Sustainability Pre-Games Report

April 2020

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Postponement of the Tokyo 2020 Games and the impacts on the sustainability pre-Games report

In response to the global coronavirus pandemic, the decision to postpone the Olympic and Paralympic Games Tokyo 2020 to 2021 was taken on 24 March 2020. On 30 March 2020, it was announced that the new dates for the Tokyo 2020 Games would be from 23 July to 8 August 2021 for the Olympic Games and from 24 August to 5 September 2021 for the Paralympic Games.

The Tokyo 2020 sustainability pre-Games report was initially scheduled to be released on 30 March 2020. This date was postponed in line with the decision to postpone the Tokyo 2020 Games.

However, considering the importance of the sustainability pre-Games report as a reference document for our stakeholders and all interested parties, the report was published on 30 April 2020. Minor changes were made, where necessary, to avoid any potential confusion to readers.

The majority of the information contained in the sustainability pre-Games report is unaffected by the postponement of the Tokyo 2020 Games. Please note however that it does contain statements that assume that the Tokyo 2020 Games will be conducted in the summer of 2020.

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The Sustainability Highlights (summary report) was published alongside this report document (main report) to aid readers' understanding.

https://tokyo2020.org/en/games/sustainability/report

Published by The Tokyo Organising Committee of the Olympic and Paralympic Games
30 April 2020

We welcome feedback, comments and suggestions.
Please contact Sustainability Department, Administration Bureau, Tokyo 2020 at
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Statement from Tokyo 2020 President MORI Yoshiro

The Olympic and Paralympic Games Tokyo 1964 symbolised Japan's dramatic recovery from the ashes of war, fuelled its subsequent economic growth, and empowered the Japanese people to become contributing members of the global society.

Today, 56 years later, people worldwide are pushing radical socioeconomic reforms in service of a common agenda: the Sustainable Development Goals (SDGs) and the realisation of a sustainable, inclusive society.

Since its founding, the Tokyo Organising Committee of the Olympic and Paralympic Games (Tokyo 2020) has positioned sustainability as a core concept of the Games. Vowing to contribute to the world as planetary citizens and recognising the role of sport in society, we have promoted concrete initiatives to fulfil our responsibility as hosts of the Games—namely, to address the challenges of sustainability through sport. These initiatives rely on the cooperation and support of a great number of stakeholders. In a sense, the process of preparing for the Games has been one of many people discovering, and deepening, the connections between the Games and sustainability.

The Tokyo 2020 Games are a once-in-a-lifetime opportunity to showcase on an unprecedented scale what the transition to a sustainable society can look like. Whether through shared connections with others at competition venues and in the city, or through their exposure to Games broadcasts and information, those who visit Tokyo and Japan will have first-hand experience of the world's people coming together beyond differences, in the spirit of mutual acceptance and respect for diversity. For example, the solidarity between the Olympic and Paralympic Games shown in Tokyo will be a symbolic step toward an inclusive society. Youth who acquire a new perspective through the Games will be leaders of inclusion and agents of transformation for the next generation of governments, businesses, and consumers.

Yet such legacies cannot be created without perseverance. The task of making society sustainable is fraught with challenges, but the commitment of everyone involved in the Games will allow us to overcome these challenges. Modelling that commitment is one of our most fundamental and central roles as organisers of the Games.

In response to the global coronavirus pandemic, on 24 March we, together with International Olympic Committee (IOC) President Thomas Bach, Prime Minister of Japan ABE Shinzo, and Tokyo Governor KOIKE Yuriko, have decided to postpone the Tokyo 2020 Games. This will allow us and people all over the world to focus on overcoming these challenging circumstances. For Tokyo 2020, this decision also means experiencing the heartache and complications of timely implementing rescheduled plans in a short period, such as the use of venues, seven years in the making.

Despite this serious setback, in the time left until the Olympic and Paralympic cauldron is lit, we will continue to engage stakeholders in dialogue and intensify initiatives that highlight the front lines of action on sustainability. By broadcasting our process and achievements to people near and far, we hope to inspire change in awareness and behaviour worldwide and leave an enduring legacy of contribution to a sustainable society.

MORI Yoshiro
Tokyo 2020 President

Statement from Tokyo 2020 Director General / CEO MUTO Toshiro

Sustainability has grown in our collective consciousness and as a topic of interest worldwide. Because of this, people are looking to the Tokyo 2020 Games to play a significant role in addressing the challenges of creating a sustainable society.

Sustainability efforts for the Tokyo 2020 Games, guided by the concept "Be better, together —For the planet and the people," have been carried out by a broad-based coalition led by Tokyo 2020 and composed of Tokyo Metropolitan Government (TMG), the Government of Japan, related local governments, sponsors and other delivery partners.

In addition to making the Games sustainable, it is vital that we also share with the public the unique insights we gain in this process: how we and our delivery partners have worked to address sustainability issues, our achievements, and the challenges we faced.

This report is intended to give readers a complete picture of the sustainability of the Tokyo 2020 Games. It details activities related to Operational Readiness, and places the Games within the context of the Olympic and Paralympic Movement and global trends. It covers a wide variety of topics, an indication of the comprehensiveness of our endeavours, the breadth of our partnerships, and the size of our collective impact.

Sustainability Highlights, issued as a summary of this report, outlines the significance and outcomes of these myriad activities in a format that is convenient and easy to understand. We hope you will use it alongside this main report.

We have been in constant dialogue with domestic and international stakeholders to ensure that sustainability is considered at every stage, from preparation of the Games until after the Games end. This includes discussions within the multi-stakeholder Urban Planning and Sustainability Commission since Tokyo 2020's founding. Public expectations of the Games are high, and despite occasional hard criticism, we have always endeavoured to prioritise sustainability and integrate its perspectives into the various aspects of the Games.

On an organisational level, our staff has grown dramatically in the last year to handle increasing workloads. While confronted with difficult decisions in this changing environment, we gave sustainability a fixed place among our core values. The sustainability management system we developed based on ISO 20121 standard and for which we obtained third-party certification in October 2019 helped make this possible.

Many of our initiatives symbolise the change we seek in creating a green, circular economy. These include fabricating the Tokyo 2020 medals from raw materials harvested from "urban mines", such as mobile phones; fabricating the medal podiums from recycled plastic; using timber provided by local governments across Japan in the Village Plaza, a community space at Olympic/Paralympic Village, with plans to return the timber after the Games; and manufacturing the Olympic and Paralympic relay torches using aluminium previously used in temporary housing for survivors of the 2011 earthquake and tsunami. Such projects illustrate to a wide audience the links between the Games and sustainability, and should help catalyse behavioural change.

In the area of decarbonisation, we have been revising venue plans, utilising rentals and leases as sourcing practices, using 100 per cent renewable energy, and more. These efforts are projected to reduce Games-related CO_2 emissions by about 280,000 tonnes. All unavoidable emissions we plan to offset through partnerships with TMG and Saitama

prefecture. Additionally, we are promoting the deployment of hydrogen energy by using hydrogen as fuel for the Games relay torches and cauldrons.

For a more inclusive society, we aspire to create a Games free from discrimination and harassment and where the human rights of all involved are respected. We have made steady progress in ensuring accessibility through tangible and intangible measures and have completed the matching process for our highly diverse 80,000 Field Cast members (Games volunteers). We are also encouraging spectators to get involved in co-creating a Games that embodies diversity and inclusion (D&I).

Engaging the supply chains that provide Games-related goods and services is another necessary element of a sustainable Games. This includes ongoing implementation of our Sustainability Sourcing Code and responsible operation of grievance mechanisms in cases of non-compliance.

Venue and facility development is an aspect of hosting the Games that has an especially large impact on sustainability. Some innovative initiatives have been carried out to prepare new permanent facilities with an eye toward building post-Games legacy, including presentation of an urban model for hydrogen use, and advanced resource recycling and reuse of procured goods. Sustainability has also been considered in the development of temporary facilities, such as through utilising rentals and leases.

We have also partnered with international organisations to help advance global action on sustainability. We signed a Letter of Intent with the United Nations aimed at supporting achievement of the SDGs—the first time for an Olympic and Paralympic Organising Committee—and partnered with the International Labour Organization to promote decent work. We remain committed to supporting progressive global initiatives such as the UN Global Compact and the Global Reporting Initiative.

Postponing of the Games is a decision unprecedented in Olympic and Paralympic history. Even as we face these uncertain circumstances, all of us at Tokyo 2020 will continue to practice self-awareness of our respective roles and work as one team to consider sustainability in implementation of the Games. The outcomes of these efforts will be announced in the upcoming report. We will continue to work to realise a sustainable Olympic and Paralympic Games, so that all who experience it can come to understand more deeply the path to a sustainable society.

MUTO Toshiro
Tokyo 2020 Director General / CEO

Statement from Urban Planning and Sustainability Commission Chairperson KOMIYAMA Hiroshi

The Urban Planning and Sustainability Commission serves the role of providing expert advice on Tokyo 2020's sustainability efforts. For the last five years, leading scholars and specialists forming this commission, its subordinate discussion and working groups have engaged in a public discussion about specific actions for delivering a sustainable Games and post-Games legacy. The outcomes of those discussions are reflected in the Tokyo 2020 Olympic and Paralympic Games Sustainability Plan, the Sustainability Sourcing Code, and the achievements and progress described in this report. As the commission's chairperson, I am pleased to convey this message on behalf of everyone who took part in those discussions.

It is crucial that we consider our purpose in hosting the Olympic and Paralympic Games now that Japan is a developed country. As an answer to this inquiry, the commission proposed that the Tokyo 2020 Games should serve as a "sustainable society showcase."

Showcasing a sustainable society is about making the abstract concept of "sustainability" something that can be seen and experienced through a collection of symbolic initiatives that serve as benchmarks for the international community. Such initiatives for the Tokyo 2020 Games include the Games medals made from recycled consumer electronics, or "urban mines"; medal podiums made from recycled plastic; the Games cauldrons fuelled by renewably sourced hydrogen; the promotion of arts and culture and the diverse individuals who create them; and competition venues that leverage cutting-edge technologies to harmonize nature and architecture.

These initiatives have been pursued as part of preparations so that the Tokyo 2020 Games contribute in a real way to the sustainable world humanity so desires to create. They are the result of Tokyo 2020 and our delivery partners acting not alone but with the participation of a great number of people sharing the process and time leading up to the Games.

The various initiatives showcased by the Tokyo 2020 Games will have an immense impact on the people of Japan and the world. Witnessing and taking part in these initiatives will no doubt motivate people to think about what a sustainable society is, and to take steps to get us there.

That is to say, the transformation of our behaviour as a human race for realising a sustainable society and planet is the legacy we seek, and our purpose for hosting the Olympic and Paralympic Games again in Tokyo.

As representatives of the various stakeholders and people that make up society, the Urban Planning and Sustainability Commission will continue to do our part to help realise the sustainability society envisioned by Tokyo 2020.

KOMIYAMA Hiroshi
Urban Planning and Sustainability Commission Chairperson

1

Basic Information on Guidelines, Organisation, and Reporting

1.1 Basic Guidelines for a Sustainable Games

The Olympic and Paralympic Games are among the world's largest sporting events. Sport has the power to change the world and our future, and holding of the Games has a global impact.

The Olympic and Paralympic Games Tokyo 2020 will be the first Olympic and Paralympic Games hosted by Tokyo since 1964. Much has changed in this city, in Japan and around the world since then. And more will change as we approach the year 2050. For the nearly 10 billion people projected to live on this planet, life will be longer, more urban, and more materially saturated, making it increasingly imperative that we harmonise our social systems to the global environment and create a society that is more respectful and inclusive of other people.

Today, under the pledge "no one will be left behind", stakeholders worldwide are pushing radical social and economic reforms toward a common purpose, namely sustainable development. Tokyo and Japan are a progressive city and country, pioneering problem-solving initiatives for a more sustainable society. In 2021, the world's attention will focus on the Tokyo 2020 Games, which have been a major impetus for these sustainability efforts.

The Games' organisers, including officials who orchestrated the bid for the Tokyo 2020 Games and the Tokyo Organising Committee of the Olympic and Paralympic Games (Tokyo 2020), have consistently recognised the importance of sustainability in the Tokyo 2020 Games, both during the bid before the host city was announced in 2013 and during the initial stages after the announcement, when the Tokyo 2020 Games Vision and the Basic Plan were formulated.

In 2014, the International Olympic Committee (IOC) identified three inter-related pillars—credibility, sustainability and youth—for the Olympic Agenda 2020, making a commitment to "include sustainability in all aspects of the Olympic Games and within the Olympic Movement's daily operations". The 2030 Agenda for Sustainable Development, adopted by the United Nations (UN) in 2015, recognises sport as an important enabler of sustainable development. In response, the IOC published in 2016 the IOC Sustainability Strategy, in which it addresses concrete ways of contributing to the 2030 Agenda and the Sustainable Development Goals (SDGs).

We at Tokyo 2020 Organising Committee are aware of the fundamental nature of human dignity and the role society expects the Tokyo 2020 Games to play. The Games are an opportunity for Japan and Tokyo to show the world how "no one will be left behind" and 21st-century sustainable development can be pursued holistically across the environmental, social and economic spheres, thus contributing to the 2030 Agenda and SDGs. We hope the Tokyo 2020 Games Vision leaves a legacy that inspires future Olympic and Paralympic Games, including 2024 Paris and 2028 Los Angeles, future mega-sporting events and other activities worldwide.

The Tokyo 2020 Games Vision

Sport has the power to change the world and our future.
The Tokyo 2020 Games, as the most innovative in history,
will bring positive reform to the world
by building on three core concepts: "Achieving Personal Best,"
"Unity in Diversity,"
and "Connecting to Tomorrow."

The Sustainability Concept of the Tokyo 2020 Games

Be better, together

For the planet and the people

1.2 The Organising Committee and Other Relevant Organisations

The Tokyo 2020 Games will be prepared and delivered by a broad-based coalition composed of the Tokyo Organising Committee of the Olympic and Paralympic Games (Tokyo 2020), Tokyo Metropolitan Government (TMG), the Government of Japan, related local governments (where competition venues are located), sponsors and other delivery partners*. Tokyo 2020 is the core of the coalition, with TMG and the Government of Japan also playing key roles.

* The Government of Japan, regional/local governments and private entities that provide financial and other support for plan development and delivery of the Games.

The Tokyo Organising Committee of the Olympic and Paralympic Games (Tokyo 2020)

We are a public interest incorporated foundation established to host the Tokyo 2020 Games. It is fully responsible to the International Olympic Committee (IOC) and the International Paralympic Committee (IPC) for delivery of the Tokyo 2020 Games. We obtain the funds necessary to host the Games from sources including IOC contributions, sponsorships and sales of tickets and licensed merchandise.

We were established as a general incorporated foundation on 24 January 2014, shortly after Tokyo was elected as host city for the 2020 Games, by TMG and the Japanese Olympic Committee (JOC) and later became a public interest incorporated foundation. Our main offices are located in Harumi, Chuo-ku, Tokyo.

During the roughly eight years till its dissolution after the Games, we will have undergone a series of abrupt and major changes in scale, organisational structure and activities as it proceeds through the preparatory and staging phases of the Games. In particular, the year 2019 was a period of executing preparatory plans in the year prior to the Games during such significant changes. Chapter 3 "Tokyo 2020 Management" (*see page 25*) explains how we are working to carry out a sustainable Games by accommodating the necessary operational changes through its organisational structures.

The Tokyo Metropolitan Government (TMG)

In addition to offering across-the-board backup for preparations carried out by Tokyo 2020, TMG has taken on various responsibilities as host city for the Games. These responsibilities include funding the construction of new, permanent venues needed to host the Games, as well as transport and security measures near Tokyo venues to minimise impacts on residents' daily lives.

TMG's medium to long-term urban strategy, which aims to further develop Tokyo into a mature, 21st-century city while seeking harmony with the global environment, underpins preparations for and delivery of the Tokyo 2020 Games.

The Government of Japan

The Government of Japan is working to ensure that preparations and delivery of the Tokyo 2020 Games proceed smoothly. This includes construction of the Olympic Stadium by the Japan Sport Council (JSC), security, anti-doping measures and preparations for the Paralympic Games, which are national government responsibilities.

In May 2016, the Government of Japan established the SDGs Promotion Headquarters composed of all cabinet members and chaired by the Prime Minister. In December 2019 the Government revised the SDGs Implementation Guiding Principles and adopted the SDGs Action Plan 2020, which both state consideration for sustainability in the run-up to the Tokyo 2020 Games and the importance of the Games as an opportunity to reach out to the global audiences. The aspiration to contribute to the SDGs through the Tokyo 2020 Games builds on such sustainability initiatives by the Government and other Japanese stakeholders.

This section contains statements that assume that the Tokyo 2020 Games will be held in 2020.

1.3 About the Reports

This pre-Games report (issued April 2020) is the second of three sustainability reports by Tokyo 2020 and the last report prior to the Tokyo 2020 Games. It details preparations being made to create sustainable Games, as confirmed by future stakeholder evaluations, focusing on activities in 2019.

Together, the three sustainability reports give a comprehensive picture of the planning process and outcomes of sustainability initiatives for the Tokyo 2020 Games.

Working in conjunction with other Tokyo 2020 Functional Areas, the Sustainability Functional Area played the lead role in compiling this report based on information collected from these entities through the governance system following ISO 20121.

This report has been subject to review by outside experts in the Urban Planning and Sustainability Commission, the Sustainability Discussion Group and individual working groups.

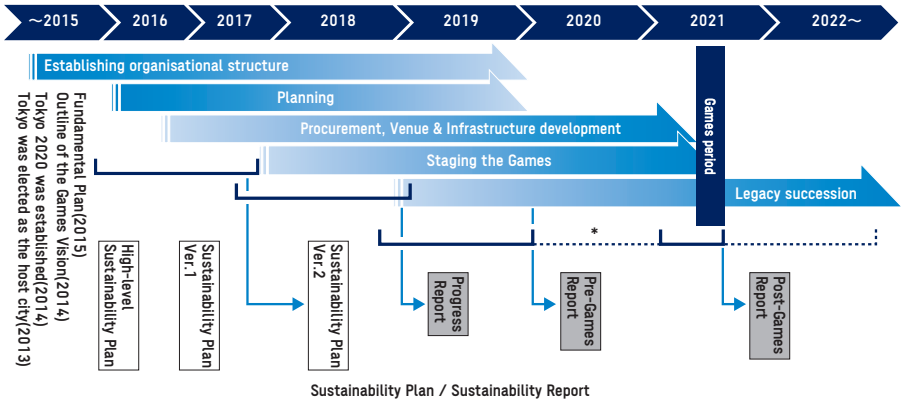
Reporting plan (schedule)

Sustainability initiatives for the Tokyo 2020 Games are being carried out based on the Tokyo 2020 Olympic and Paralympic Games Sustainability Plan. These efforts are detailed in sustainability reports: progress report, pre-Games report and post-Games report.

Preparations and delivery of the Games include five phases in eight years from the selection of the host city to the delivery of the Games, and these phases progress in an overlapping manner. The five phases are as follows:

- Establishment of organisational structures
- Plan formulation
- Procurement, venue and infrastructure construction
- Delivery of the Games
- Handing down of the legacy

Tokyo 2020 Games' phase progression and sustainability reporting frame



* Timing and means of future reporting will be decided later.

Reporting framework

This report has been compiled to detail initiatives based on the Sustainability Policy (May 2018) and the Sustainability Plan (Version 1 in January 2017 and Version 2 in June 2018). It has been prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core option, an international standard on sustainability reporting. GRI's Reporting Principles* were also taken into account.

* Principles for defining report content: stakeholder inclusiveness, sustainability context, materiality and completeness
Principles for defining report quality: accuracy, balance, clarity, comparability, reliability and timeliness

Scope of this report

The three sustainability reports, including this pre-Games report, primarily address Tokyo 2020's core initiatives in preparing for and delivering the Games. However, sustainability initiatives related to the Tokyo 2020 Games—from election of the host city to preparations for and delivery of the Games to leaving a legacy—are the domain of not only us but also TMG, the Government of Japan, related local governments, sponsors and other stakeholders. This pre-Games report thus also includes important and representative initiatives by these stakeholders, as such information is likely to be useful for understanding our initiatives and the overall sustainability of the Games.

Period covered by this report

The progress report, published in March 2019, was the first of the three sustainability reports to follow publication of the Sustainability Plan (Version 2) in June 2018. It focuses on initiatives in 2018 and also covers important matters from 2013 to 2018 to provide context as Tokyo 2020's first report.

This pre-Games report, published in April 2020, is the second sustainability report and focuses on initiatives in 2019. Although progress is generally assessed as of 31 January 2020, progress after that date has been included when possible. Important pre-Games initiatives that could not be included in this report due to limitations in the report publishing schedule will be disclosed on the official Tokyo 2020 website as supplemental information to the pre-Games report. All other activities, including staging-related details still being decided and information obtained after the Games, will be covered in the post-Games report. This report also repeats important content from the Sustainability Plan and progress report to provide an overview and aid understanding of our initiatives.

As illustrated in the reporting framework (*see page 15*), the progress report and this pre-Games report serve as our annual reports on sustainability. The Sustainability Plan (Version 2) also describes the progress of initiatives as of the time of its publication and should be referred to in conjunction with the two sustainability reports.

Sustainability Highlights

The Sustainability Highlights (summary report) was published alongside this report document (main report) to aid readers' understanding. The Sustainability Highlights and this document together make up the pre-Games report.

Related reports and information disclosures

In February 2018, the IOC transitioned from its past practice of conducting far-reaching studies into the tangible and intangible impact of Olympic Games on the environment, society & culture and economies of host cities and regions (Olympic Games Impact Studies) to a new initiative for evaluating and reporting on the impact of the Games by assessing their legacy. This legacy reporting framework is applied alongside the sustainability reports. For this reason, the impact of the Tokyo 2020 Games will be addressed in future reporting under the legacy reporting framework, and the three sustainability reports, which detail the outcomes of Tokyo 2020's efforts toward a sustainable Games, will provide supporting information.

In addition to the three sustainability reports, other information relevant to sustainability may be found on the Tokyo 2020 website and in other formal reports issued by us and our partners.

Tokyo 2020 website: https://tokyo2020.org/en/

Materiality (important issues)

Materiality assessment, the process of selecting from a long list of sustainability issues those that are most important, is a core element of any effective sustainability program. For this reason, we have undertaken a careful deliberation process for identifying the most important (material) issues related to the Tokyo 2020 Games.

First of all, based on the SDGs and other global trends (*see table on page 19*), we have organised social and environmental issues, then we took into account expectations from multiple stakeholders*1 including the Urban Planning and Sustainability Commission, experience of past Games and external impact in preparing and delivering the Games.

*1 For the classification of stakeholders taken into account in the materiality assessment, refer to "Appendices" (*page 236*).

This process began in 2015 at an early stage of Games preparation and is based on discussions within the Commission and joined by outside experts.

In the High-Level Sustainability Plan published in January 2016, we proposed the following five themes as the most important (material) sustainability issues for the Games. In the subsequent Sustainability Plan, we finalised the five main themes and developed concrete actions for them based on public opinion and discussions within the Urban Planning and Sustainability Commission and other groups.

Five main sustainability themes

- Climate change
- Resource management
- Natural environment and biodiversity
- Human rights, labour and fair business practices*2
- Involvement, cooperation and communications (engagement)

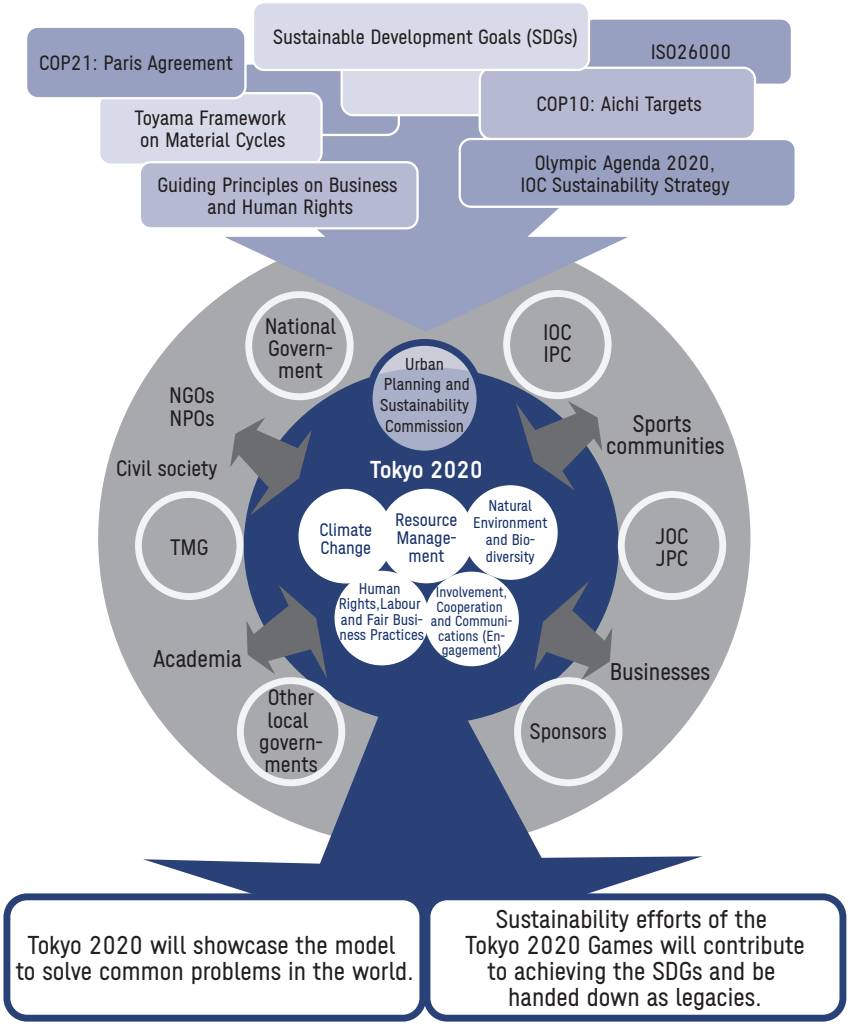
*2 This theme name was changed after the Sustainability Plan was published, based on discussions held by the Sustainability Discussion Group.

These five themes are complex and important long-term visions comprised of the interrelationships between human activity, social systems and the global environment, spanning all aspects of sustainability. Chapter 2 "Tokyo 2020 Games Main Sustainability

Themes" (*see page 20*) and Chapter 4 "Progress of Main Themes" (*see page 37*) explain each theme in detail.

We are working to implement sustainability initiatives focusing on these five themes. The following figure shows the review process of five themes and the goals of each of the associated initiatives.

Global trends of sustainability



The Olympic and Paralympic Games and Major Global Sustainability Trends

- **Aichi Targets (2010)**

  Global targets on biodiversity to be achieved by 2020 that were adopted by the 10th Conference of the Parties under the United Nations Convention on Biological Diversity

- **Publication of ISO 26000 (2010)**

  An international standard on organisational social responsibility

- **Guiding Principles on Business and Human Rights (2011)**

  Guidelines that put in place a framework for facilitating the protection of, respect for and aid for human rights that applies to all nations and corporations

- **IOC Olympic Agenda 2020 (2014)**

  A declaration committing the IOC to pursue sustainability in all aspects of the Olympic Games and within the Olympic Movement's daily operations

- **Sustainable Development Goals (SDGs) (2015)**

  Universal goals for achieving a sustainable world that apply to all countries, specified in the 2030 Agenda for Sustainable Development

- **Paris Agreement (2015)**

  An international measurement framework for tackling climate change starting in 2020 that was adopted by the 21st Conference of the Parties under the United Nations Framework Convention on Climate Change

- **G7 Toyama Framework on Material Cycles (2016)**

  A Framework in which G7 countries cooperate and work on resource efficiency and 3Rs* that was adopted by the G7 Toyama Environment Ministers' Meeting

- **IOC Sustainability Strategy (2016)**

  A declaration that places sustainability within the working principles of the Olympic Movement

* 3Rs: Reduce, Reuse, Recycle

2

Tokyo 2020 Games Main Sustainability Themes

2. Tokyo 2020 Games Main Sustainability Themes

Main Themes and the SDGs

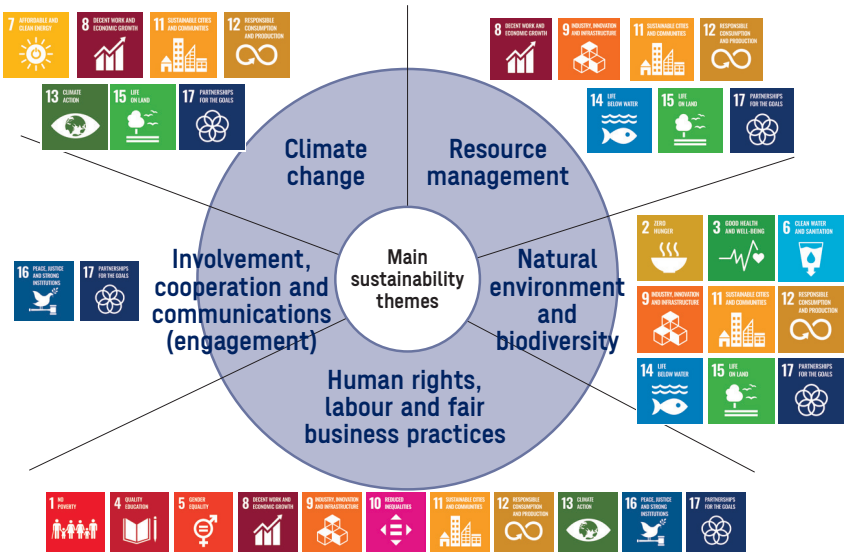
The main sustainability themes and initiatives of the Tokyo 2020 Games are closely tied to "Transforming our world: the 2030 Agenda for Sustainable Development" and the Sustainable Development Goals (SDGs) and targets adopted by the UN General Assembly in September 2015.

The 2030 Agenda presents key dimensions of sustainable development and critical areas of importance, along with 17 SDGs and subordinate targets for achieving it.

At the heart of the Agenda are five areas of critical importance: people, planet, prosperity, peace and partnership. The SDGs are a pledge by all countries and all stakeholders to eradicate poverty and hunger in all forms; to combat inequalities within and among countries; to build peaceful, just and inclusive societies; to protect human rights and promote gender equality and the empowerment of women and girls; to ensure the lasting protection of the planet and its natural resources while taking action on climate change; to create the conditions for sustainable, inclusive and sustained economic growth, shared prosperity and decent work for all; and to leave no one behind on the path to sustainable development.

The 17 SDGs and 169 targets apply universally to all countries, are interrelated, interdependent and call for integrated solutions.

Likewise, we at Tokyo 2020 are working through the five main themes to deliver integrated solutions in the environmental, social and economic areas.



The Sustainability Plan (Version 2) explains the relationship between these themes and the SDGs.

Tokyo 2020 Olympic and Paralympic Games Sustainability Plan (Version 2):

https://tokyo2020.org/en/games/sustainability/sus-plan

The Tokyo 2020 Games are an opportunity to drive sustainability awareness and action widely across Japanese society—among Japanese businesses, public authorities and the general public—through their direct and indirect involvement in preparations and delivery of the Games, and through experiencing the Games themselves. For this reason, the Tokyo 2020 Games are a sustainable society showcase. The specific sustainability measures taken by Tokyo 2020 are exemplars for all global stakeholders to follow as a way forward.

The following section describes the goal and overall approach for each of the five themes. Chapter 4 "Progress of Main Themes" (*see page 37*) describes the progress being made in each theme based on the Sustainability Plan.

Climate change

Goal: Towards Zero Carbon

Following 2020 when the Paris Agreement starts, this goal represents the intention of Tokyo 2020 and delivery partners to manage the Games focusing on maximum energy savings and use of renewable energy, and thereby to together build the foundation for a decarbonised society, ahead of the rest of the world.

Approach: Measures include using existing venues as opposed to constructing new ones, reducing energy use by venues, using power from renewable energy in operations, and promoting use of transport with a low environmental impact, for example through use of public transportation and fuel cell electric vehicles.

Resource management

Goal: Zero Wasting

The Tokyo 2020 Games conducts resource management by all, aiming to put a stop to deforestation and land devastation caused by resource exploitation as well as to eliminate environmental impact caused by waste, on the basis of utilising resources without any wasting throughout the supply chain.

Approach: We have been promoting use of recycled materials and renewable resources, reusing or recycling procured items and goods by renting or leasing them, and reuse and recycle waste generated through Games operations.

Natural environment and biodiversity

Goal: City within Nature / Nature within the City

Looking ahead to the legacy, we will work to restore and conserve biodiversity through the Games and contribute to the creation of a new urban system that will improve comfort and resilience.

Approach: Games venues conserve water resources through rainwater harvesting and recycling. Design and construction of Games venues emphasised retention of existing trees and protection of wildlife habitats, while new landscaping used native species to harmonise with existing vegetation and help foster an ecological network. At urban waterfront, we are improving the environmental capacity of the marine parks adjacent to many competition venues to protect waterfowl and aquatic life. We have been also working with TMG and involved ministries and agencies to address heat-related issues.

Human rights, labour and fair business practices

Goal: Celebrating Diversity—Inspiring Inclusive Games for Everyone

To respect the human rights of all people involved in the Tokyo 2020 Games, we will foster diversity and inclusion (D&I) and implement the UN Guiding Principles on Business and Human Rights in every aspect of Tokyo 2020 Games preparation and operation. We will seek to prevent or mitigate adverse human rights impacts caused by Games-related activities. We will avoid causing or contributing to any discrimination such as that of race, colour, sex, sexual orientation, gender identity, language, religion, political affiliation, social status, age, or impairment/disability, and never encourage child labour, forced labour, or excessive labour, directly or indirectly. Furthermore, we will strive to ensure fair business practices free of corruption and anti-competition.

Approach: We have been developing and implementing mechanisms for protecting and respecting human rights and remedying any issues in line with the UN Guiding Principles on Business and Human Rights. We have been also spreading awareness of D&I and working to ensure accessibility through mobility support, information accessibility and venue facilities development in line with the Tokyo 2020 Accessibility Guidelines.

Involvement, cooperation and communications (engagement)

Goal: United in Partnership & Equality — Inspiring Inclusive Games for Everyone

We will deliver an open Game in which anyone can meaningfully participate. Through activities that encourage involvement and collaboration across national, generational, and other boundaries, we will help build a diverse, inclusive, and more engaged society.

Approach: We have been offering a broad range of opportunities for involvement in the Tokyo 2020 Games through citizen engagement projects such as the Tokyo 2020 Nationwide Participation Programme, including the Tokyo 2020 Medal Project. We have been publicising progressive initiatives that promote understanding and encourage action on sustainability.

Supply chain management to underpin the themes

We have been implementing the Sustainable Sourcing Code established in March 2017 and have also launched a grievance mechanism to receive reports of non-compliance. Section 4.6 "Sustainable Sourcing" (*page 167*) describes progress being made in sustainable sourcing and supply chain management.

Peace and sports

The 2030 Agenda for Sustainable Development recognises sport as an important enabler of sustainable development. Sport contributes to the realisation of development and peace by promoting tolerance and respect. Sport, sustainable development, and peace are thus deeply interconnected. Peace is the foundation for engaging in sport and for realising sustainable development.

As a "festival of peace", the Olympic and Paralympic Games showcase the importance of friendly and peaceful relations through sport. As a global mega-event that brings people together from across the globe, the Games present both an opportunity and a responsibility to actively contribute to sustainability and peace.

The Olympic and Paralympic Games Tokyo 2020 will contribute to creating the groundwork of a peaceful society upon which sustainable development can be achieved. In December 2019, the UN General Assembly adopted a resolution co-sponsored by 186 nations titled "Building a peaceful and better world through sport and the Olympic ideal" (Olympic Truce) for the Tokyo 2020 Games. The Olympic Truce is a movement to use the power of sport to realise a world without war; it calls on all nations to refrain from conflict during the period of the Olympic and Paralympic Games. This resolution illustrates how the Tokyo 2020 Games are an opportunity to build a peaceful and better world.

3

Tokyo 2020 Management

This section contains statements that assume that the Tokyo 2020 Games will be held in 2020.

3.1 Tokyo 2020: Organisational Structures

Underpinning delivery of the Games

The Tokyo Organising Committee of the Olympic and Paralympic Games (Tokyo 2020) is responsible for preparing for and delivering this unrivalled mega-sports event. The scale and initiatives of the organisation will change significantly during the course of the approximately eight years that will lapse from its establishment to its dissolution.

The preparations and delivery of the Games proceed in the following phases: establishment of organisational structures, formulation of the plan, procurement, venue and infrastructure construction, delivery of the Games, and handing down of the legacy (see the figure on *page 15*: "The timeline of the Games and framework of reporting"). As the Games approach, the centre of gravity of all our activities has shifted from planning and coordination to preparations and actual operations, and the workload has grown accordingly. Diverse expertise is required, and the number of staff engaged has grown significantly. The management structure and approach have also needed to adapt to these changes.

Tokyo 2020 Organising Committee has strengthened and reformed its organisational structure as necessary to operate efficiently in line with the projected progress through each phase.

For basic information about the organisation of Tokyo 2020, see:
https://tokyo2020.org/en/organising-committee/

(1) Tokyo 2020 staff levels

At the time of its establishment in February 2014, we had 44 staff, but that number had grown to about 220 by February 2015 and then to about 470 (by March 2016), about 820 (by March 2017), about 1,350 (by March 2018), about 2,050 (by January 2019) and about 3,140 (by October 2019). As of January 2020, we have about 3,300 staff. This number will continue to increase as the Games approach and will reach about 8,000 at the time of the Games.

At the end of the Games, most departments of Tokyo 2020 will have fulfilled their roles and the number of staff will sharply decrease as the organisation is dissolved.

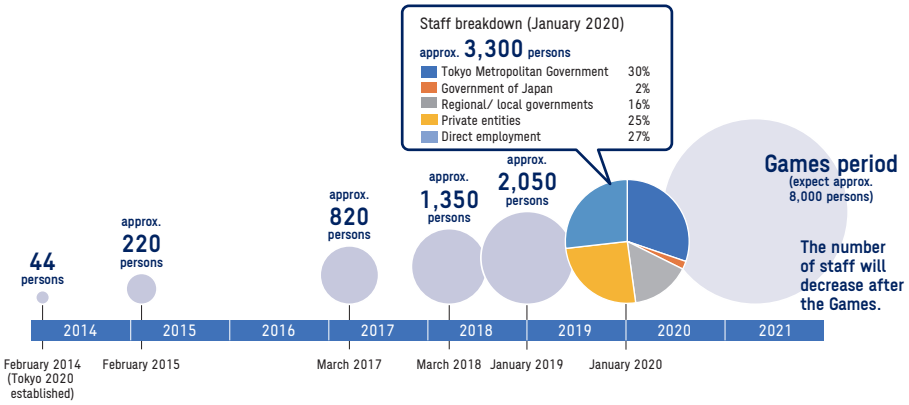
(2) Staff breakdown

Tokyo 2020 consists of directly employed staff as well as others who have been seconded from delivery partners and other entities. Seconded staff come from the Tokyo Metropolitan Government, the Government of Japan (GOJ), and local governments as well as from sponsors and other private-sector companies and organisations. We are a rapidly growing organisation whose staff represent a variety of perspectives and values.

* For Games volunteers, see Section 4.4 "Human Rights, Labour and Fair Business Practices", Diversity and inclusion (D&I) (*page 120*).

This section contains statements that assume that the Tokyo 2020 Games will be held in 2020.

Tokyo 2020 Number of staff and breakdown



(3) The Tokyo 2020 Spirit

We created the Tokyo 2020 Spirit as a statement of our staff's values, and with the slogan "One Team for Our Dreams" in mind, we are united in realising the Games Vision through daily operations.

Tokyo 2020 Spirit initiatives include an interview programme that promotes communication between supervisors and subordinates; member surveys to reflect members' voices in the management of Tokyo 2020; profile sheets and recreational sports to enhance cross-sectional interaction of staff members.

We strive to create a workplace characterised by unity and open communication, where each individual values respect, professionalism, courage, and change. We believe that respect for the unique individuality of each staff empowers each one of them to make the most of their strengths.

The Tokyo 2020 Spirit
— Our Core Principles —

One Team for Our Dreams
One team—working to make all our dreams come true

Respect ／敬意
Everyone is different—that's what makes each of us so interesting

Professionalism ／責任
Working so that the future will be proud of our achievements

Courage ／勇気
Taking on new challenges and pioneering new frontiers

Change ／変革
Bringing about change that will shape the future

(4) Functional Areas (FAs)

Tokyo 2020 has established 52 Functional Areas* (FAs) to oversee a variety of functions and operations required in the preparation and delivery of the Games. This was based on the IOC's and IPC's store of knowledge from organising committees of the past Olympic and Paralympic Games.

Each FA is accumulating best practices as a team responsible for its specialised function, and operates effectively by working closely with one another as parts of a united organisation.

* For a list of FAs, see the Appendices (*page 239*).

About Sustainability (SUS) FA

The Tokyo 2020 Games Foundation Plan (February 2015) defines its mission as follows: "The Sustainability Functional Area shall support the activities of the Tokyo 2020 Organising Committee so that it can plan and deliver sustainable Olympic and Paralympic Games, and it shall implement the Tokyo 2020 Games Sustainability Plan in collaboration with the Tokyo Metropolitan Government and other major partners. Furthermore, it shall support initiatives undertaken by units of the Tokyo 2020 Organising Committee to help create a legacy that will have a positive benefit in the future in both Japan and elsewhere in the world."

Reorganisation of administrative structure

The administrative structure of Tokyo 2020 has been reorganised and enhanced over time in response to changes in scale of required operations. As of January 2020, we have eight offices and 11 bureaux under the leadership of the CEO.

In December 2017, for example, we transferred the Sustainability Department from the Games Operations Bureau to the Administration Bureau, which is the principal bureau in charge of leading the entire Tokyo 2020, with the aim of further enhancing a broad range of sustainability initiatives at the Tokyo 2020 Games. In July 2018, we assigned

sustainability (SUS) administrators and coordinators who are responsible for implementing concrete sustainability initiatives to each FA and department. See Section 3.2 "Sustainability Management System" (*page 31*) for more information.

Venuisation

As the Games draw nearer, Tokyo 2020 will transition from an FA-based organisational structure to a venue-based operational structure to be taken during the Games in a process known as venuisation. Since this reorganisation involves major changes, we are working systematically to ensure a smooth transition.

(1) Games Delivery Group

As the Games Delivery Group, we first set up the Games Delivery Office in 1 January 2019. Its objectives are to provide overall progress management and make operational improvements in the preparations for the Games, provide liaison and coordination on plans involving delivery of the Games as well as make decisions and exchange information during the Games. A Games Delivery Officer (GDO) had been appointed to head the group.

In addition, we are successively appointing Venue General Managers (VGMs) who will be responsible for each venue, to build an operational structure at each venue.

(2) Games Delivery Group activities

The Games Delivery Group is undertaking the following activities.

We initially developed a roadmap called Ready for the Games to present an overall picture of the Games preparation, check the current status of all the staff, confirm shared priorities and detail every step we need to take to deliver the Games.

To step up the decision-making process, we have been holding Main Operation Centre (MOC)* meetings to take up issues and matters related to delivering the Games at each FA and each venue, and to exchange information and discuss specific solutions within the given time frames. Nearly 30 executives from the bureaux overseeing the Games meet every week. Forty-five meetings have been held from January 2019 to the end of January 2020. Major topics include temporary construction works, operations of each venue and each FA, test events and heat-related measures.

* MOC: Main Operation Centre. Headquarters during the Games

To create a framework for delivering the Games and strengthen collaboration between the MOC and each venue, we have held the MOC Forum with the participation of VGMs in charge of each venue and Sport Managers (SPMs) in charge of staging each sport, in addition to all the Executive Directors and other MOC meeting attendees. The forum is held every other week with the objective of discussing various agendas and exchanging information. Twelve meetings have been held from February to August 2019. Major topics that have been discussed include the MOC design framework (such as composition of the MOC and FA headquarters and coordination with each venue), fundamental approach to media communications during the Games, test events for Games readiness and heat-related measures.

Furthermore, we have been holding an expanded MOC Forum with the President, CEO, COO, all the VGMs and SPMs, all the Heads of FAs and Executive Directors, and other leaders responsible for delivering the Games as the members, with the aim of further fostering group unity and building momentum to help ensure reliable and effective delivery of test events. The first expanded forum was held in April 2019 before starting test events, the second at the end of September 2019 after the end of the first set of test events, and the third in January 2020 before building operational systems of venues in order to enhance One Team for Our Dreams.

The Games Delivery Group will also focus on essential and complex operations of other key priorities, including test events, climate adaptation (against heat and typhoon), transportation, waterfront cities, delivery of the Opening and Closing Ceremonies, and the Paralympic Games.

(3) Test events and Operational Readiness activities

Operational Readiness (OPR) refers to the state of readiness that Tokyo 2020 and its partners must achieve before the Games commence. This means that our highly-trained teams are capable of dealing with normal as well as emergency situations at each venue, using similar systems and facilities that will be used in the actual Games. OPR activities are designed to build the operational skills needed to achieve readiness for the Games.

Test event

Through OPR activities, we can test and improve our operational plan and capabilities. They are therefore a critical element of our Games Delivery Group activities to further ensure the success of the Games.

We are conducting tests (test events etc.) and exercises (tabletop, simulations, venue rehearsals, etc.) to achieve our core objectives of confirming the feasibility of our plan and strengthening Games operational capabilities.

The test events are mainly sporting events held from 2019 until the Games year, which are organised by Tokyo 2020 or International/National Federations. A variety of hands-on tests are being performed in the course of running actual events, in order to reinforce our operational skills for individual sports and for the entire Games. Starting from June 2019, test events will eventually be held towards the Games.


Tabletop exercise

Tabletop exercises are scenario-based training exercises conducted in meeting rooms to improve operational capabilities. Specific scenarios are set up consisting of given conditions such as sport, date, time and weather, along with incidents and other issues that may arise.

We have appointed OPR administrators to each FA to carry out OPR activities.

The culmination of all these test events and OPR activities will ensure the success our hosting of the Tokyo 2020 Games.

To deliver a more sustainable Games, we are also checking the feasibility of our sustainability plan and strengthening sustainability-related operational capabilities in all test events and OPR activities.

See Section 3.2 “Sustainability Management System” (*page 31*) for an on-site audit at a test event for ISO 20121 certification by a third-party certification body.

3.2 Sustainability Management System

Overview

To ensure that the Games will be an event conscious of its effects on sustainability, the Tokyo 2020 has introduced a management system in accordance with ISO 20121,* an international standard that defines event sustainability management systems. We have been implementing the initiatives identified in the Sustainability Plan (Version 2) under the management system.

* ISO 20121: Its purpose is to manage the impact of event operations on the environment, economy, and society and to improve event sustainability. It was issued in 2012, the year of the London Olympic and Paralympic Games, which prompted its establishment. The London 2012 Games, Rio de Janeiro 2016 and PyeongChang 2018 Games obtained third-party ISO 20121 certification.

Summary of progress

Building structures to implement sustainability initiatives	Completed
Implementing management systems	In progress
Obtaining ISO 20121 third-party certification	Completed (October 2019)
ISO 20121 surveillance audit	In 2020 and 2021

Obtaining ISO 20121 certification

The awarding ceremony for the ISO 20121 certificate

Tokyo 2020 was third-party certified to the ISO 20121:2012, *Event sustainability management systems — Requirements with guidance for use* in October 2019 from the British Standards Institution. Audits were conducted from May to August 2019 by the third-party certification body, which confirmed that our management system was operating effectively in accordance with the standard (See "Audits by third-party certification body"). The awarding ceremony for the ISO 20121 certificate was carried out in November 2019.

Benefits of adopting ISO 20121

(1) Adoption process

Tokyo 2020 adopts ISO 20121 standard to facilitate continual improvement in our operations. To make certain that the ISO 20121 certification proceeds smoothly, we have to ensure that the management system currently operating within our organisation is consistent with the standard. We conducted a gap analysis of the standard requirements to identify those that are already part of our system and those that still need to be addressed and narrowed down the areas that we have to work on. This process made it possible to effectively adopt the ISO 20121 standard while making the most of our present management system.

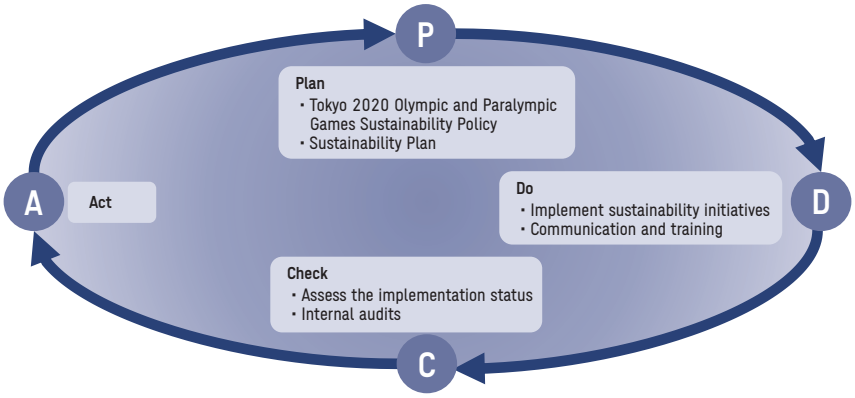
In order to adopt ISO 20121 in a way that is suited to real circumstances, we used London 2012 and other past Games as examples. We also worked with the ITU World Triathlon Series Yokohama organization committee (the organiser of ITU World Triathlon/ Paratriathlon Yokohama) and the World Sailing (the organiser of Sailing's World Cup Series Enoshima), both of which have acquired ISO 20121 certification, to learn how the standard is used in actual events.

(2) Benefits

Working towards ISO 20121 certification has led to the following benefits. First, preparing report forms to comply with ISO 20121 has reduced potential risks, such as missed legal obligations, during the preparation and delivery of the Games. Second, declaring our commitment to adopt the ISO 20121 standard has accelerated work on our sustainability initiatives within the organisation. Third, receiving certification from a third party for the ISO 20121-compliant management system we created has helped us inform the public of our sustainability initiatives for the Tokyo 2020 Games in a more compelling way.

Since obtaining ISO 20121 third-party certification, we have been able to increase the visibility of our sustainability initiatives for the Games. We look forward to seeing our sustainability initiatives, as well as the efforts of others building on our initiatives, take root and spread to international sporting events and other types of events held in Japan and around the world, so that sustainability practices become an integral part of events.

Plan-do-check-act (PDCA) cycle approach in the management system



Initiatives in line with ISO 20121

We have set up a policy and objectives and then established a plan to implement our sustainability initiatives through a plan-do-check-act (PDCA) cycle approach. We conduct reviews to further improve each initiative on an ongoing basis.

(1) Policy and planning

In May 2018 we set up the Tokyo 2020 Olympic and Paralympic Games Sustainability Policy*, which outlines our basic approach to incorporate sustainability into the planning and delivery of the Games. This policy presents the framework of our main themes and goals on sustainability and the fundamental measures to achieve them. Based on the policy, we established the Sustainability Plan (Version 2) in June 2018, which indicates our specific initiatives and goals. We monitor and assess the implementation status of these initiatives and goals on a regular basis, in line with our ISO 20121-compliant management system.

* Tokyo 2020 Olympic and Paralympic Games Sustainability Policy
https://gtimg.tokyo2020.org/image/upload/production/kl5xezmkpzud3llncc9i.pdf

(2) Organisation

The decisions on Tokyo 2020's operations are made at the Executive Board as well as the Management Board that consist of the CEO and Executive Directors and other meetings. The Sustainability Strategic Meeting consisting of bureau heads has been established to facilitate partnerships on sustainability initiatives throughout the organisation.

Tokyo 2020 consists of 52 Functional Areas (FAs)* with individually distinct roles to clarify the functions and operations required to deliver the Games. The Sustainability (SUS) FA, in particular, offers support in planning and delivering sustainable Games. Each FA has a sustainability (SUS) administrator and a SUS coordinator who play important roles, including the following:

- Coordinate with SUS FA
- Implement sustainability initiatives, review and manage progress
- Create ISO 20121-related documents
- Promote sustainability initiatives in daily operations

* See Section 3.1 "Tokyo 2020: Organisational structures" (*page 28*). For a list of FAs, see the Appendices (*page 239*).

(3) Communication and Training

To further raise awareness of the importance of sustainability internally, we share diverse information and knowledge on sustainability at our organisational meetings, and continuously offer training on the basic approach to sustainability to all staff, including new hires.

[Training (Apr. 2018 – Jan. 2020)]

- Induction training: 22 times, 90% participated
- e-learning: 87% attended (for those who attended by May 2019)
  *Continuing to implement e-learning

Sustainability (SUS) administrators and coordinators meetings

Case Study Sustainability (SUS) administrators and coordinators meetings

It is vital that each functional area (FA) of Tokyo 2020 fully understands the importance of sustainability to be able to advance them in our various activities.

In 2018, we assigned a sustainability administrators and coordinators to each FA to establish a system that will reliably carry out initiatives at each FA.

Five meetings have been held so far, to share the results of discussions by expert panels and conduct briefings on the sustainability policy and plan, as well as the ISO 20121-compliant management system for the Tokyo 2020 Games. The meetings have also become a way to share proactive sustainability efforts taking place at each FA.

[Example of initiatives at each FA]

- Diversity and inclusion progress through initiatives toward LGBTs and other sexual minorities in the workplace
- Paperless meeting
- Proper disposition of asset or early decision of final disposal destination

(4) Compliance

We have appointed a Chief Compliance Officer (CCO) and set up the Compliance Committee to ensure compliance at every stage of planning and delivery of the Games. To ensure compliance with basic rules and regulations in daily operations, we compiled a Compliance Handbook and implemented an e-learning programme for all staff as well as held compliance training for new hires. In addition, we monitor compliance to sustainability-related legislations on a regular basis, in line with our ISO 20121-compliant management system.

[Training (Apr. 2018 – Jan. 2020)]

- Induction training: 22 times, 90% participated
- e-learning: 4 times,85% attended

(5) Risk management

We implement risk management based on the following processes:

a. Identify risks (risk assessment)

b. Discuss and define measures to address risks

c. Make improvements through training, exercises and drills

Based on the scale and details of the risks identified, we discuss measures to deal with them and improve measures through training and drills. The Sustainability (SUS) FA participates in all the processes above so that the perspective of sustainability is embedded in the risk assessment and defined measures in an appropriate manner.

(6) Ongoing improvement

We review the operational status of the management system through periodic evaluations and internal audits, which are reported to and approved by the CEO. These are key parts of the management system cycle which enable us to strive for continuous improvement. Necessary actions are taken on matters that have been pointed out in internal audits.

Wider dialogue with multiple stakeholders

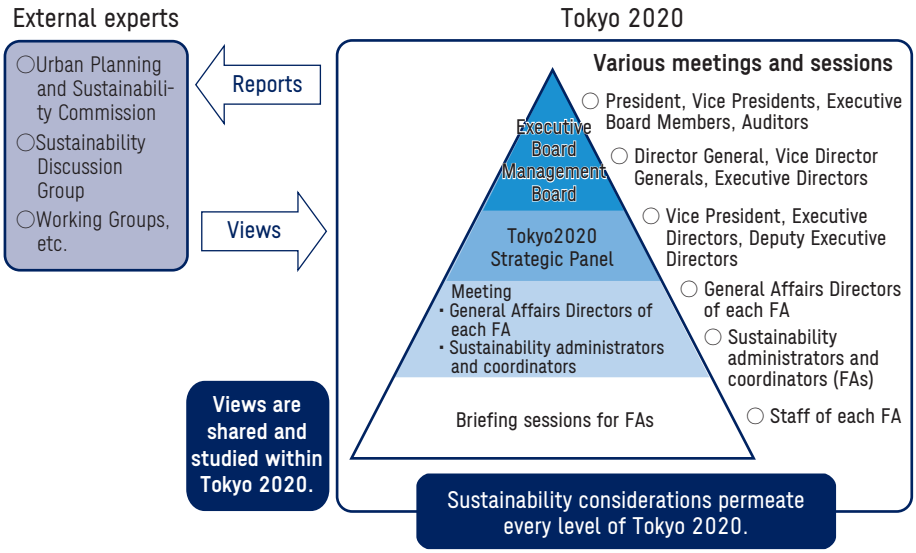
To take into account global and national situations relevant to delivering the Games in a sustainable manner, we have been sharing information and exchanging ideas with multiple stakeholders including experts in each field since the planning phase.

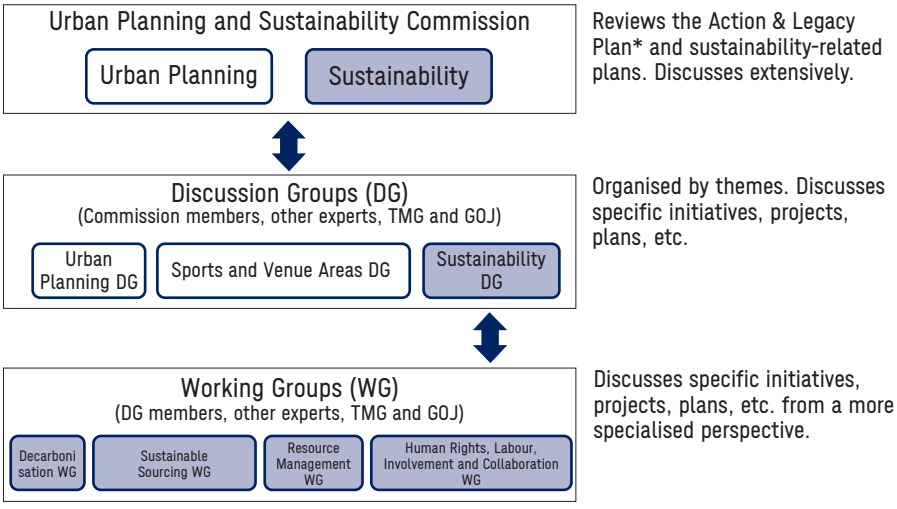
We have established the Urban Planning and Sustainability Commission, which includes academic researchers and NGO representatives; the Sustainability Discussion Group, which discusses specific issues under the Commission; and Working Groups, which examine each issue from a more specialised perspective. The outcome of all these information sharing sessions and discussions among a broad spectrum of people will be reflected in the delivery of more sustainable Tokyo 2020 Games.

[Number of communications and dialogue (Jun. 2015 – Jan. 2020)]

- Urban Planning and Sustainability Commission: 9 times
- Sustainability Discussion Group: 17 times
- Working Groups: total of 58 times

Internal and external structure to expand sustainability efforts





* For Action & Legacy Plan, see Chapter 7. "Handing Down the Legacy" (*page 218*).

Audits by third-party certification body

(1) ISO 20121 certification audit

The management system we adopted underwent third-party audits to check for compliance of setup and operations management with ISO 20121 standard. We obtained ISO 20121 certification in October 2019 from the British Standards Institution (BSI). Audits were carried out from May to August 2019 and included CEO interview, office documents review and on-site audit at test events*.

* A test event is a sporting event carried out prior to the Games to ensure successful operations of the competitions and the Games.

(2) On-site audit at test events

On-site audit at test event

An on-site audit at test events organised by Tokyo 2020 was also conducted as part of the third-party certification. The on-site audit was held from July to August 2019 to check the state of preparations and implementation of the management system at venues.

There were no particular non-conformities indicated from the on-site audit, although some areas that could be improved on were identified. For example, we received a recommendation that all venue operations should ideally be standardized with regards to displays, such as “fire prohibited” signs around generators used at the venues. We are reviewing the recommendations we received from BSI to make improvements in time for the Games.

(3) Surveillance audit

Our ISO 20121-certified management system will have to undergo surveillance audit to ensure that the system continues to be operated properly and effectively. Tokyo 2020 surveillance audit are scheduled to take place in 2020 and 2021.

ISO 20121 certification and sustainability of the Games

Our ISO 20121 certification signifies that sustainability has been integrated into every aspect of our management system.

We will continue using this ISO 20121-compliant management system to advance our initiatives and work toward a more sustainable Tokyo 2020 Games.

4

Progress of Main Themes

4.1
Climate Change

Towards Zero Carbon

4.1 Climate Change

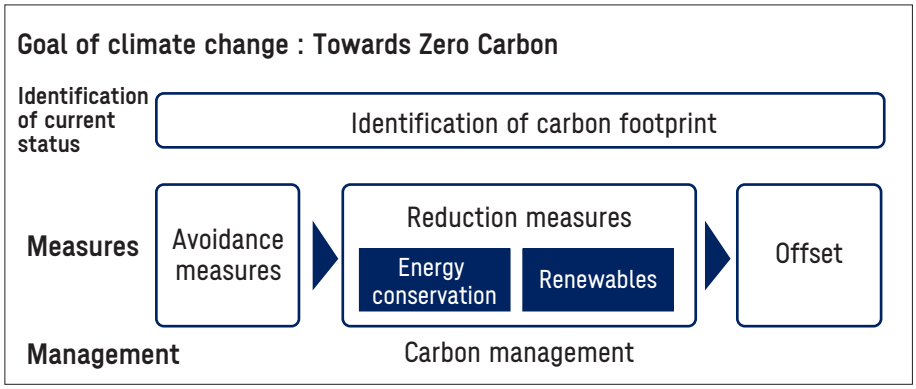
Overview

In 2020, the international framework based on the Paris Agreement was launched with the aim of achieving net zero CO_2 and other greenhouse gas emissions in the second half of this century. The Paris Agreement sets a common goal to keep global average temperature rise to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to below 1.5°C. At the Olympic and Paralympic Games Tokyo 2020, we aim to work towards achieving a decarbonised society as our goal for climate change action, branded Towards Zero Carbon. To achieve this goal, we are approaching carbon management according to the strategy shown below.

Carbon footprint
·····Page44

Avoidance and reduction measures
·····Page52

Offset (incl. carbon offset programme)
·····Page65



To implement carbon management for the Games, we have been calculating our carbon footprint by quantifying and converting all greenhouse gases (GHGs) emitted in relation to the Games into CO_2 emissions in order to determine our status (See "Carbon footprint" on *page 44* for more details). We first calculated the carbon footprint when no measures are taken (i.e. business as usual, or BAU). We then performed calculations using the currently determined values and the latest forecast for the foreseeable future after measures are taken into account, such as avoiding emissions, using energy conservation measures and switching to renewable energy. The calculation method has been validated and current results have been verified by an independent agency. For unavoidable CO_2 emissions even with measures in place, carbon offset initiatives by carbon absorption or reduction elsewhere are implemented to offset emissions. (See "Carbon Offset Programme for the Tokyo 2020 Games" on *page 65* for more details).

Furthermore, we set 12 separate targets and implemented carbon management initiatives through a plan-do-check-act cycle approach to achieve our goal. See the chart on the next page for information on progress against each target.

In this report, specific CO_2 emissions avoidance and reduction measures are summarised from four perspectives: renewable energy, transportation, venue development and use of goods. (See CO_2 and other emissions avoidance and reduction measures on *page 52* for more details).

Summary of progress

We have provided a simple colour-coded rating to give a visual sense of our progress.

Deep green: Completed / Substantial progress and on track

Pale green: Some progress but more work required

Items		Target (including qualitative targets)	Main indicator	Performance / progress
Emissions Avoidance	[Construction] 1. Strategic venue planning for the maximum use of existing venues and public transport networks	Use of existing competition venues Ratio: 58%	Number of existing competition venues/total number of competition venues	58% (25 out of 43 venues)
	2. Ensuring high environmental performance in the construction of venues	Number of venues with passive design: 5	Number of venues with passive design	Five venues (Olympic Stadium, Olympic/Paralympic Village Plaza, Ariake Arena, Musashino Forest Sport Plaza, Ariake Tennis Park)
		Use of recycled materials in venues and the amount used	Amount of recycled materials used in venues	See Chapter 5. "Venue Development" (*page 260*)
		Use of environmentally conscious materials	Venues that use environmentally conscious materials	[Venues that use native Japanese timber] Olympic Stadium Ariake Gymnastics Centre Olympic/Paralympic Village Plaza
	[Operation] 3. Maximum procurement of materials and items with high environmental performance	Procurement of materials and items compliant to the Sourcing Code	Use of goods and materials with high environmental performance ・Amount of recycled fibre used ・Amount of recycled metal used in medals	The following have been implemented for recycled fibre and medals. For procuring other items, items with high environmental performance are used in compliance with the Sourcing Code. [Recycled fibre] Used for uniforms for approx. 88,000 people See Chapter 6. "Preparations for Games Operations" (*page 213*). [Tokyo 2020 Medal] Gold: Approx. 32kg Silver: Approx. 3,500kg Bronze: Approx. 2,200kg See Section 4.5 "Involvement, Cooperation and communications (Engagement)" (*page 151*).

Items			Target (including qualitative targets)	Main indicator	Performance / progress
Emissions Reduction	Reduction measures	[Construction] 4. Construction of venues by effectively using energy saving technologies	Three new permanent venues aiming for satisfying CASBEE*1 Rank S	Number of venues which aims for satisfying CASBEE Rank S, etc.	Four venues (Olympic Stadium, Tokyo Aquatics Centre, Ariake Arena and club house and indoor tennis court in Ariake Tennis Park) See Chapter 5. "Venue Development" (*page 186*).
			Temporary indoor sport venues certified with CASBEE Rank S for short-term use	Number of venues which satisfy CASBEE Rank S, etc.	One venue (Ariake Gymnastics Centre) See Chapter 5. "Venue Development" (*page 186*).
		[Construction] 4. Construction of venues by effectively using energy saving technologies	Seven new permanent venues with floor areas of 2,000m^2 or more to satisfy Level 3 of the Tokyo Green Building Programme and achieve more than 30% energy reduction rate (ERR) of facilities compared to standard buildings	Number of venues which satisfy Level 3 of the Tokyo Green Building Programme Evaluation and with more than 30% ERR of facilities compared to standard buildings	Seven venues (Olympic Stadium, Musashino Forest Sport Plaza, Ariake Arena, Ariake Tennis Park, Oi Hockey Stadium, Sea Forest Waterway and Tokyo Aquatics Centre) See Chapter 5. "Venue Development" (*page 186*).
		[Operation] 5. Maximum use of facilities and equipment with high energy efficiency	Maximise use of high energy efficiency equipment	Number of high energy efficiency equipment in use ・Number of temporary venues with LED lighting and high-performance air conditioners	Determined to use LED sports lighting in principle in overlay*2 Ex: 8 temporary venues (Ariake Gymnastics Centre, Ariake Urban Sports Park, Odaiba Marine Park, Shiokaze Park, Aomi Urban Sports Park, Sea Forest Cross-Country Course, Asaka Shooting Range, Tsurigasaki Surfing Beach) For other items, items with high energy efficiency are used.
		6. Implementation of energy management in venue operations, and install and use building and energy management system (BEMS) in new permanent venues	Optimal use of lighting and room temperature in office facilities	Status of optimising lighting and room temperature in office facilities	Preparing to put up environmental-awareness-raising poster at rooms at venues
			Number of venues using BEMS: 4	Number of venues using BEMS	Four venues (Olympic Stadium, Tokyo Aquatics Centre, Ariake Arena, Musashino Forest Sport Plaza) See Chapter 5. "Venue Development" (*page 186*).

Items			Target (including qualitative targets)	Main indicator	Performance / progress
Emissions Reduction	Reduction measures	7. Reduction of CO_2 emissions through recycled use of items as much as possible	Ratio of reuse or recycling of procured items: 99% (linked with resource management target)	Amount of recycling and reuse/amount procured	Procurement of items underway with a view to reuse post-Games See Section 4.2 "Resource Management" (*page 72*)
		8. Promotion of transport with lower environmental load	Ratio of low-pollution and fuel-efficient vehicles for passenger cars: 100%	Passenger car model composition	Arranging contracts on used vehicles
			Average CO_2 intensity of vehicles used in the Games	Average CO_2 intensity of vehicles used in the Games (g-CO_2/km)	Attained 80 g-CO_2/km or less based on model composition of vehicles used in the Games
		9. Maximum reduction of greenhouse gases (GHGs) (e.g. hydrofluorocarbons (HFCs))	Reduction of alternative HFCs	Actual installation of equipment that use natural refrigerant	Introducing approx. 3,300 units of equipment that use natural refrigerant and low-GWP (global warming potential) equipment (as of Dec. 2019)
	Renewable Energy	[Construction] 10. Installation of facilities that use renewable energies in permanent venues	Venues in which solar photovoltaic (PV), solar heat thermal or geothermal heating/ cooling systems are installed and the capacity of the installed systems	・Solar PV system: Total number of facilities with installation and installed capacity (kW) ・Solar heat thermal system: Total number of facilities with installation and installed capacity (kW) ・Geothermal heating/ cooling system: Total number of facilities with installation and installed capacity (MJ)	Seven venues with installation (Olympic Stadium, Musashino Forest Sport Plaza, Ariake Arena, Ariake Tennis Park, Oi Hockey Stadium, Sea Forest Waterway and Tokyo Aquatics Centre) Total capacity of solar PV systems: Approx. 515 kW Total capacity of solar heat thermal systems: Approx. 462 kW Total capacity of geothermal heating/ cooling systems: Approx. 1,523 kW See Chapter 5. "Venue Development" (*page 186*).

Items			Target (including qualitative targets)	Main indicator	Performance / progress
Emissions Reduction	Renewable Energy	[Operation] 11. Maximum use of renewable energy	Rate of electricity use from renewable energy: 100%	・Amount of electricity use from renewable energy sources during operation ・When no available electricity from renewable energy sources, amount of electricity use from renewable energy sources using tradable green certificates or other credits	Arranging a contract for procurement of electricity from renewable energy sources Currently coordinating the procurement through tradable green certificates or other credits
			Use of renewable energy for other than electricity	Use of hydrogen energy from renewable energy sources in areas other than vehicles	Determined to use hydrogen from renewable energy sources for part of the Olympic cauldron and torch relay, and part of the Olympic/Paralympic Village facilities
Carbon Offset		12. implementation of offset CO_2 and other that are inevitably emitted even with the implementation of elimination/ reduction measures of emissions	Implement carbon offset or other measures	Amount of carbon offset by credits*3 in line with the programme for the Tokyo 2020 Games	Number of participating organisations: 101 Volume of credits donated: 3,149,739t-CO_2 (offset volume to be determined) (as of 7 Feb. 2020)
				The outcome of reduction initiatives towards decarbonisation, engaged by various actors	7 applications 108,875 participants (as of Jan. 2020)

*1. Comprehensive Assessment System for Built Environment Efficiency (CASBEE) is the green building certification system in Japan for evaluating and rating the environmental performance of buildings and the built environment.

*2. Overlay is defined as structures and equipment added to the Games venues, only temporarily for the duration of the Games for operational purposes. Examples are: prefabricated structures, tents, broadcast lighting and temporary infrastructure for operations.

*3. A credit refers to the greenhouse gas reductions achieved, which is tradable among parties through certification programme after verification.

Carbon footprint

Determining our carbon footprint, by first assessing the amount of greenhouse gases (GHGs) emitted in connection with the Games and converting them into CO_2 emissions, is the key to analysing our measures against climate change. Informed by the approach used in the previous Games, we calculated carbon footprints in the Sustainability Plan (Version 2) and showed the results for the case with business as usual (BAU case), when no measures were taken in order to determine our baseline condition, and the case when effects of venue-related measures such as venue plan revisions and design changes were taken into account (venue revision case).

Reference: Carbon footprints in Sustainability Plan (Version 2)

BAU case: 3,011kt-CO_2

Venue revision cases: 2,932kt-CO_2

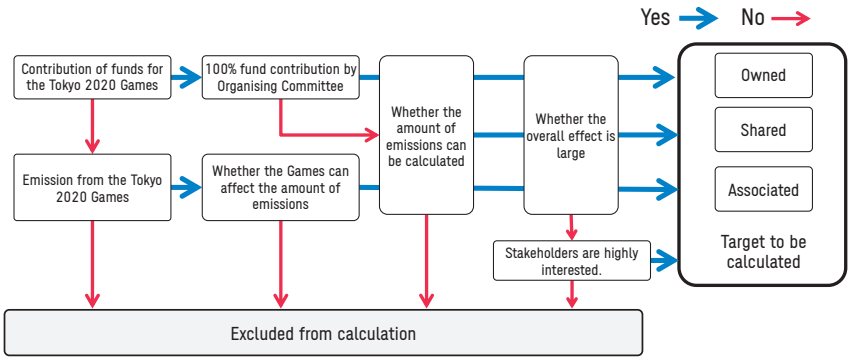
This pre-Games report presents carbon footprint calculations after implementing reduction measures related to the operations of the Games.

In the post-Games report, we will update our carbon footprint based on actual data from the Games.

(1) Carbon footprint boundaries (range included in the calculations)

We defined the boundaries for calculating the carbon footprint of the Tokyo 2020 Games according to the approach used in the previous Games. Carbon footprints are assigned based on the decision tree below, and classified into owned, shared or associated footprints depending on the strength of their connection to the Games, such as whether the funds are contributed for the Games or whether the emissions were due to the Games.

Decision tree to define the boundaries for calculating the carbon footprint

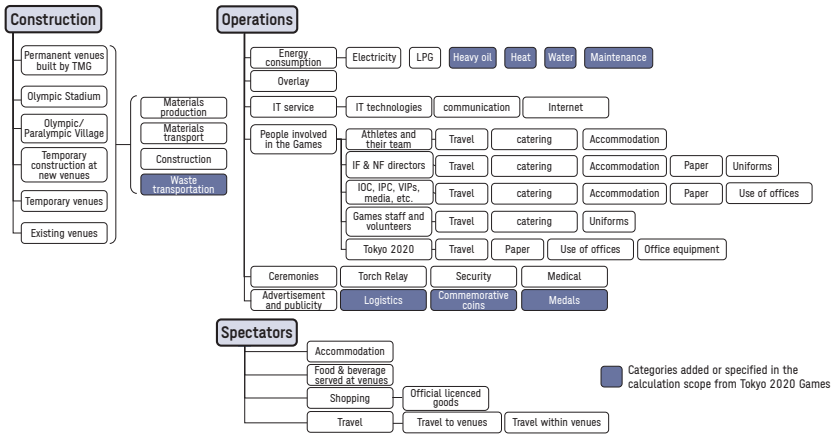


The figure below shows the boundaries of carbon footprint calculations for the Tokyo 2020 Games. The boundaries were defined in three stages: construction, operation and spectators.

Overlays are included in operation because they are required for the operation of the Games and carbon footprints from past Games also classify them as operational stage.

The dark blue boxes are newly added or designated categories according to the approach of the Tokyo 2020 Games.

Boundaries of carbon footprint calculations



*Parts of the boundary diagram provided in Sustainability Plan (Version 2) have been reclassified and revised into more appropriate terms. The category "internet" included in other operations in the previous boundary diagram is now included in IT services.

(2) Carbon footprint calculation method

Carbon footprint is calculated as the sum of all the activity levels multiplied by their corresponding greenhouse gas (GHG) emission intensity. Activity levels are based on information available at the time of calculation. GHG emission intensity has been carefully considered and applied to reflect actual conditions at the Tokyo 2020 Games.

Outline of carbon footprint calculation method

Category	Carbon footprint (item)		Amount of activity		GHG emission intensity*
Construction	The construction of new venues	=	Area of new construction [m^2]	×	Emission intensity of new construction [t-CO_2 / m^2]
	The temporary construction	=	Area of temporary spectator seats zone [m^2]	×	Emission intensity of temporary construction [t-CO_2 / m^2]
	Existing venues		Area of renovation [m^2]	×	Emission intensity of renovation [t-CO_2 / m^2]
Operation	Energy consumption by venues	=	Energy consumption, etc. [kWh]	×	Emission intensity of energy consumption [t-CO_2 / kWh]
	Overlay	=	Area of overlay [m^2]	×	Emission intensity of overlay [t-CO_2 / m^2]

Operation	IT services	=	Budget of IT services [JPY]	×	Emission intensity of IT services [t-CO_2 / JPY]
	Ceremonies	=	Budget of ceremonies [JPY]	×	Emission intensity of events [t-CO_2 / JPY]
	Torch Relay	=	Total length of travel by torchbearers [person & km]	×	Emission intensity of travel [t-CO_2 / person & km]
	Security	=	Security budget [JPY]	×	Emission intensity of security [t-CO_2 / JPY]
	Medical	=	Budget of medical activities [JPY]	×	Emission intensity of medical activities [t-CO_2 / JPY]
	Advertisement and publicity	=	Budget of advertisement and publicity [JPY]	×	Emission intensity of advertisement and publicity [t-CO_2 / JPY]
	Logistics	=	Budget of distribution [JPY]	×	Emission intensity of distribution [t-CO_2 / JPY]
	Commemorative coins	=	Metal weight of memorial coins [kg]	×	Emission intensity of metals [t-CO_2 / kg]
	Medals	=	Weight of metals used in Medals [kg]	×	Emission intensity of metals [t-CO_2 / kg]
People involved in the Games	Catering	=	Budget of catering [JPY]	×	Emission intensity of catering [t-CO_2 / JPY]
	Accommodation	=	Number of nights spent at each accommodation [person & night]	×	Emission intensity of accommodation [t-CO_2 / person & night]
	Paper	=	Amount of paper consumption by organisations [kg]	×	Emission intensity of papers [t-CO_2 / kg]

Operation	People involved in the Games	Uniforms	=	Amount of uniform consumed by organisations [kg]	×	Emission intensity of uniform [t-CO_2 / kg]
		Use of offices	=	Amount of energy consumption, etc. [kWh]	×	Emission intensity of energy consumption (office) [t-CO_2 / kWh]
		Office equipment	=	Budget of supplies [JPY]	×	Emission intensity of supplies [t-CO_2 / JPY]
		Travel	=	Total amount length of travel by people [person & km]	×	Emission intensity of travel [t-CO_2 / person & km]
Spectators		Accommodation	=	Total number of nights and persons spend at accommodations [person & night]	×	Emission intensity of accommodation [t-CO_2 / person & night]
		Food & beverage served at venues	=	Total number of food & beverage served [serving]	×	Emission intensity of food & beverage served [t-CO_2 / serving]
		Shopping (official licenced goods)	=	Monetary amount of shopping by the spectators [JPY]	×	Emission intensity of official goods [t-CO_2 / JPY]
		Travel	=	Total amount of travel by spectators [person & km]	×	Emission intensity of travel [t-CO_2 / person & km]

*Parts of the carbon footprint calculation method given in Sustainability Plan (Version 2) have been reclassified and revised into more appropriate terms. Although it was included in the calculations, the calculation method for existing venues was added here. The category "internet" included in other operations in the previous carbon footprint calculations is now included in IT services.

*References of CO_2 Emission intensity

- "IDEA v2 (Inventory Database for Environmental Analysis v2)" (The National Institute of Advanced Industrial Science and Technology / Japan Environmental Management Association for Industry)
- "Report of the development of environmental evaluation technique through the lifecycle of social capitals —Methods to practice social capital LCA—" (National Institute for Land and Infrastructure Management, Ministry of Land, Infrastructure and Transport)
- "LCA guideline for buildings" (Architectural Institute of Japan, 2006)
- "Green diagnosis and modification planning standards and their descriptions" (supervised by Government Buildings Department, Minster's Secretariat at Ministry of Land, Infrastructure and Transport)
- "The environmental load intensity that takes into account of global supply chain estimated using the global link input-output (GLIO) model provided in Embodied Energy and Emission Intensity Data (3EID) for Japan Using Input-Output Tables" (National Institute for Environmental Studies)

- "Carbon Emission Calculator" (ICAO)
- "London2012 Carbon footprint study — Methodology and reference footprint" (March 2010)
- CO_2 emission intensity of newly constructed venues and overlays estimated from the amount of materials used in the Tokyo 2020 Games

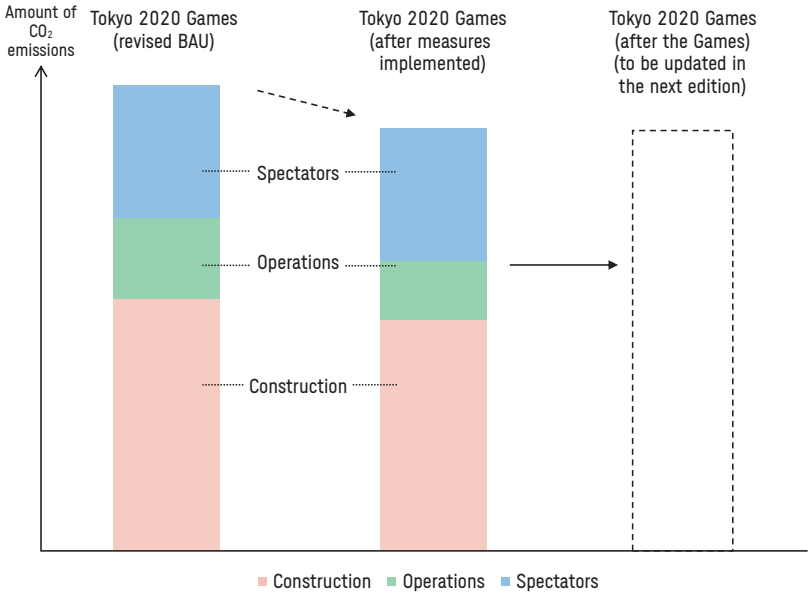
(3) Carbon footprint calculations

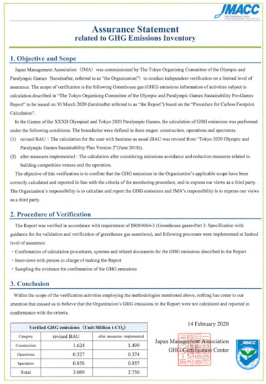
Carbon footprint for the BAU case at the time of release of the Sustainability Plan (Version 2) considered the effect of construction on additional sports competitions (Baseball/ Softball, Karate, Skateboarding, Sport Climbing and Surfing), but the effects of the Games operations and spectators could not be reflected because competition schedules have not been determined yet. Here, BAU calculations reflect the footprints from operations and spectators due to additional sports competitions (revised BAU case).

In addition, we calculated the carbon footprint considering emissions avoidance and reduction measures related to building competition venues and the operation of the Games (after measures implemented). We were able to avoid or reduce our carbon footprint mainly through revision of venues, including the plan for the Olympic Stadium, the use of temporary facilities, temporary spectator seats, overlay rentals and leases. Other reduction measures include installation of energy efficient systems at new permanent venues, use of fuel-efficient vehicles with low environmental impacts, use of renewable energy, reduction in paper use and use of recycled crushed stones. Our avoidance and reduction measures resulted in about 280kt-CO_2 reduction compared to the revised BAU level. For details of the avoidance and reduction measures, *see page 51*. The major factors for the rise in carbon footprint are the changes in competition period, sport events and venues.

Carbon footprint figures for this year have been verified by an independent party based on the calculating method planned by the Tokyo 2020 Organising Committee.

a. Carbon footprint of the Tokyo 2020 Games




JMACC

Assurance Statement
related to GHG Emissions Inventory

1. Objective and Scope

2. Procedure of Verification

3. Conclusion

Assurance Statement
rerated to GHG Emissions Inventory

Category	Tokyo 2020 Games (revised BAU)	Tokyo 2020 Games (after measures implemented)
Construction	1.624 million t-CO_2	1.499 million t-CO_2
Operations	0.527 million t-CO_2	0.374 million t-CO_2
Spectators	0.858 million t-CO_2	0.857 million t-CO_2
Total	3.009 million t-CO_2	2.730 million t-CO_2

b. Breakdown of carbon footprint

Carbon footprint details					
Item			Related organisation (Functional Areas)*1	Emissions with revised BAU (kt-CO_2)	After measures implemented (kt-CO_2)
Construction (by venue)	Newly constructed venues	TMG permanent venues	TMG	511	336
		Olympic Stadium	GOJ/Japan Sport Council (JSC)	465	311
		Olympic/ Paralympic Village	TMG	405	553
		New venues (temporary parts)	Tokyo 2020	98	83

Construction (by venue)	Temporary venues		Tokyo 2020	87	89
	Existing venues		Tokyo 2020/ Other facility administrators	58	127
	Subtotal			1,624	1,499
Operation	Energy consumption		Tokyo 2020 (NRG)/TMG/ Other facility administrators	64	17
	Overlay*2		Tokyo 2020 (VNI)	133	11
	IT services		Tokyo 2020 (TEC)	44	44
	Ceremonies		Tokyo 2020 (CER)	17	25
	Torch relay		Tokyo 2020 (OTR)	3	3
	Security		Tokyo 2020 (SEC)	26	26
	Medical		Tokyo 2020 (MED)	11	11
	Advertisement and publicity		Tokyo 2020 (COM)	13	13
	Logistics		Tokyo 2020 (LOG)	5	20
	Commemorative coins		Tokyo 2020 (LIC)	2	2
	Medals		Tokyo 2020 (PRT)	0.1	0.1
	People involved in the Games	Catering/ Accommodation/ Paper/ Uniform/ Use of offices/ Office equipment	Tokyo 2020 (FNB, ACM, Administration, PEM)	209	202
		Travel	Tokyo 2020 (TRA, NCS)		
	Subtotal			527	374

Spectators	Accommodation	Tokyo 2020 (TKT)	168	168
	Food and beverage served at venues	Tokyo 2020 (FNB)	30	30
	Shopping (official licenced goods)	Tokyo 2020 (LIC)	49	49
	Travel	Tokyo 2020 (TRA, TKT)	611	610
	Subtotal		858	857
Total			3,009	2,730

*1 For a list of FAs, see the Appendices (*page 239*).

*2 Overlay boundary (i.e. scope of calculation) in calculating the carbon footprint is as follows: Tents, prefabricated structures, modular housing, containers and modular toilets for operational purposes.

(4) Carbon footprint reduction measures

a. Avoidance with a strategic venue plan that leverages the use of existing venues

We revised the Olympic Stadium plan as well as other venue plans to shift from use of new venues to existing venues, such as in the case of the Waterpolo Arena. Carbon reduction from this measure is about 100kt-CO_2.

b. Reduction from use of rentals and leases

For temporary facilities, temporary spectator seats and overlays, we avoided new purchases by using rentals and leases. We calculated the CO_2 reduction for rentals, leases or reuse based on the rental or lease period for the Games (seven months) and the ratio of usage period that takes into account the lifetime of the facility or equipment.

The effect of renting or leasing at temporary venues, temporary spectator seats and overlay will amount to a reduction of more than 80 per cent of the carbon footprint when purchased, with a reduction of about 140kt-CO_2 (approximately 50 per cent of total reduction).

c. Reduction from energy use reduction and effect on legacy

We reduce energy use of the entire facilities by installing energy efficient facilities at new permanent venues to be compliant with the Tokyo Green Building Programme and achieve more than 30 per cent energy reduction rate (ERR). For details on reduction and effect on legacy, see "CO_2 emissions avoidance and reduction measures" (*page 61*).

d. Reduction from use of renewable energy

For electricity directly procured by Tokyo 2020, we will use electricity from renewable energy sources to achieve our goal of 100 per cent power from renewables in operations of the Games. For areas where access to electricity from renewable energy sources is difficult due to existing contracts or other circumstances at the venue, we will use tradable green certification system or other credits to lower impact. We expect to reduce our carbon footprint by approximately 50kt-CO_2.

e. Reduction from use of fuel-efficient vehicle transport

We plan to adopt fuel-efficient vehicles for passenger cars (fleet cars) for the Games operations such as fuel cell electric vehicles (FCEVs),* plug-in hybrid electric vehicles (PHEVs) and other hybrid vehicles. We expect to reduce our carbon footprint by approximately 400 t-CO_2.

* Carbon footprint of FCEVs is calculated over the vehicle's well-to-wheel lifecycle from exploiting fuels to hydrogen production and filling the tank. The emission intensity for hydrogen employs that in the case of on-site reforming (hydrogen is produced at filling stations).

f. Reduction from reduction in paper use

Tokyo 2020 has promoted a paperless office and has implemented a cut on unnecessary colour printing, resulting in a significant reduction in paper use. Carbon footprint has been reduced by approximately 2,000 t-CO_2.

g. Reduction from use of recycled crushed stones

Large volumes of recycled crushed stones have been used in the construction of the Ariake Gymnastics Centre and new permanent venues.

Carbon footprint has been reduced by approximately 3,000 t-CO_2 compared to the case using conventional crashed stones and gravel.

CO_2 emissions avoidance and reduction measures

(1) Use of renewable energy and hydrogen energy

a. Use of renewable energy

For electricity directly procured by Tokyo 2020, we will use electricity from the renewable energy mix to achieve our goal of 100 per cent power from renewables at competition venues, International Broadcast Centre/Main Press Centre (IBC/MPC) and the Olympic/Paralympic Village in operations of the Games. For areas where access to electricity from renewable energy sources is difficult due to existing contracts or other circumstances at the venue, we will use tradable green certification system or other credits to lower impact.

Using this approach, we aim to reach 100 per cent renewable energy use.

Expected power procurement using the criteria for electricity from renewable energy sources established by Tokyo 2020 (planned)

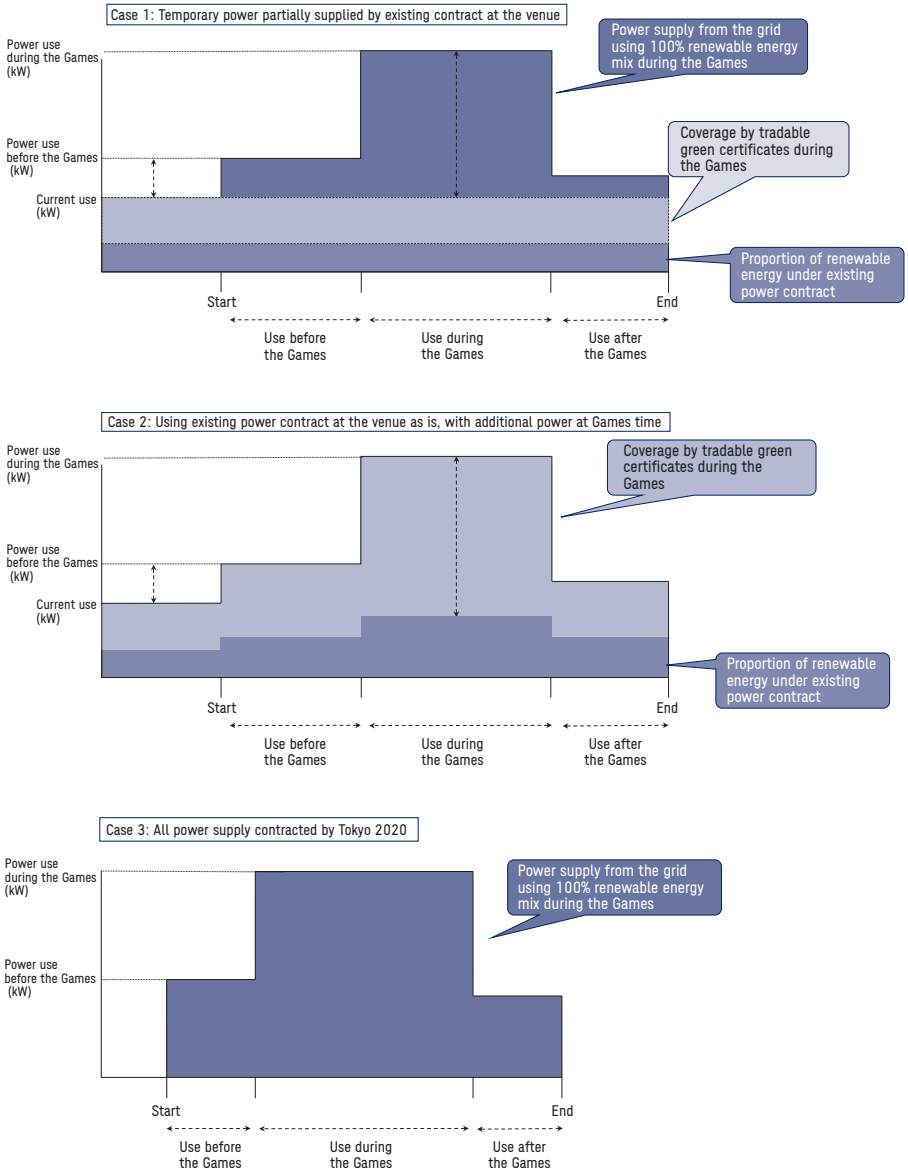
Electricity from renewables for the Games
Power consumption from the renewable energy mix
Power generated by renewable energy system installed at the venue
Renewable energy use from electricity with a high proportion of renewable energy
Renewable energy use using tradable green certification system

Power supply from renewable energy sources are classified into the following three cases. Areas with non-renewable energy sources due to existing contracts at venues will be covered using environmental credits (tradable green certification system or the methodology under the J-credits resulting from renewable energy).

Case 1: Temporary power partially supplied by existing contract at the venue

Case 2: Using existing power contract at the venue as is, with additional power at Games time

Case 3: All power supply contracted by Tokyo 2020



i. Renewable energy mix

Regarding the supply of electricity to temporary venues and the supply for covering increased power at the competitions at some permanent venues, we will introduce electricity from 100 per cent renewable energy mix that can clearly identify power sources from the power company. We are arranging energy mix, aiming for using renewable energy generated in Tohoku and other regions since Tokyo 2020 Games are recognized as the "Reconstruction Games".

ii. Procurement of environmental credits using tradable green certification system

We are currently coordinating the procurement of environmental credits using tradable green certification system or other credits to cover areas with non-renewables due to existing venue contracts.

We plan to utilise the tradable green certificates of Yokohama City's wind power plant (Hama Wing) for the electricity consumption at the Football games at the International

Stadium Yokohama.

iii. Installation of renewable energy system

We installed new renewable energy systems at seven venues within Tokyo, including the Olympic Stadium and Tokyo Aquatics Centre.

Solar heat thermal systems and photovoltaic panels at Ariake Arena

Total generation capacity of solar photovoltaic systems (kW)	Total usable capacity of solar heat thermal systems (kW)	Total geothermal capacity of geothermal heating/ cooling systems (kW)
Approx. 515kW	Approx. 462kW	Approx. 1,523kW

iv. Expected use from renewable energy power generation system

During the Games, we will collect data on the amount of power generated by renewable energy power generation systems at existing venues, in addition to the power generated by the new renewable energy power generation systems installed at seven newly constructed permanent venues in Tokyo.

Venue	Power generation method	Generation capacity (kW)	Forecasted generation* (kWh)
Ariake Arena	Solar photovoltaic	200	37,960
Ariake Tennis Park	Solar photovoltaic	50	9,490
Oi Hockey Stadium	Solar photovoltaic	5 3	1,520
Sea Forest Waterway	Solar photovoltaic	30	5,690
Tokyo Aquatics Centre	Solar photovoltaic	100	18,980
Musashino Forest Sport Plaza	Solar photovoltaic	102.58	19,470
Tokyo Stadium	Solar photovoltaic Wind	240 0.2	45,550 60
Olympic Stadium	Solar photovoltaic	24.7	4,690
Enoshima Yacht Harbour	Solar photovoltaic	5	950
Ibaraki Kashima Stadium	Solar photovoltaic	205	38,910

Saitama Stadium	Solar photovoltaic	8.88	1,690
Yoyogi National Stadium	Solar photovoltaic	55 44	18,790
Tokyo International Forum	Solar photovoltaic	93	17,650
Shiokaze Park	Solar photovoltaic	10	1,900
Saitama Super Arena	Solar photovoltaic	351.7	66,750
Sapporo Dome	Solar photovoltaic	90	17,080
IBC/MPC	Solar photovoltaic	825.12	156,610

* Forecasted power generation is estimated for two-month generation. Capacity factors of solar photovoltaic power generation system and wind power generation system are 13% and 20%, respectively.

v. Use of hydrogen from renewable energy sources

Tokyo 2020 and TMG plan to use hydrogen energy mainly in Tokyo at the Olympic/Paralympic Village.

We are considering the use of hydrogen from renewable energy sources produced in Fukushima Prefecture. For more details, see b. "Use of hydrogen energy."

vi. Number of venues that use electric power with a high proportion of renewable energy for the Games

- At permanent venues with facilities provided by TMG, we are reviewing power procurement that uses a high proportion of renewable energy and the lowest carbon emissions possible. We are recommending electricity that meets standard level 2 of the Tokyo Metropolitan Green Purchasing Guidelines, which specifies an emission factor below 0.47, renewable energy ratio of 20 per cent or higher, among others. Achieving this standard will aid in our ongoing commitment to reach the national emission factor target in 2030.

Case Study Renewable energy use in showcasing areas

The showcasing areas are being fitted to supply electricity from renewables. Each pavilion will be able to cut CO_2 emissions from electricity use.

Fuel cell forklift
Source: Toyota Motor Corp. official website

b. Use of hydrogen energy

Recent trends towards creating a hydrogen-based economy in Tokyo have been gaining ground. At the Games, we will use hydrogen energy as our energy source for some of the facilities inside the Olympic/Paralympic Village and introduce fuel cell electric vehicles (FCEVs) for use at the Games. We are also reviewing the use of fuel cell forklifts among other things, as we plan to help create a hydrogen-based economy through the Tokyo 2020 Games.

i. Use of hydrogen energy in vehicles

We plan to introduce 500 FCEVs, which are fuelled by hydrogen, as passenger cars for transporting Games stakeholders.

Buses that use hydrogen enegy are widely used in Tokyo. Tokyo Metropolitan Bureau of Transportation is currently in the process of introducing fuel cell buses (FC buses). TMG-operated Toei Bus will operate 70 FC buses as transit buses in the metropolitan area by 2020. In addition, FC buses are scheduled for use as non-articulated vehicles in the Bus Rapid Transit (BRT)*1 system, with preliminary runs to commence in 2020.

By actively adopting vehicles that use hydrogen energy for the Games, we hope that the Tokyo 2020 Games will serve as a springboard to increasing the demand for hydrogen energy and help create a full-fledged hydrogen-based economy.

*1 An urban transport system based on the flexible use of buses with the carrying capacity and performance comparable to trams, facilitated by articulated buses running on improved road and the use of smart cards. The BRT plans to make use of both articulated and non-articulated vehicles.

ii. Hydrogen-related initiatives at the Olympic/Paralympic Village

The Olympic/Paralympic Village district is being developed as part of a redevelopment project. After the Games, TMG plans to create a hydrogen supply system using hydrogen pipelines and set up hydrogen stations in the district, in order to make the Olympic/Paralympic Village district a model for a hydrogen-based economy under the Olympic/Paralympic Village District Energy Development Plan (March 2017). Prior to this, TMG will also publicise hydrogen energy use around the district. Lodging facilities at the Olympic/Paralympic Village and the rest facilities at the Harumi Port Park are supplied with the

electricity generated using hydrogen-based technologies.

Hydrogen from renewable energy sources produced in Fukushima Prefecture is to be used as the energy source. With these initiatives, we plan to send messages of hope for Tohoku region's recovery and the possibilities of a hydrogen-based economy.

Hydrogen stations for vehicles will also be set up in neighbouring areas of the Olympic/ Paralympic Village District to supply hydrogen to vehicles 24 hours a day during the Games. Hydrogen information facilities will be established inside the hydrogen stations to provide information on hydrogen energy.

Case Study Use of hydrogen in the Games cauldrons and torch

The Tokyo 2020 Games will be the first in the history of the Games to use hydrogen as fuel for the Olympic and Paralympic cauldrons and torch relay. Two Olympic cauldrons will be installed: one in Olympic Stadium for use during the Opening and Closing Ceremonies, and one on the Yume no Ohashi bridge for use during the Games. Both will use hydrogen to fuel the flame of the cauldrons. The fuel will include hydrogen derived from renewable energy and manufactured in Namie, Fukushima, by a Games partner. Certain segments of the Tokyo 2020 Olympic Torch Relay in Fukushima, Aichi, and Tokyo will also use torches fuelled by hydrogen. These efforts will symbolise to the world the sustainability initiatives of the Tokyo 2020 Games.

(2) Transport with low environmental impact

At the Tokyo 2020 Games, we aim to use low-emission and fuel-efficient vehicles whilst fully leveraging the public transport system. We will also integrate relevant strategies such as encouraging eco-driving and travel demand management (TDM) to lower environmental impact.

a. Low-emission and fuel-efficient vehicles

We will use 2,700 fleet vehicles for the Games. We are working on attaining our target of 100 per cent use of clean and fuel-efficient vehicles at the Games through active use of fuel cell electric vehicles (FCEVs) and plug-in hybrid electric vehicles (PHEVs) for our fleet requirements, on top of our efforts to minimise the number of vehicles in the fleet.

We plan to use a total of 500 FCEVs to deliver the Games. Using a large number of FCEVs is expected to lead to higher recognition of hydrogen energy and FCEVs, and to drive the demand for more hydrogen energy, which will ultimately help to create the hydrogen-based economy promoted by Government of Japan (GOJ) and local governments including TMG.

We also plan to use other types of clean and fuel-efficient cars such as hybrid electric vehicles (HEVs).

Fuel cell electric vehicle (FCEV)
Source: Toyota Motor Corp. official website

b. Average CO_2 emission intensity

Active use of clean and fuel-efficient vehicles such as FCEVs and PHEVs will average CO_2 emission less than 80 g-CO_2/km for fleet vehicles*1 which is expected to be the lowest intensity level so far in the history of the Olympic/Paralympic Games. The CO_2 emissions of vehicles of the same class and model as the vehicles used for the Games is approximately 150 g-CO_2/km*2 when calculated based on 2020 Japanese standard. Thus, the intensity level of less than 80 g-CO_2/km is well better than the standard value.

*1 Numerical data based on partner companies that provide vehicles

*2 Weighted fuel efficiency average calculated based on the vehicle fuel efficiency standards for vehicles (FY2020)

*3 Last mile refers to the spectators' route from transport hubs such as a train, subway or shuttle bus station to the venue.

c. Use of battery electric vehicles (BEVs)

Apart from the fleet vehicles, delivering the Games will require various types of vehicles to transport athletes and spectators, such as shuttle buses covering the Olympic/Paralympic Village area or vehicles for aiding visitors on the last mile*3 to venues. At the Tokyo 2020 Games, we plan to use the BEVs described below for these purposes, since they do not emit CO_2 or other gases in running. Ninety per cent of all vehicles in the Games will be electrified vehicles, including FCEVs for passenger cars in addition to the BEVs given below.

At the Olympic/Paralympic Village, we will provide shuttle buses that circulate within the Village to help with the smooth movement of athletes and related staff. The plan is to introduce BEVs equipped with autonomous driving technology for this purpose, and the bus shuttle service will travel inside the Village for the mobility of athletes.

At large-scale venues, we're planning to use around 200 of these exclusive-use BEVs supporting mobility within the Games venue area. The venue transport service considers accessibility for all, including people involved in the Games, athletes, seniors, people with restricted mobility, pregnant women and people accompanying infants and young children. These vehicles will also make it possible to quickly transport wheelchair users, heatstroke patients and other people requiring urgent medical care.

The vehicles are specially equipped with a low floor, electric ramp and adjustment control to park the vehicle at stops and support the movement of wheelchair users for easy boarding/alighting.

In addition, we will use several types of EVs with futuristic designs as lead cars for the marathon and torch relay convoy to present cutting-edge vehicles at symbolic scenes and set the stage for the Games.

We also plan to use around 300 pedestrian-zone battery electric vehicles for the mobility of security and medical staff around the venue. State-of-the-art EV technology will be utilised in all areas of the Games.

Battery electric vehicles scheduled to be used
Source: Toyota Motor Corp. official website

d. Low emission and fuel-efficient buses

Of all the buses to be used to transport athletes and spectators, we are working on using as many clean and fuel-efficient vehicles as possible for buses we directly procure for the Games.

In addition, low-emission vehicles are being adopted for transit buses in the metropolitan area. As of fiscal 2019, 15 fuel cell (FC) buses have been introduced as transit buses by TMG-operated Toei Bus, with plans to increase the number of FC buses to 70 by 2020. TMG has set the target of introducing FC buses as 100 by 2020, including ones introduced by private bus operators.

Furthermore, the operations of the bus rapid transit (BRT) system are scheduled to start from 2020 at Tokyo's waterfront areas. The system plans to use fuel cell buses for non-articulated single-carriage vehicles, which will be available at the Games as well.

We are leveraging the Games as an opportunity to actively promote the adoption and use of clean and fuel-efficient buses around the Tokyo area. We also anticipate that these buses will continue running on the streets of Tokyo after the Games and become part of the legacy of the Games.

e. Considerations for the transport of goods and others

We have been recommending the use of clean and fuel-efficient vehicles to waste disposal operators. Among vehicles used for waste collection at the Games, some are hybrid vehicles and vehicles powered by liquefied petroleum gas (LPG) or compressed natural gas (CNG).

To work on our commitment to reduce carbon emissions, we drew up an operation plan for transporting goods and waste in advance, which will ensure efficient transport routes and implement an efficient transport system that considers road congestion conditions. We will also minimise emissions during transport by enforcing eco-driving, such as no engine idling.

In procuring ingredients for food and beverage services for the Games, we will prioritise the use of Japanese ingredients to the extent possible. Using locally produced ingredients reduces CO_2 emissions by shortening travel distance compared to ingredients imported from abroad. We will continue to promote and implement these initiatives in the lead up to the Games.

Kick-off ceremony of the 2020 travel demand management (TDM) project

f. Travel demand management

We strive to provide smooth transport for the Tokyo 2020 Games, whilst maintaining the stability of people's and businesses' activities in the metropolitan area. We will carry out travel demand management (TDM) as one of the solutions to achieve these goals.

It is a set of strategies to use transportation resources most efficiently, which includes easing road congestion through efficient vehicle use and switching to suitable public transport options, and regulating travel demand including those for rail and other public transport modes. This is expected to bring down traffic volume, create a smooth traffic environment and reduce environmental impact.

In August 2018, Tokyo 2020, TMG and GOJ launched the 2020 TDM Promotion Project to begin work on the mobility management to reduce traffic congestion during the Games.

The project is carrying out the preparatory work for avoiding congestion at the Games by calling for the cooperation of industry groups and businesses on initiatives such as TMG's campaign Jisa Biz*, using staggered working hours, telecommuting, and changing delivery

* Campaign to reduce congestions on rush hour trains by encouraging commuters to use staggered working hours and telecommuting, along with railway companies' campaign to promote off-peak commuting

time in logistics. In October 2018, the Games Transport Impact Map was published to show the impact on roads, rails and other modes of transport with no traffic strategies in place during the Games. The map aims to provide a reference for people when deciding to use roads or rails during the Games, as well as for corporations to assess the impact on their businesses and to aid in creating action plans to avoid potential traffic congestion during the Games.

With these initiatives, we aim to balance providing safe and smooth transport for spectators and stakeholders of the Tokyo 2020 Games and maintaining the stability of logistics and other activities in the metropolitan area.

Smooth Biz promotion poster

TMG has integrated all the initiatives, including TDM, Jisa Biz and telecommuting, and has focused its efforts into promoting all of them as Smooth Biz campaign. As part of these efforts, TMG implemented a trial run to reduce the number of personnel commuting to and working in its office building to one-third its usual in the summer of 2019. These measures to ease traffic congestion and lower environmental impact are expected to remain as a legacy of the Games.

g. Rail (Energy-efficient trains)

Railway companies in particular are working on improving the energy efficiency of their trains. Railway lines running through Tokyo have started adopting trains with the latest energy-saving technologies, such as variable voltage variable frequency (VVVF) control and regenerative braking, with their adoption rate nearing 100 per cent by 2020.

Climate actions are also being advanced through both the use of rail and other public transport and the use of energy-saving technologies by the railway companies.

h. Eco-driving

At the Tokyo 2020 Games, we ensure that all drivers including volunteer drivers undertake advance eco-driving training, in which we call for greater awareness of fuel efficiency and lower environmental impact and thorough practise of eco-driving.

i. Maximising use of public transport

We are encouraging people to use public transport when visiting the competition venue to watch the Games. Controlling the use of private cars to go to the venue creates a smooth road environment and also results in climate action.

(3) Environmentally responsible development and operation of venues

a. Low impact construction of the venues

i. Providing environmental performance

1) Weight reduction in the Ariake Gymnastics Centre roofing

The Ariake Gymnastics Centre has a large vaulted ceiling of about 90m width and 120m


Ariake Gymnastics Centre

depth—one of the largest in Japan—which was achieved by using a wooden beam string structure with wooden arches and steel cables.

Made of wooden beams instead of steel, the roof uses approximately 1500m^2 of timber. While the structural weight of roof frames (excluding finishing) is 200kg/m^2 for typical steel structures, using wooden beams reduced the weight by about half, to approximately 102kg/m^2. Using a lighter roof made it possible to reduce the amount of steel used for the foundation, and therefore to avoid carbon emissions.

ii. Active use of energy-saving technologies in architecture

We have actively used energy-saving facilities at newly outfitted competition venues.

1) Energy savings in venues with CASBEE

Aiming to construct an Olympic Stadium with low energy use, we verified that its architecture cleared the highest rating of Rank S during assessment at the design stage under Comprehensive Assessment System for Built Environment Efficiency (CASBEE), the green building certification system in Japan, which comprehensively assesses building quality including energy efficiency and landscaping.

The Ariake Arena, Tokyo Aquatics Centre and club house and indoor tennis court in Ariake Tennis Park have also been certified as CASBEE Rank S. The Ariake Gymnastics Centre, a temporary indoor stadium, obtained in September 2019 the highest rating, Rank S, under CASBEE for short-term use. The Olympic/Paralympic Village was certified as Rank S under CASBEE, and certified as Gold under the US-based rating system, Leadership in Energy and Environmental Design for Neighborhood Development (LEED-ND), which assesses energy efficiency and environmental considerations of neighbourhood developments, in November 2018.

For more details, see Chapter 5. "Venue Development" (*page 186*).

2) LED lighting for competitions at venues

We used in principle LED fixtures for lighting during competitions at the temporary indoor stadium, Ariake Gymnastics Centre, and other venues. Energy savings by using LED is expected to save more energy compared to when incandescent or halogen lamps are used.

3) Carbon dioxide reductions from the energy use reduction on legacy

We reduce energy use of the entire facilities by installing energy efficient facilities at new permanent venues to be compliant with the Tokyo Green Building Programme.

Carbon dioxide reductions from the energy use reduction for the period of the Games are shown in the table below.

Olympic	2,122t-CO_2
Paralympic	1,242t-CO_2
Total	3,364t-CO_2

The positive environmental impact after the Games as a legacy was calculated based on the amount of CO_2 reduction for the period of the Games, the annual number of days in operation, and the estimated period in which CO_2 reduction remains in effect.

Future reductions as a legacy of the Games are shown in the table below. For the figures, total reduction is not calculated because some venues are to be used for both the Olympic and Paralympic Games, which may result in double counting.

Olympic-based	384,069t-CO_2
Paralympic-based	362,851t-CO_2

b. Energy management at venues

The building and energy management system (BEMS), which utilises information and communication technology, makes it possible to determine the status of energy use. We have deployed BEMS at the following venues.

New permanent venues with BEMS
Olympic Stadium
Tokyo Aquatics Centre
Ariake Arena
Musashino Forest Sport Plaza

For existing venues, BEMS has already been installed at some, while other venues conduct energy management through demand control and other technologies using a central monitor. We also plan to set up power monitoring devices to ensure adequate power supply during the Games. With these technologies, we will work to take control of any situation and ensure stable power supply.

Both technological and human approaches are important to properly manage energy use. For the Games staff area and other spaces, we will keep staff members informed and enforce lighting and air conditioning management by displaying posters that call for turning lights off when they leave the room and keeping the adequate room temperature.

We also carry out awareness campaigns, such as by distributing flyers at hotel briefings for people involved in the Games, in order to promote energy conservation at hotels and other facilities where they stay.

Flyers distributed at hotel briefings for people involved in the Games

For spectators, we have been introducing sustainability initiatives from pre- to post-Games at the Tokyo 2020 Games Official Website. Purchasing airline tickets with carbon offsetting, using public transportation, staying at hotels practicing energy-saving measures and other actions lead to lower carbon emissions.

We are working to raise awareness and drive positive behavioural change, so that each individual's Games-related efforts will save energy and serve to decarbonise the entire Games.

(4) Environmentally responsible items

a. Items with lower CO_2 emissions in sourcing materials and production

i. Uniforms

Various items of the uniforms to be worn by Games staff contain a considerable amount of recycled polyester and plant-based materials. The packaging of some items uses environmentally conscious materials that absorb CO_2 during incineration. The amount of recycled fibre use translates to uniforms for about 88,000 people. We also reduced use of petroleum oil for the formal uniforms of technical officers by using corn-based polyester fibres as part of materials of a jacket.

ii. Recycled metal use for Tokyo 2020 medals

Through the Tokyo 2020 Medal Project—Towards an Innovative Future for All, we called for participation of people all over Japan and collected metal until 31 March 2019, which will be used to produce the medals for the Games. Small consumer electronics, such as used mobile phones and personal computers, are called "urban mines", because they contain

many valuable resources such as gold, silver, copper and rare metals. Since these resources are collected using collection boxes set at various locations across the country, the initiative generates lower environmental impact, energy consumption and CO_2 emissions than mining them.

For more details, see Section 4.5 Involvement, Cooperation and Communications (Engagement) (*page 151*).

Types of metal	Amount of recycled metal
Gold	Approx. 32kg
Silver	Approx. 3,500kg
Copper	Approx. 2,200kg

b. Maximising use of high energy performance equipment

i. Furniture, fixtures and equipment with high energy performance

When procuring furniture, fixtures and equipment (FF&E) at competition venues and related facilities, we use high energy performance equipment as listed in the "Appendices" on *page 243*.

ii. Other equipment with high energy performance

When procuring equipment other than FF&E, we use high energy performance equipment as listed in the "Appendices" on *page 244*.

c. Equipment using refrigerants with low greenhouse effects

i. Types of refrigerant

When procuring items containing refrigerants, we have been promoting equipment that use refrigerants with low greenhouse gas effects, such as by selecting non-fluorocarbon refrigerants (natural refrigerants). Examples of equipment using refrigerants are listed in the "Appendices" on *page 244*.

ii. Risk of refrigerant leakage

- Since licensed professionals conduct filling and recovery of equipment under the law known as the Act on Rational Use and Proper Management of Fluorocarbons, the risk of leakage during installation or removal work is low.
- Under the Policy for Procurement of Eco-Friendly Goods and Services of the Tokyo Metropolitan Government (Public Works), the use of products containing fluorocarbons are restricted for heat insulating materials in construction work.
- For existing permanent venues, venue administrators have established a system to prevent leakage. All commercial freezing and refrigeration equipment, as well as air conditioners are required to have brief inspections at least once every three months and periodic inspections by qualified professionals at a set frequency under the Act on Rational Use and Proper Management of Fluorocarbons.
- For home-use air conditioners, refrigerant recovery is also required under the Home Appliance Recycling Act.

Carbon Offset Programme

The CO_2 and other greenhouse gasses emitted during the Games that cannot be eliminated through the implementation of measures will be offset using credits*. In July 2018, we published the criteria for credits that can be used for the Carbon Offset Programme for the Tokyo 2020 Games, and are accepting applications for credits through TMG and the Saitama Prefectural Government.

* A credit refers to the greenhouse gas reductions achieved, which is tradable among parties through certification programme after verification.

(1) Overview of the Programme

We will ensure that the Carbon Offset Programme for the Tokyo 2020 Games is objective and reliable by setting the following conditions for credits.

The concept of carbon offset credits for the Tokyo 2020 Games
・The project requires the additionality.*
・Double-counting of carbon credits must be avoided. Transactions shall be recorded, and an independent system (directories and/or transaction logs) that enables an objective verification is necessary.
・The project must be validated and verified by an independent audit agency.
・The project must not have a negative effect on society, the economy and the environment in which it takes place. Preferably it will bring benefits. Specifically, an explanation about its contribution to SDGs must be provided.

* Additional environmental effect compared to the state before the project

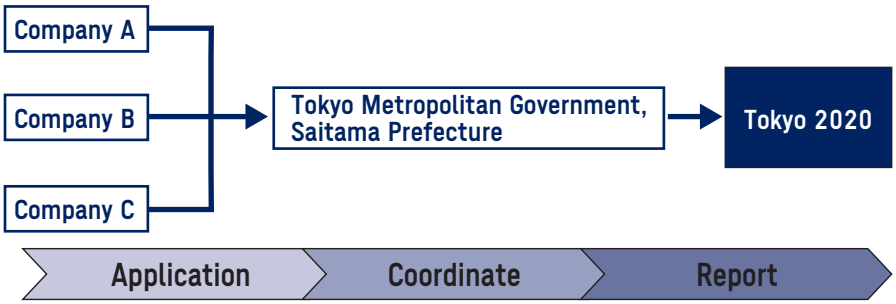
(Examples of credits that meet the conditions)

- Local Government Cap-and-Trade Credits
- GS: Gold Standard (Overseas VER: Verified Emission Reduction)

Businesses participating in Tokyo cap-and-trade programme and Saitama Target Setting Emissions Trading System reduce CO_2 emissions by engaging in energy saving measures, such as upgrading to highly energy-efficient facilities, equipment and operating measures. Excess reduction Credits and Small and Medium-sized Installation Credits are earned as a result of these carbon reduction measures. These credits can then be used to offset carbon emissions from the Games under the Carbon Offset Programme. We aim to get many organisations to participate in the Programme.

TMG or the Saitama Prefectural Government review and cancel credits, and then report the credit volume to Tokyo 2020.

Carbon Offset Programme in the Tokyo 2020 Games



(2) Status of credit applications

Credits are donated by many businesses and organisations in the Tokyo Metropolis and Saitama Prefecture.

Aside from the Carbon Offset Programme for the Tokyo 2020 Games, which directly offsets CO_2 emissions from the Games, TMG is also undertaking its own project called the Tokyo Zero Carbon 4 Days in 2020. TMG has been accepting credit applications for these two at the same time, with the total volume received reaching about 2,680,000 t-CO_2 from 70 businesses and organisations (published as of 7 February 2020). The credit volume for use under the Carbon Offset Programme is expected to be within this total volume, we expect to offset certain amount of carbon emissions from the Games.

The Saitama Prefectural Government has also been accepting credit applications in its efforts called Zero Carbon Saitama and other projects of its own with the total volume received reaching about 470,000 t-CO_2 from 31 businesses and organisations. The credit volume for use under the Carbon Offset Programme for the Tokyo 2020 Games is expected to amount to 420,000 t-CO_2.

Volume of credits received by TMG and Saitama (published as of 7 Feb. 2020)

Programme administrator	Credits (t-CO_2)	No. of applications
TMG https://www.kankyo.metro.tokyo.lg.jp/en/climate/zc4d/index.html	2,679,130	70
Saitama Prefectural Government https://www.pref.saitama.lg.jp/a0502/olympic.html (Japanese)	470,609	31
CO_2 emissions of the Games (reference value): 2,728kt-CO_2		

Case Study Tokyo Zero Carbon 4 Days in 2020

TMG is working on achieving net-zero carbon emissions for the whole Tokyo area on the four days of the Opening and Closing Ceremonies of the Tokyo 2020 Games.

In addition to the Carbon Offset Programme, which offsets CO_2 emissions from the delivery of the Games, TMG is also calling for credit donations to this project to achieve Zero Carbon Days.

Adaptation measures

Apart from reducing carbon emissions and offsetting, we need to implement adaptation measures at the Tokyo 2020 Games to reduce the consequences of climate change and extreme weather, such as heat stroke. We are working on heat management measures in cooperation with TMG, GOJ and other organisations. For more details, see Section 4.3 "Natural Environment and Biodiversity" (*page 102*).

Progress of other climate initiatives

(1) Activities of CO_2 reduction by citizens at the Tokyo 2020 Games

a. Overview

Tokyo 2020 is taking the opportunity to promote the citizens' actions on carbon reduction at the Tokyo 2020 Games, encouraging citizens and organisations to participate in the reduction of CO_2 emissions and help bring us closer towards becoming a decarbonised society. By widely publicising organisational initiatives and their CO_2 reduction, we aim to build awareness on climate change, encourage more people and organisations to join and continue the effort for the future. These initiatives also form part of the Tokyo 2020 Nationwide Participation Programmes*.

* For details of the Tokyo 2020 Nationwide Participation Programmes, see Section 4.5 Involvement, Cooperation and Communications (Engagement) (*page 154*).

b. Actual carbon reduction

For details of each action, see Section 4.5 "Involvement, Cooperation and Communications" (Engagement) (*page 159*). The number of project applications and participants is seven and 108,875*[1] as of January 2020 respectively.

Shinjuku's Green Curtain Project: Explanatory session (Shinjuku City)

Applicant	Action	No. of participants	Amount of reduction ($t\text{-}CO_2$)*2
Yokohama City	Go Ecology with the Tokyo 2020 Games in City of Yokohama!	28,507*3	9.7*3
Kumamoto Prefecture	Kumamoto BDF	Approx. 30,000	120.3
Shinjuku City	Shinjuku's Green Curtain Project	594 households and 118 schools and other organisations	44.1
Kodaira City	Challenge energy saving in Kodaira	40	4.6
Kodaira City	The Eco-challenge Tree	42	0.1
Hachioji City	The Energy Conservation Challenge	8,954	36.9
Nerima City	Stop Climate Change!: Join us for eco-lifestyles	40,601 19 offices	2.4

*1 For the number of the participants, numbers of households, schools and other organisations are calculated as those of one person. When a project is continuing for more than a year, the above figures indicate the total number of the participants in the period.

*2 Refers to the total amount of reduction for overall period of each project

*3 as of the end of December 2019

4.2
Resource Management

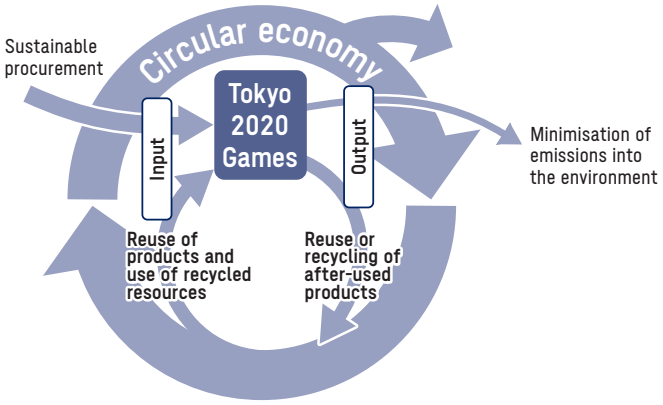
Zero Wasting

4.2 Resource Management

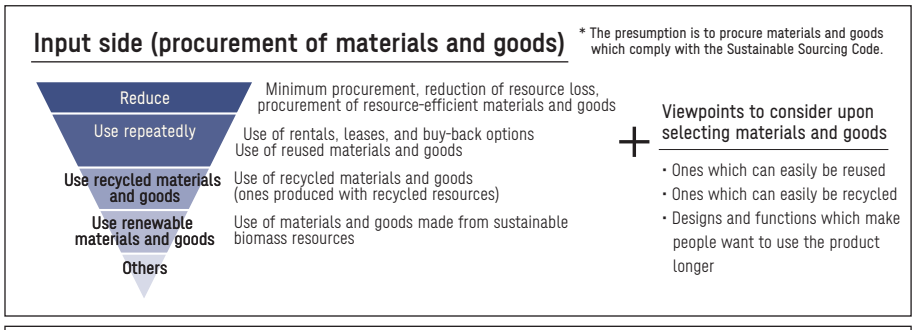
Overview

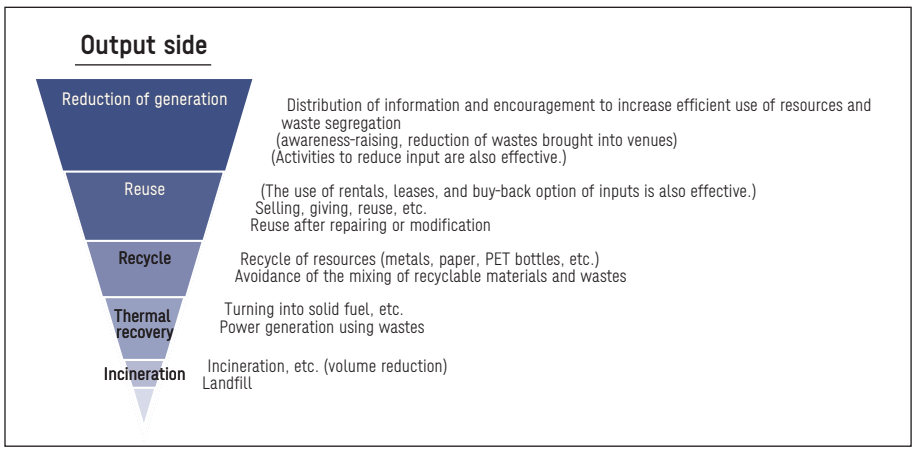
Zero Wasting—keeping resource waste to zero—is a major goal of the Tokyo 2020 Games. Through collective efforts throughout the entire supply chain, we are committed to managing our resources effectively to minimise environmental impact by fully utilising resources and by avoiding land devastation and deforestation caused by resource exploitation. Based on the concepts and priorities shown in the figures below, on the input side of the Games, we are encouraging the efficient use of resources and other sustainable practices for the procurement of goods, and are working on various projects that promote reuse and recycling. In terms of output, we have established a system that specifies the post-Games reuse and recycling of items used during the Games.

The concept of the key elements of resource management



Priorities of initiatives in resource management





* When it is effective from the viewpoint of sustainability, this order can be changed.

Summary of progress

We have provided a simple colour-coded rating to give a visual sense of our progress.

Deep green: Completed / Substantial progress and on track

Pale green: Some progress but more work required

Item		Key area	Status
For people and society	Reduce	Reduce edible part of food waste	Preparing initiatives for implementation in collaboration with businesses
		Reduce packaging and containers	Preparing concrete initiatives such as reducing single-use plastics in collaboration with businesses
		Reduce production of new items by utilising rentals and leases for procurement	Continuing to procure items with a view to reuse after the Games. Developing and implementing systems to manage and reuse procured items Target: 99% reuse or recycle procured items
	Reuse/ Recycle	Reuse procured items: Utilise rentals and leases, reuse or recycle items after the Games : 99%	
	Recycle	Use recycled materials	Continuing to procure items using recycled materials (e.g. torches, uniforms, etc.)
		Use recycled metal for medals of the Games	Completed after-use metal collection and currently manufacturing medals
	Reuse/ Recycle	Reuse or recycle waste generated from operations of the Games : 65%	Established concrete recycling methods in each venue. Working to achieve target: reusing or recycling 65% of waste generated
		Recycle food waste	
		Reuse or recycle construction waste	Completed construction of the new permanent venues and implementing initiatives to achieve targets
For the environment		Use renewable resources in a sustainable manner (e.g. timber)	Completed venues development using timbers at Olympic Stadium and Ariake Gymnastics Centre
		Reduce waste to landfill and CO_2 emission from waste	Working to minimise emissions through the above initiatives

Reduction of food loss and waste

Based on the Basic Strategy for Food & Beverage Services (March 2018) of the Tokyo 2020 Games, we will work with food & beverage service contractors to reduce food loss and waste. That includes raising awareness of the importance of reducing food loss and waste, promoting effective and feasible measures to lessen food waste, and predicting the necessary amount of food and beverages for portion and stock control using ICT technologies. We are also working on measuring and visualising the amount of food wasted as much as possible, in hopes that the information will serve as a model for food waste control after the Tokyo 2020 Games.

The Basic Strategy for Food & Beverage Services (March 2018)
https://tokyo2020.org/en/games/food-strategy/

Reduction of packaging materials

We are working to reduce packaging and container waste by limiting their use and the use of disposable products. We pursue sustainable procurement through simple packaging and containers, considering ease of recycling and environmental impact of disposal in line with guidelines such as TMG's Green Purchasing Guidelines.

(1) Initiatives on single-use plastics at the venues

The impact on marine ecosystems of single-use plastic containers, packaging and products that have turned into ocean plastic waste has become a major concern worldwide, and measures have been taken globally. We plan to reduce single-use plastics by reducing single-use bag distribution, using alternative paper bags and using paper containers in providing meals to spectators. Paper containers are also planned to be recycled. Official shops plan to use recyclable paper bags to reduce plastic bags. For food and beverage services at the Olympic/Paralympic Village, we plan practice the 3Rs* and maximise the use of reusable tableware. In cases where they cannot be used, however, we will use paper and other recyclable tableware and recycle them afterwards.

* 3Rs : Reduce, Reuse, Recycle.

(2) Other initiatives on single-use plastics

To prevent the discharge of plastics into the ocean at competition venues, two ocean plastic waste collecting devices called Seabins have been deployed at Enoshima Yacht Harbour in Kanagawa Prefecture. See Section 4.5 "Involvement, Cooperation and Communications (Engagement)" (*page 149*) for more details. We also embarked on the Podium Project to make medal podiums using recycled plastic to symbolise our commitment to addressing plastic pollution.

See Section 4.5 "Involvement, Cooperation and Communications (Engagement)" (*page 153*) for more details.

Reuse and recycling of procured items and goods

[Quantitative Target]

- Reuse (including rentals and leases) or recycling of procured items: 99 per cent

We have been working on achieving our set target for the reuse or recycle of procured items and goods. Whenever possible, we use rentals and leases when procuring goods and services and promote sharing of these goods and services. For purchased items, we are pursuing avenues for reuse or recycling, such as by reselling them or by lining up where they will be destined to go for reuse post-Games, with the cooperation of the national government, local governments and sponsors.

(1) Framework for reuse and recycling

The organisations working under Tokyo 2020 have been procuring a wide range of items in large quantities in the lead up to the Games. We established a reuse and recycling implementation policy and procedures, in order to clearly define the items to be reused or recycled and ensure that such procured items are eventually reused or recycled.

Further, we stipulated the basic guidelines on the management and disposal of assets and goods we procured. We also ensure our compliance to laws and regulations and engage in sustainable resource management through a framework developed according to both ISO 20121 (*Event sustainability management systems*) and our organisational structure that oversees disposal of procured goods. To facilitate the reuse and recycling of items we have procured, we are working on collaborative projects with the TMG, upcycling of decorations under Look of the Games programme and other initiatives, which will hopefully serve as model cases and a legacy of the Games.

a. Reuse and Recycling Guidelines (Procedure)

Following the Reuse and Recycling Guidelines (Policy) established in March 2018 with the aim of reusing or recycling 99 per cent of procured items, we came up with the Reuse and Recycling Guidelines (Procedure) in March 2020. In the procedure, we set economical and sustainable implementation policies and evaluation criteria at each stage—from procurement, use and management, and until the removal of items—as well as provided the framework to procure items covered by the policy and the specific work procedures to achieve the 99 per cent reuse or recycling target.

i. Policies at each stage: procurement, use and management and removal

During procurement

- Procure items at a minimum amount, with less resource loss, and which conserve resources.
- Use rentals, leases and repurchase agreements.
- Consider the following when selecting items.
  - Easy-to-reuse items
  - Easy-to-recycle items
  - Items made for long-lasting use
  - Well designed and highly functional items

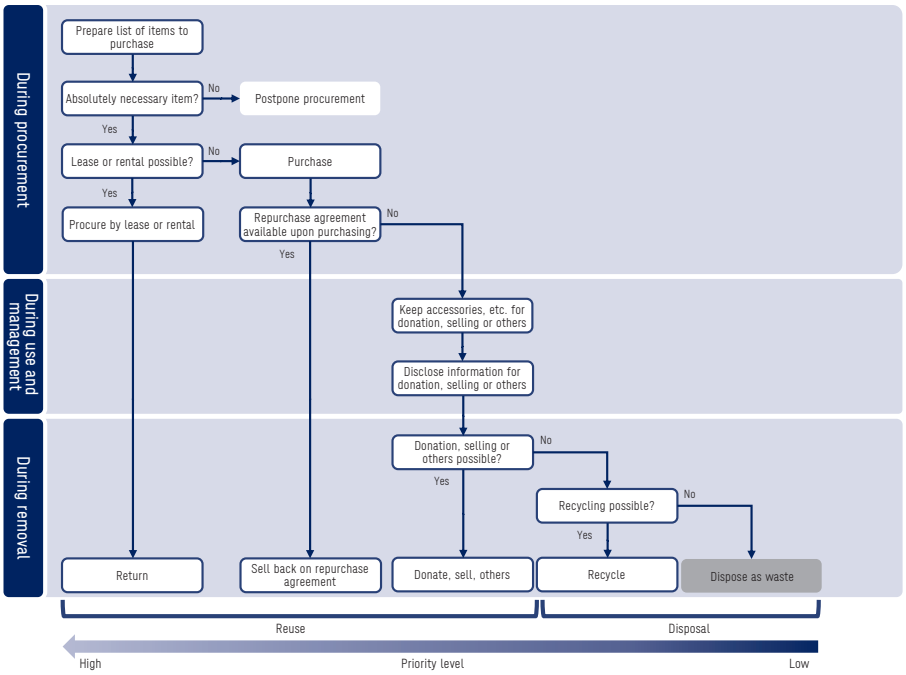
During use and management

- Before using purchased equipment, keep accessories, etc. with reuse in mind
- Disclose information early in order to sell at the end of the Games

During removal

- Return rentals and leases, sell back items with repurchase agreements
- Give top priority to reuse through donation or selling at auction, etc.
- Recycle and dispose of items in accordance with laws and regulations
- Keep waste disposal to less than 1%

ii. Evaluation criteria



iii. Procuring items for reuse or recycling

Types of items	Examples	Note
1. Items procured through rental or lease, as part of borrowed assets	Fixtures, servers, office equipment such as computers, electrical products such as UPS, car washers, sports equipment, beddings, furniture, consumer appliances, cameras, projectors, etc.	Excludes some consumables, materials and animals
2. Items purchased and items transferred free of charge	Fixtures, servers, office equipment such as computers, electrical products such as UPS, car washers, sports equipment, beddings, furniture, consumer appliances, cameras, projectors, etc.	Excludes some consumables, materials and animals Includes items to be transferred as a legacy after the Games
3. Items produced by consignment and owned by Tokyo 2020	Event production goods, installations for the Opening and Closing Ceremonies, etc.	Excludes some consumables Includes items to be transferred as a legacy after the Games

4. Items procured during construction work (including design-build (DB))	(Items determined by number) Water heaters, modular bathrooms, lighting for field of play, air conditioning, spectator stands, fixtures, furniture, consumer appliances, beddings, etc. (Items determined by volume) Tents, prefabricated structures, modular houses, container houses, etc.	Excludes some consumables, construction materials and items whose quantity is difficult to determine by numbers
5. Other items that particularly need to be reused or recycled	Decorations under Look of the Games programme, etc.	The ownership of the decorations belongs to each operating business, not to Tokyo 2020. In light of recent social demand for solving plastic pollution, however, the decorations are subject to our numerical target (99%) in order to reuse or recycle after-use plastics.

See "Procured items subject to targets for reuse/recycling" in the Appendices, (*page 245*) for details on items covered by the policy.

b. Asset management and disposal

In December 2018, we established the Asset Management and Disposal Regulation, which stipulates the basic guidelines for the proper management and disposal of assets, including from the standpoint of sustainability.

Aside from sports competition equipment for the Games, each functional area (FA) under Tokyo 2020 has been procuring the necessary equipment and facilities for temporary venues and other locations, energy infrastructure and technological items. When procuring items, we prioritise rentals and leases wherever possible. As the FAs continue procuring according their function, the items and equipment must be properly managed, and their specific disposal methods must be determined in advance to facilitate prompt disposal.

We therefore implemented the Asset Management and Disposal Manual in September 2019, which gives specific administrative procedures and provides a comprehensive method for managing and smoothly disposing of procured items using an asset tracking system (ATS).

Furthermore, we set up the Asset Management and Disposal Committee to deliberate on key matters, such as policy, disposal methods and final disposal destination. As part of efforts to appropriately manage and smoothly dispose of items, once procurement has been decided, the disposal destination is set as quickly as possible.

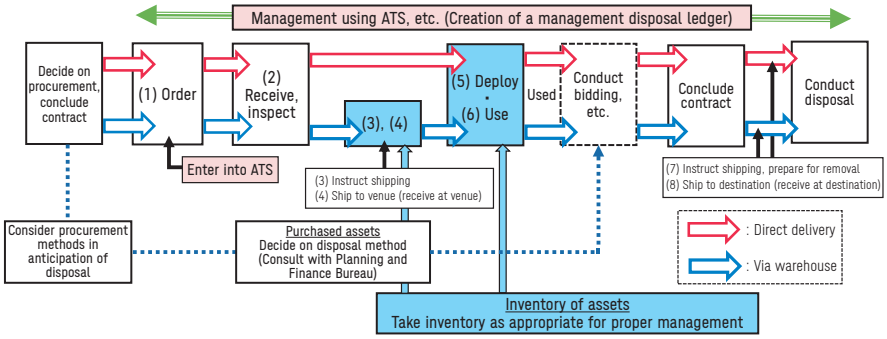
As the number of procured items is expected to dramatically rise immediately before the Games, the disposal destination will also be quickly determined for any items procured in the future. For items acquired through joint projects, in collaboration with the TMG we are looking into ways to reuse them whenever possible.

i. Basic policy for asset management and disposal

- ◯ In general, asset management will be conducted according to the nature and importance of the asset, with a view to its use during the Games and disposal afterwards.
- ◯ Considering the sustainability and fiscal management of Tokyo 2020, owned assets will in principle be disposed of by transferring ownership with payment. If an appropriate transferee has not been found, the asset will be transferred free of charge. Recycling and disposal is allowed only for assets with no transferee.
- ◯ We are committed to carrying out our work properly in procuring assets, by making decisions comprehensively based on economic considerations, while looking for ways to lower our environmental impact and waste.

Source: Asset Management and Disposal Manual

ii. Procured items management using the asset tracking system (ATS)



* **Each FA acts as the management body for assets and goods they use.**
* In principle, Logistics section acts as the management body for delivery from inside warehouse to each venue (warehouse management system (WMS): linked with ATS).

iii. Implementation framework for asset management and disposal

Asset Management and Disposal Committee
- Discusses and approves important matters related to deciding on how to dispose of assets, and to managing and disposing of assets

Leadership and supervision
- Accounting director* provides guidance and coordination on the management and disposal of assets
  * The accounting director for this legal entity is the CEO. (Article 3 of the accounting regulations)
- Executive Director of Planning and Finance Bureau organises the assets system and conducts the necessary coordination

Each bureau and organisation
- Executive Directors and other heads manage and dispose of assets the organisation uses, and oversee the personnel in charge
- The Committee selects officers (at project director and senior project manager levels) to perform the work of asset management and disposal

c. Collaborative project with TMG's Bureau of Environment

For items procured or about to be procured by the FAs, the project investigates concrete ways to reuse or recycle items in large quantities, custom-made items and other items that are difficult to reuse, and provides the results to each FA to facilitate reuse and recycling. With this collaborative project with TMG, we aim to boost and revitalise the reuse market, and leave a set of guidelines for conducting reuse and recycling at large-scale events as a legacy of the Games.

Items covered by the project

Type		Primary examples			
Seating		Office chairs	Sofas	Benches	
Desks		Office desks	Tables		
Furniture & storage		Cabinets	Lockers	Chests	Beds
Electric appliances	Recyclable appliances	Air conditioning units	Refrigerators, freezers	Washing machines	Televisions, monitors
	Other	Electric fans	Electric kettles	Vacuum cleaners	Microwaves
Electronics		Computers	Tablets	Servers	
Facilities & equipment		Water heaters	HVAC systems	Car washes	Unit baths
Medical & disaster preparedness		Medical implements	Medical devices	Fire extinguishers	
Broadcasting & communications		Broadcasting equipment	Photography equipment	Communications equipment	Acoustic equipment
Tools		Electrical tools	Lighting equipment		
Dividers		Partitions	Fences	Cones	
Competition events & venues, etc.		Sporting equipment			
Other		Venue decorations			

(2) Case study on sustainable resource use and sourcing

As well as using rentals and leases for sourcing items as far as possible, we have set the Sustainable Sourcing Code to require the promotion of reduce, reuse and recycle practices from suppliers through the use of multi-purpose items, the adoption of structures that are easy to separate or disassemble and the use of recycled materials. By requesting proposals that incorporate reuse and recycling after the Games, and by including the use of recycled materials in specifications, we are advancing sustainable practices that make the most of the cutting-edge technologies, knowledge and skills of suppliers for materials and goods that have already been procured.

a. Use of rentals and leases

We use rented or leased items as far as possible for fixtures such as desks, chairs and shelves, and computers. The details of rented or leased items as of 2 December 2019 are as follows:

Rented and Leased Items

Item		Estimated quantity
Seating		1,900
Desks		640
Furniture & storage		220
Electric appliances	Recyclable appliances	60
	Other appliances	40
Electronics	Computers	4,400
	Other electronics (communications devices, database servers, etc.)	16,000
Medical devices		410
Sporting equipment		1,700
Other (equipment for venues, etc.)		250

*As of 2 December 2019. Source: Asset tracking system (ATS) data

b. Procurement of items for venue development

Whenever possible, we used rentals or leases when procuring items to furnish venues. Through a collaborative project with TMG for post-Games reuse, we also secured destinations for items after use.

Case Study Example: Post-Games reuse of lighting in Oi Hockey Stadium

- Lightings for competitions are provided by Venues & Infrastructure section as temporary overlay
- The initial plan called for the removal and disposal of the lighting equipment after the Games
- We received a request from TMG for their use after the Games, and considered leaving it behind
- After deliberations by the Asset Management and Disposal Committee, we decided to transfer ownership to TMG
- Administrative procedures such as transfer agreements are planned for the future

Venue

Lighting equipment

Bed frames made of 100 per cent cardboard materials

c. Other procurement (example)

Bed frames made of 100 per cent highly durable cardboard materials will be used for sleeping accommodations in the Olympic/Paralympic Village. These will be turned into recycled paper after the Games.

Use of recycled materials

We are promoting the use of recycled materials for procured items and construction materials at the Tokyo 2020 Games.

(1) Use of recycled materials in construction

This section contains statements that assume that the Tokyo 2020 Games will be held in 2020.

We promote the use of recycled crushed stones and other materials in the development of new permanent venues and other structures. We strive to procure environmentally friendly construction materials and reduce the use of materials with high environmental impact, in accordance with the Policy for Procurement of Eco-Friendly Goods and Services of the Tokyo Metropolitan Government (Public Works) and the Resource Circulation and Disposal Plan of the Tokyo Metropolitan Government as well as the Policy on Promoting the Procurement of Environmentally Friendly Materials of Japan Ministry of Education, Culture, Sports, Science and Technology, which is based on Japan's Act on Promotion of Procurement of Eco-Friendly Goods and Services by the State and Other Entities. See "Appendices" (*page 260*) for more details.

Olympic torch

Manufacturing torches using recycled aluminum

Torchbearer uniform

(2) Use of recycled materials in items and goods

We promote the use of recycled materials for items and goods to be used at the Games.

a. Torch (Torch Relay)

The Olympic and Paralympic torches embody the sustainability considerations and people's hopes for reconstruction after the 2011 earthquake and tsunami. A part of the materials used in making the torches is recycled aluminium that was originally used in the construction of prefabricated housing units in the aftermath of the earthquake. About 30 per cent of the torches are made from recycled aluminium. The temporary units that used to house the people affected by the disaster have been transformed into the Olympic torches as a symbol of peace, as well as the torches for the Paralympic Torch Relay to create new connections, in order to show the world how the disaster-stricken areas have been recovering one step at a time.

Bearing the concept of the Tokyo 2020 Olympic Torch Relay, "Hope Lights Our Way", the Olympic flame will travel across Japan. With the concept "Share Your Light", the flame for the Tokyo 2020 Paralympic Games will be generated by the coming together of the collective passion of everyone supporting the Paralympic Games. Flames from each prefecture where flames will be lit in a number of unique ways will become a single Paralympic Flame in Tokyo.

b. Uniforms

With the cooperation of Coca-Cola (Japan), official torchbearer uniforms for the Tokyo 2020 Olympic Torch Relay are made from recycled plastic bottles collected by the company.

Uniforms for the Tokyo 2020 Games were developed with three concepts in mind: comfort

Field Cast uniform

* The name Cast refers to the Games staff (Field Casts) and volunteers from cities (City Casts).

in hot weather, sustainability and diversity, to make sure that everyone wearing them can comfortably perform their roles regardless of their age, gender or nationality. We hope that these uniforms will foster unity among Casts* and enhance the overall atmosphere of the Games.

Various items of the uniforms contain a considerable amount of recycled polyester and plant-based materials. Environmental concerns have also been incorporated into the packaging materials of some items, such as the use of materials that absorb CO_2 during incineration.

Case Study Quality recycling of plastic bottles

Approximately 50,000 after-used bottles were collected, and Coca-Cola (Japan) washed and removed labels and caps from them before the recycling process to help eliminate sorting and compression baling processes. This led to efficient recycling.

c. Podium

To encourage efforts that address the ocean plastic pollution, we have been promoting the Podium Project to make medal podiums from plastic waste in collaboration with our worldwide partner, Procter & Gamble. With the cooperation of city residents, we had collected used household plastic containers to produce the podiums that will be used for awarding ceremonies during the Games. See Section 4.5 "Involvement, Cooperation and Communications (Engagement)" (*page 153*) for more details.

Use of recycled metals in medals

Medals for the Olympic (above) and Paralympic (below) Games created through the Tokyo 2020 Medal Project.

There are a number of concerns regarding the supply of the raw metals that are essential to electronic products. These include increased environmental destruction and negative impacts on health in developing countries caused by improper resource mining and the extraction of useful metals from discarded waste, increasingly intensive mining and waste production in metal extraction due to decrease in mineral resource quality, as well as fluctuating prices and disputes surrounding securing resources. For sustainable use of materials, it is vital to recover useful metals from discarded products, then recycle and utilise them in a circular way.

We carried out the Tokyo 2020 Medal Project to produce the medals for the Games. A first of its kind in the history of the Olympic and Paralympic Games, the project collected post-consumer mobile phones and other consumer electronics from all over Japan to produce medals made from recycled metals recovered from these electronic devices.

Through the public's contributions to the project, we were able to manufacture all of the approximately 5,000 medals needed for the Tokyo 2020 Games.

Along with announcing the final results of metals recovered through the project in July 2019, we released the designs of the medals for the Olympic and Paralympic Games on 24 July and 25 August 2019. Over 90 per cent of municipal districts in Japan participated in the project, which also contributed to making the Act on Promotion of Recycling of Small Waste Electrical and Electronic Equipment more widely practiced.

Furthermore, one legacy of this project is the Japan Ministry of the Environment's After Medal Project, begun in April 2019 in partnership with certified consumer electronics recycling businesses. The project aims to engage in urban mining and promote sustainable use of materials by supporting municipalities that collect consumer electronics, and by

running events that encourage residents to recycle their unwanted items.

Our goal for this project is thus to establish the environmentally friendly and sustainable practice of recycling small consumer electronics as a legacy of the Tokyo 2020 Games.

See Section 4.5 "Involvement, Cooperation and Communications (Engagement)" (*page 151*) for more details.

Reuse and recycling of waste generated during the Games

[Quantitative Target]

- Reuse or recycle waste generated from operations of the Games: 65 per cent

To achieve the target of reusing or recycling 65 per cent of waste generated during operation of the Games, we are investigating specific initiatives for the competition venues and the Olympic/Paralympic Village.

(1) Separation and recycling of waste

We have formulated a Policy on Appropriate segregation and recycle of waste generated from operations of the Games (August 2019). Based on this policy, waste and resources from facilities including the competition venues, the Olympic/Paralympic Village and the International Broadcast Centre/Main Press Centre (IBC/MPC) will be separated and recycled appropriately, aiming for achieving the target of reusing or recycling of 65 per cent of waste generated, higher than Japan's national recycling rate: approximately 53 per cent*. Waste that is not recycled will be disposed of by appropriate methods that contribute to circulating resources, such as thermal recovery.

* Fiscal 2016 result. Thermal recycling that uses refuse paper and plastic fuels (RPFs) was included in calculation, but incineration was excluded (Source: Japan Ministry of the Environment).

Separation and recycling of waste in competition venues (spectator areas)

Plastics	Recycled
Plastic bottles	
Paper cups and containers	
Leftover drinks	
Combustible waste (leftover food, tissues, disposable chopsticks, etc.)	

For services not provided directly by Tokyo 2020, we share the target of reusing or recycling 65 per cent of waste with our delivery partners and contractors, encouraging them to cooperate for the appropriate separation and recycling of waste.

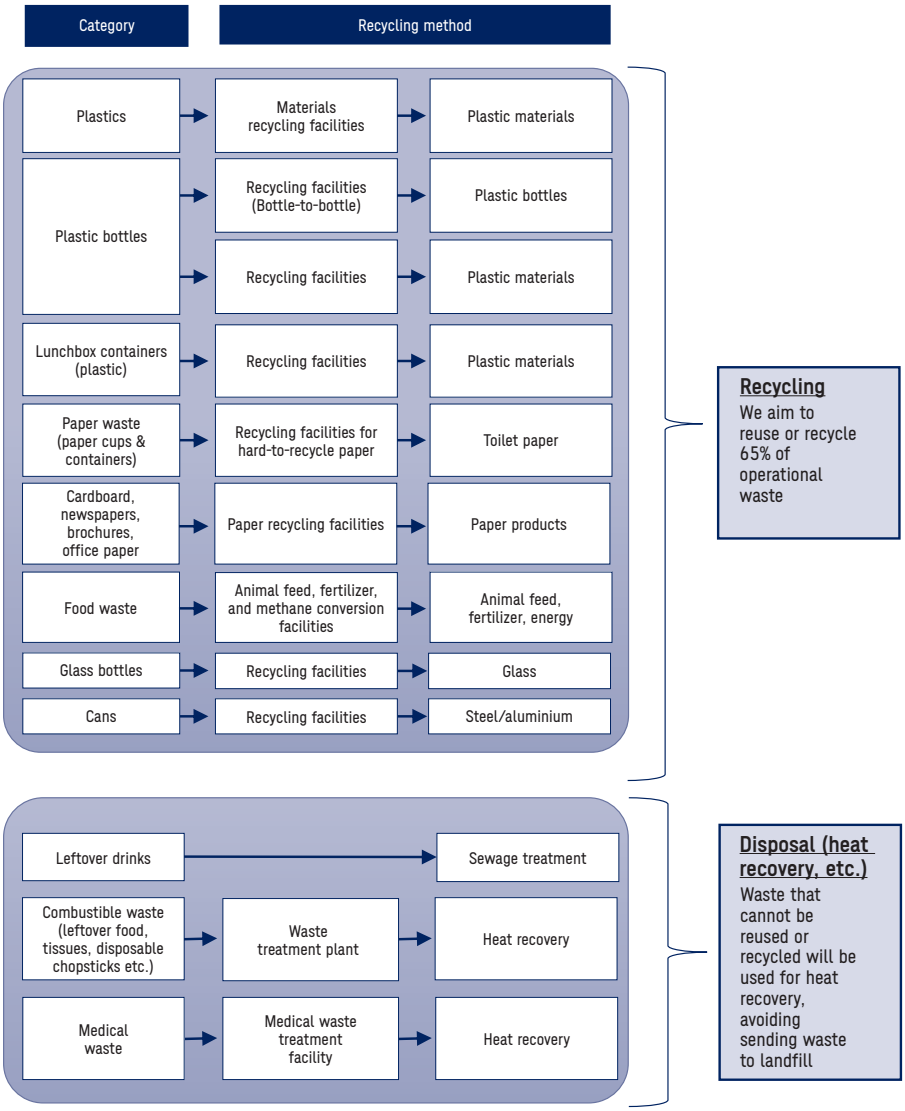
We are working on the following recycling initiatives to achieve the target.

At the Tokyo 2020 Games, paper containers will replace the single-use plastics conventionally used at venues. At many of the venues, paper waste has previously been incinerated, but paper waste from spectators at the Tokyo 2020 Games will be recycled at facilities specialising in paper that is hard to recycle. Plastic waste will be separated properly and for venues in Tokyo, in collaboration with TMG, the waste will be sent to materials recycling facilities where it will be crushed, washed and automatically sorted into different plastic materials such as polyethylene and polypropylene, so that it can be recycled into plastic products.

Although the technology to sort and recycle plastic waste exists in Japan, until now there

has been limited domestic material recycling for unsorted mixed plastic waste from businesses. Challenging this at the Tokyo 2020 Games is significant for further development of plastic recycling in Japan. Heat recovery through incineration will be promoted for venues outside of Tokyo, with landfilling avoided whenever possible.

Recycling methods for the main categories of waste during the Games (examples)

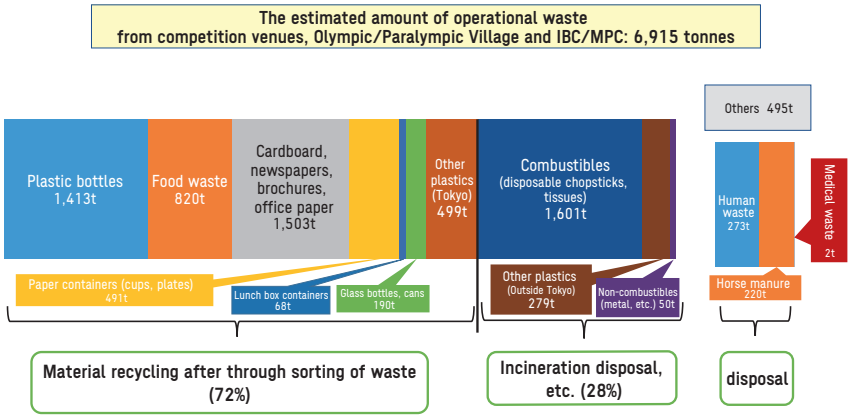


The estimated amount of operational waste (as of 1 December 2019) for the Tokyo 2020 Games are shown in the chart below. We estimate a total of approximately 7,000 tonnes for the competition venues, Olympic/Paralympic Village and IBC/MPC combined. To calculate these estimates, we took into consideration competition schedules and event characteristics (whether it is indoors or outdoors, etc.) for each attribute, such as spectators, athletes, volunteers, and staff. We set an waste intensity and multiplied by the number of sessions at each venue to calculate the total. There is currently no confirmed information on food and beverage, heat-related measures, or services at the venues, which would be necessary to estimate what creates the most waste and when. These estimates will thus be updated in the future according to the progress of the Games preparation and

decisions made about services. Using the estimated waste amounts as of 1 December 2019, within the planning stages, the aforementioned recycling initiatives would result in a 72 per cent of waste to be reused or recycled compared to the goal of 65 per cent.

This section contains statements that assume that the Tokyo 2020 Games will be held in 2020.

The estimated amount of operational waste and planned recycling values (As of 1 December 2019)



* Scope: 43 competition venues, Olympic/Paralympic Village and IBC/MPC
Period: 24 Jun. – 6 Sep. 2020 (Approx. 1 month before and after the Games based on the Games delivery plan before the Games was postponed)

In managing the recycling and disposal of operational waste generated during the Games period, we plan to utilise electronic manifests to work with information in a timely manner. In this case, we anticipate that a substantial amount of waste generated during the Games will be business-related general waste, and are considering the use of electronic manifests with the goal of unified and efficient management of both industrial and general waste. We believe that managing business-related waste disposal with an awareness of recycling will become a legacy of the Games.

At the Tokyo 2020 Games, large amounts of waste will be produced at around 50 venues within a short period of time. This waste will be produced continuously over a period of several days, which the existing venues have not experienced before. Summer is the peak time for consumption of drinks, so more waste is produced at this time of year. It will be a challenge for waste disposal contractors in the Tokyo area to deal with the additional waste generated by the Games, at their busiest time of year. Stricter restrictions on importing waste products in other countries have also caused a backlog in waste plastic processing, particularly in the Tokyo area, where it is difficult to secure a stable waste disposal system.

We are working with the waste disposal and recycling industry and local governments to secure spare vehicles, improve logistics efficiency and adjust deliveries in order to achieve the ambitious target of reusing or recycling 65 per cent of waste.

Waste bin made of cardboard

(2) Waste separation pictograms and waste bins

Based on the Japan Ministry of the Environment's Large-scale Event Waste Separation Labelling Guidance, we have created pictograms for the types of waste expected to be produced at the Games. The pictogram for plastics shows plastic bottle caps and sweet wrappers, while the pictogram for combustible waste shows tissues and disposable chopsticks. The pictograms for recyclable items incorporate the recycling symbol to recognise such items at a glance. The category names accompanying the pictograms have been worded to be understood by spectators from other countries. Recycling of resources is also considered in the waste bins to be used at the Games. Existing bins at the venues will be used where possible. New waste bins procured for the Games will be made of cardboard.

Pictograms to be used at the Games

(3) Promoting waste separation at venues

To achieve the target of reusing or recycling 65 per cent of waste and make huge amounts of waste sorted appropriately during the Games, it is important for spectators to separate items correctly when throwing away their rubbish. Waste at the Tokyo 2020 Games will be separated into categories according to how it will be recycled. At some of the venues, we will provide "sorting navigators" to help visitors separate waste correctly in collabortion with TMG. Previously, it has been difficult for venues to sort waste due to the large quantities produced at once. At the Tokyo 2020 Games, huge amounts of waste will be produced over several days, so it will be difficult for venues to sort it after the event. The sorting navigators will ensure that waste is separated correctly, as well as explaining the significance of separating rubbish and the importance of recycling. Separating their own rubbish will give visitors the opportunity to think about why and how waste should be separated.

Tokyo 2020 will provide information about waste separation in advance on the official Tokyo 2020 Games website to help spectators use the system easily.

(4) Waste separation at test events

We conducted test events, dress rehearsals, to improve competition and event operation capabilities in order to ensure the success of the Olympic and Paralympic Games. At the test events, waste bins were provided using the same categories to be used at the Tokyo 2020 Games, and our staff encouraged spectators to separate their rubbish. We found that waste was separated more accurately when staff helped spectators separate their rubbish. We also identified some issues that need to be investigated, such as how to publicise the separation method to make sure the spectators take note of it, and how to deal with large numbers of spectators leaving at once. We will develop appropriate waste separation activities at the competition venues, providing prior information and working with the navigators mentioned above.

(5) Bottle-to-bottle recycling

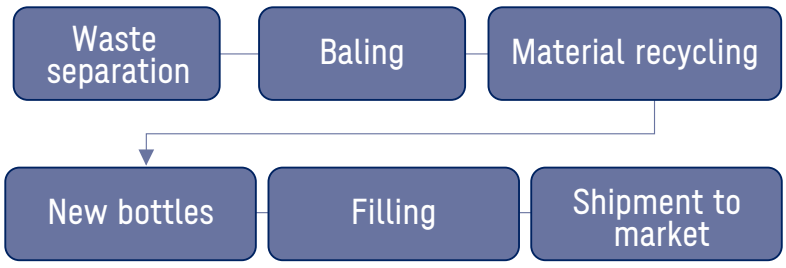
Plastic bottles from drinks consumed by athletes, staff and spectators will be recycled into new plastic bottles and go back to consumers wherever possible.

This applies to plastic bottles from the competition venues (except venues far away from Tokyo), the Olympic/Paralympic Village and the IBC/MPC.

Plastic bottles that athletes, staff and spectators put into the correct recycling bins after finishing a drink are collected as a resource. Separating waste correctly is vital to improve the recycling process. Removing lids and labels from plastic bottles ensures quality recycling. The bottles from each venue will be baled for efficient transport, which also makes the next process more efficient. The bales of plastic bottles are taken to polyethylene terephthalate (PET) recycling facilities where they will be crushed, sorted, washed and flaked to produce PET pellets. After being checked they meet quality standards, these pellets are moulded into bottles, which can then be filled and return to the market as drinks bottles.

As well as recycling plastic bottles into sheets and fibres, improving the cycle of recycling bottles into new bottles will help to minimise the use of new plastic resources, ensuring that resources will not be wasted.

Bottle-to-bottle recycling process



Recycling of food waste

It is important to minimise the amount of food that is wasted, but any food waste generated will be recycled wherever possible. At the Tokyo 2020 Games, food waste from the Main Dining and Casual Dining areas of the Olympic/Paralympic Village, the IBC/MPC and the competition venues will be recycled. (At venues where this is not possible due to geographical conditions and small quantities of food waste produced, we especially appeal spectators not to waste food, and any leftovers will be disposed of as combustible waste.)

Reuse and recycling of construction waste

New venues are being constructed in line with the plans for each venue. In the construction of the venues, we have worked on achieving our targets: over 99 per cent of construction waste was recycled or reduced, while 99 per cent of soil from construction was utilised effectively.

See Chapter 5. "Venue Development" (*page 186*) for details on the progress.

Use of sustainable resources—Timber

The Olympic/Paralympic Village Plaza, Olympic Stadium, Ariake Gymnastics Centre and other structures are being constructed using Japanese timber.

We launched Operation BATON (Building Olympic/Paralympic village with Timber Of the Nation), a project to construct the Village Plaza using domestic timber on loan from local municipalities across Japan, which will afterwards be dismantled and returned as a legacy of the Games to each region. By using wood native to different regions of Japan on various parts of the building, we hope to express diversity and harmony while at the same time reduce our environmental impact and achieve sustainability.

We also used Japanese wood to carry out the sustainable construction of venues, such as in the roofing of the Olympic Stadium and Ariake Gymnastics Centre. See Chapter 5. "Venue Development" (*page 186*) for more details.

Similarly, domestic wood has been used for roof trusses in the Ariake Tennis Park. See Chapter 5. "Venue Development" (*page 196*) for more details.

Reduction of emissions and waste

We will avoid disposal to landfill as much as possible by reusing and recycling procured items and wastes generated during operations whenever possible. In the Post-Games Report, we will assess the amount of disposal to landfill and CO_2 emissions from waste of procured items, wastes generated from operations of the Games and construction waste.

4.3
Natural Environment and Biodiversity

City within Nature /
Nature within the City

4.3 Natural Environment and Biodiversity

Overview

Greenery and the water environment in Tokyo have been created and maintained by not only government agencies, but also private-sector companies, local organisations, and private individuals, among other stakeholders. The Heritage Zone, where many facilities that served as competition venues in the Tokyo 1964 Games will be utilised in the Tokyo 2020 Games, is home to historic and valuable natural areas, while the Tokyo Bay Zone is home to many marine parks. It plays an important role in people's lives as a precious greenspace in the city (*see page 185*: Venue Master Plan).

We are currently working to create a pleasing urban environment that coexists with nature in collaboration with TMG and other diverse stakeholders. By creating a new system that will restore and foster rich ecological networks while improving comfort and resilience, we aim to deliver a Games that will make a significant contribution to continuously developing Tokyo into a mature city.

Summary of progress

Key area	Status
To minimise the environmental impact of the Games, enhance the functions of water circulation in the city and improve the comfort that urban environment can offer	・Advanced concrete initiatives contributing to heat-related measures, and currently refining them based on test events ・Planning use of measures during the Games to minimise water quality deterioration after rainfall, based on the results of surveys and tests performed at Odaiba Marine Park ・Continuing measures to improve functioning of the water circulation
To develop an urban environment with a rich ecological network by conserving biodiversity, creating lush greenery and water environment, and forming an attractive landscape	・Greening with plants selected as suitable for planned locations while being considerate of preserving existing green areas around Games venues ・Continuing efforts in cooperation with various entities to improve the environmental conservation function of marine parks that are adjacent to many Games venues, as bases of biodiversity ・Continuing initiatives for restoring and greening the natural environment in the entire area
To minimise the environmental impact associated with production, distribution and procurement necessary for the Games by preventing environmental contamination and protecting biodiversity	・Implementing the Sustainable Sourcing Code ・The Government of Japan and TMG are promoting initiatives to implement GAP* and acquire certifications

* Good Agricultural Practices (GAP)

Examples of the kinds of birds found in Kasai Marine Park (© TMG)
Great crested grebe (top)
Greater scaup (bottom)

Biodiversity conservation and regeneration of urban natural environments

(1) Biodiversity in metropolitan parks

Leading up to 2019, TMG made prioritised environmental improvements to 16 of the 31 metropolitan parks that are bases for local ecosystems, and continue to monitor and manage them appropriately.

TMG is also making efforts to conserve rare species in other metropolitan parks, taking into account the characteristics of each park, and is securing spaces for diverse flora and fauna to inhabit and grow throughout all metropolitan parks.

(2) Biodiversity in marine parks

Kasai Marine Park was designated a wetland under the Ramsar Convention on 18 October 2018. In accordance with the "wise use" philosophy advocated by the Convention, TMG now is working to conserve the wetland's natural environment and use the tidal flat in a more sustainable manner.

Additional park space has also been created after the expansion of tidal flats, sand beaches and rocky beaches in Tokyo Wild Bird Park. TMG will continue conserving and creating natural environments that provide habitats for diverse wildlife. It will also secure further space for wildlife to inhabit and migrate by appropriately managing forested areas in green corridor parks, and by creating neo-natural river dykes in parks along canals.

(3) Biodiversity-conscious greening

TMG has published Guidelines for Selecting Native Species for Greening that provide information on choosing plants native to the region and points to consider when planting, as well as the Species-Friendly Greening Assessment Tool to quantitatively evaluate how well a greening plan takes the ecosystem into account.

TMG also operate the Edo-midori Registered Green Space System, a registry of private-sector green spaces where plant species native to Tokyo are actively planted, which currently has a total of 10 registered locations.

Through these initiatives, TMG not only promotes greening of Games venues and other spaces utilising plants native to the region, but also the connection of different town areas by green spaces considerate of the ecosystem. This helps expand the ecological network that provides habitats for living creatures, creating more space in urban areas for birds, insects, and other flora and fauna to live and grow. TMG will continue its efforts to provide information and guidance on greening that is ecosystem conscious.

(4) Invasive alien species management

A large number of goods are shipped to Japan from abroad for the Tokyo 2020 Games, and measures are necessary to address the potential entry of invasive alien species that may affect the health of humans or the ecosystem, and Japan's agricultural, forest and fishery industries.

If an invasive alien species is found to have entered the country, TMG will work together with the national government and local municipalities to take necessary steps, such as

controlling and eliminating the invasive alien species, and alerting the public. TMG holds a liaison council with local municipalities each June to discuss invasive alien species (IAS).

If an IAS is discovered at an event venue, Tokyo 2020 will cooperate with the pertinent agencies to take appropriate measures.

Creating opportunities to encounter nature in cities

(1) Creating spaces to relax in parks

To make Tokyo's parks more welcoming to visitors from around the world, TMG is planning events to attract park-goers, and improving park maintenance to create enjoyable and relaxing environments with beautiful wooded areas and clean facilities.

Sport programmes such as running workshops are being held at parks throughout the city to create momentum around the 2020 Games.

At cultural parks and gardens, TMG is also organising events that showcase Japanese culture and provide an opportunity to experience Japanese customs.

Marine parks are also being improved with an awareness of continuity between nature and the local area, and seafront garden ways and public squares are being created to provide more spaces where visitors can come in contact with the ocean.

Cycling and running routes are also being installed to provide a safe and comfortable environment to enjoy sport whilst experiencing the wonder of the sea. Cycling routes have been completed at Shinkiba Ryokudo Park, and work is progressing at Yume-no-Shima Green Park and Tatsumi-no-Mori Seaside Park.

With a view forward to after the Games, TMG is working to generate appeal and activities in areas like Harumi and North Ariake that are home to the Olympic/Paralympic Village and multiple venues. In particular, Ariake Marine Park and Ariake Arena will be integrated into one park after the Games, and the sandy beaches and rocky seashores will be improved to create a more appealing seaside area.

During the Games, the seaside park part of the Olympic/Paralympic Village will serve as a tranquil space for athletes from around the world to jog in the shade of trees whilst enjoying the shoreline. In addition to helping alleviate Tokyo's heat island effect, after the Games this park will also be transformed into an urban oasis where city dwellers can come in contact with nature.

Case Study Sea turtle nesting at Tsurigasaki Surfing Beach during test event

Surfing event venue Kujukuri Beach has been deemed the northernmost location of sea turtle nesting, and investigations at Ichinomiya Beach have also confirmed turtle landing and egg laying activity.

Just before the surfing test event in July 2019, sea turtles were discovered laying eggs at the venue. To protect the eggs, we worked with authorities in Ichinomiya, Chiba and an NGO to section off the nesting area and make it visible to visitors and athletes.

We will continue managing the situation together with Ichinomiya authorities and the NGO during the Games.

Sea turtle nesting area

Case Study Chiba Welcome Project in Kujukuri-Sotobo—Tokyo 2020 Beach Cleanup Campaign

With the selection of Ichinomiya's Tsurigasaki Coast as the venue for the surfing competition, the Chiba government took the opportunity to run a beach cleanup campaign. The events served to foster a feeling of unity amongst Prefecture, 16 municipalities in the Kujukuri-Sotobo area and local residents, build momentum for the Games, and promote the prefecture's clean and beautiful shoreline.

Beach cleanup campaign

Resource consumption in the Games to conserve biodiversity

We are working to ensure sustainability, including consideration of impact on biodiversity, by calling on the entire supply chain to comply with the Sustainable Sourcing Code in procurement related to preparations for and delivery of the Games. With regard to procurement of agricultural, livestock and fishery products in particular, the national government and TMG have been promoting relevant efforts to realise sustainable agriculture, forestry and fishery as well as supply of food at the Games, such as implementing Good Agricultural Practices (GAP) and obtaining related certification.

(1) National government initiatives

Japan Ministry of Agriculture, Forestry and Fisheries (MAFF) is working to support prefectural governments' efforts to encourage certification, such as GAP guidance or certification subsidies, through initiatives such as a flexible grant scheme for prefectures. MAFF also promotes consumer-oriented PR activities with major retailers and prefectural governments, and further disseminates GAP information through its website "GAP-info"*. The Ministry also strives to increase the number of GAP Partners who seek GAP-certified food products.

* http://www.maff.go.jp/j/seisan/gizyu/gap/gap-info.html (Japanese)

(2) TMG initiatives

TMG provides financial support to relevant businesses for certification-related consulting and auditing, in order to supply more agricultural, forestry and fishery products produced in the Tokyo to the Games. With regard to agricultural products in particular, TMG launched the Tokyo GAP Certification Programme in March 2018, which takes into account the characteristics of urban agriculture. TMG is also taking further steps to help reduce the burden on farmers, such as by making its certification programme free of charge, and shortening the time needed to complete the certification process.

TMG GAP certification system

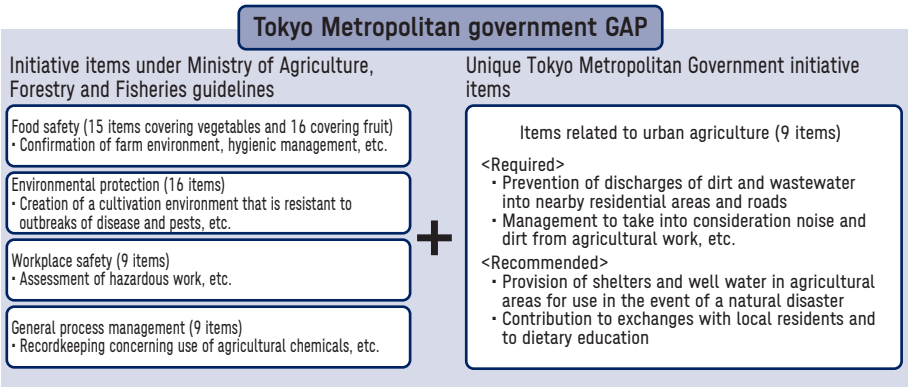
Certificate: Issued by the Governor of Tokyo

Covered products: Fruit and vegetables

Certificate cost: Free

Validity: 5 years from the date of registration (subject to annual inspection and instruction by the TMG)

Inspection: About 90 initiative items covering food safety, environmental protection and occupational safety



Involvement, Cooperation and Communications (Engagement)

It is through the involvement of many people that the parks, tree-lined streets and other greenery in Tokyo have been maintained and managed, and activities are being carried out to raise awareness about topics such as biodiversity through experiences in these areas of nature.

The help of local volunteers will be enlisted in the integration of Ariake Arena with Ariake Marine Park after the Games, and when the park reopens it will also be used as a venue for environmental education.

Umi-no-Mori Park, where boat, canoe and equestrian competitions take place, will also later be transformed by the community into a forest through volunteer tree-planting activities and events held in partnership with businesses and NPOs.

Kasai Marine Park will offer regular opportunities to swim in the sea, and cultural activities related to the ocean like seaweed workshops will be run by NPOs and private operators to show the world Tokyo is a city in harmony with nature.

TMG also operates the Fund-raising for Flowers and Greenery in Tokyo Program, which encourages the cooperation of local residents and businesses in creating green spaces with flowers and plants that showcase Japan's four seasons and culture to both local residents and visitors from around the world. Through this programme TMG is working to foster an urban environment lush with greenery that is not only welcoming for visitors, but that also protects precious ecosystems.

Tokyo 2020 too is seeking opportunities and measures for collaborations that utilise the initiatives and know-how of businesses, organisations and other private stakeholders, with the goal of expanding our circle of participation and partnership.

Case Study Tree planting at Ariake Gymnastics Centre to show support for reconstruction

As part of efforts to support reconstruction in areas affected by natural disasters, TMG and the National Land Afforestation Promotion Organization will hold a tree-planting event at Ariake Arena to rally hope for fast reconstruction. Symbolic trees chosen in consideration of biodiversity will be planted for Iwate, Miyagi, Fukushima and Kumamoto, the four prefectures struck by major natural disasters in recent years.

These trees will become symbolic reminders of Tokyo 2020 as the "Reconstruction Games" even after the Games have finished.

The event will take place after completion of the Games, and we are looking to show our support by inviting a large number of volunteers to join in planting the trees, including Tokyo residents and those who live in areas affected by disasters.

Greening and biodiversity

Tokyo has embarked on a drive to transform itself into a city that coexists with nature, aiming to present a model of sustainability to other cities facing similar challenges. In addition to taking the Games as an opportunity to promote greening at the competition venues, TMG is accelerating initiatives to revitalise Tokyo's natural environment as a whole.

In addition, a variety of initiatives related to the conservation of biodiversity are being carried out in preparation for the Games, as 2020 is the year targeted by (short-term) initiatives designed to achieve biodiversity under the 10th Meeting of the Conference of the Parties (COP10) to the Convention on Biological Diversity (CBD).

Since the target is expected to be revised at COP15 scheduled to be held in 2020, TMG is working on revising the TMG's regional biodiversity strategy (strategy for promoting biodiversity conservation and sustainable use) based on the international situation.

Case Study　Green Tokyo

●Greening of urban areas

TMG encourages the creation of green spaces during urban development projects, based on the system requiring developers to submit greenery plans.

As a result of these initiatives, the percentages of green space announced by TMG for 2018 were: central Tokyo 24.2%, Tama area 67.8%, total area 52.5%.

TMG also promotes the planting of native species to encourage biodiversity and initiatives to brighten up the streets of Tokyo with flowers.

●Nature in the suburbs of Tokyo

Meiji no Mori Takao Quasi-National Park is around 50 minutes from central Tokyo.

Even within the suburbs of Tokyo there are world-class sites like this, where rich ecosystems have been preserved.

Meiji no Mori Takao Quasi-national Park

Competition venues

TMG and JSC are conserving existing trees wherever possible in the construction of permanent venues, by taking existing planted areas into consideration from the design stage and minimising changes to these areas.

In addition, by transplanting trees and using native species when planting new trees, the plans comply with greening standards stipulated in regulations by the local authorities

where the venues are located. In the construction of overlays and temporary venues, existing trees will similarly be retained if possible, or transplanted if they cannot be kept where they are.

These initiatives will create lush green spaces, providing habitats for wildlife and forming attractive landscapes, helping to create an urban environment with a rich ecosystem.

If trees do have to be removed, we will investigate whether the timber can be reused on site or in facilities for the Games, or recycled as a resource by material recycling or thermal recycling.

(1) Competition venues

The following table shows the number of modified and new trees at the permanent venues.

Event venue	Number of saved trees	Number of transplanted trees	Number of newly planted trees
Olympic Stadium*1	Approx. 10	130	Approx. 47,000
Permanent venues developed by TMG*2	Approx. 37,530	Approx. 120	Approx. 24,860

*1. For new construction only

*2. The total number of trees in Tokyo Aquatics Centre / Sea Forest Waterway / Ariake Arena / Kasai Canoe Slalom Centre / Yumenoshima Park Archery Field at planning and the number of trees in Musashino Forest Sport Plaza at completion.

Case Study　Conserving existing trees at the Sea Forest Cross-Country Course

The Sea Forest Cross-Country Course, the venue for equestrian eventing, is being constructed on land where trees have been planted by local people and businesses. Only native species have been used to provide a suitable habitat for wildlife.

Its course design has taken these existing trees into consideration, and there is a policy of transplanting trees based on this.

The turf course will be located mainly on the area that is currently open space, and the design aims to minimise modification of planted areas.

The plans minimise impact on existing trees by transplanting around 20,000 trees from the planned area of the cross-country course to Sea Forest Park.

The turf of the course is a native species of grass called *noshiba*.

Local people planting trees at Umi no Mori

Course turf (native species *noshiba*)

(2) Maintenance of roadside trees

The Japan Ministry of Land, Infrastructure and Transport and the TMG are working to carefully maintain and manage trees lining streets providing access to venues to ensure good tree shade by expanding the canopy of trees through systematic pruning based on species-specific and environmental considerations.

Pleasant urban green spaces and waterfront spaces

(1) Network of water and greenery formed of parks and roadside trees

As well as promoting the greening of river and waterfront areas, as part of the planned maintenance of Tokyo's urban parks and green spaces, TMG is focusing on developing parks which form organic connections with trees lining main roads and rivers.

This will enhance the network of water and greenery around the city, creating tranquil green spaces for people including visitors to Tokyo for the Games.

In areas such as the city centre, where public parks form the green spaces, TMG is maintaining the greenery and landscape of existing parks, and creating verdant urban spaces linking to nearby open spaces, providing visitors with an oasis of calm.

Tokyo's marine parks, located in the Tokyo Bay area, will also function as part of the network of water and greenery. To make the coastal area more attractive in anticipation of the Games and beyond, the marine parks are being developed to provide continuity with the green spaces in the surrounding area, as well as coordinating with different land uses—the surrounding residential areas, culture and sports.

Flowers and trees are being planted to add colour to parks popular with tourists, creating colourful spaces around the coastal area.

(2) Creating a landscape of flowers and greenery

As well as taking measures against the heat island effect and promoting green spaces to encourage biodiversity, TMG is engaged in various projects to make Tokyo an attractive, green city, including the Tokyo Greening Project with Flowers and Plants supporting businesses to plant trees and plants, and the Flower City Project encouraging municipalities to work with local communities and groups to brighten up the city with flowers in preparation for the Tokyo 2020 Games.

The Greenery and Flowers Promotion project supported three schemes between fiscal 2015 and fiscal 2018. The City of Flowers project supported a total of four schemes between fiscal 2017 and fiscal 2018.

Case Study Greenery and Flowers Promotion project

In anticipation of the Tokyo 2020 Games, as well as taking measures against the heat island effect and promoting green spaces to encourage biodiversity, TMG's Bureau of Environment is supporting projects to promote greenery and flowers to create a city in harmony with the environment. These projects aim to create more green spaces in Tokyo, making it a more comfortable and beautiful city for residents and visitors alike.

Example project: Greening the premise of Senjuin temple (Taito City, Tokyo)

Temple garden

Case Study City of Flowers project

TMG's Bureau of Environment conducted the project to support local municipalities to brighten up Tokyo with flowers and greenery and welcome visitors to the Tokyo 2020 Games.

Example project: "Hospitality with Flowers" in Katsushika

Flower Merry-go-round powered by sunlight and waters itself automatically

Flower Merry-go-round
© Katsushika City

(3) Green spaces created by the private sector

TMG requires developers to submit a greening plan when building on sites of 1,000 square meters or over (250 square meters or over if building on land owned by national or local government). As a guideline, at least 20 per cent of the rooftop area of buildings and at least 20 per cent of open spaces should be designated as green spaces.

By developing public open spaces and improving areas of high-density wooden housing through various urban development schemes, high-quality green spaces are being created in open spaces all over the city, forming a network of water and greenery around the city centre.

TMG supports projects by wards and municipalities to create community farms and convert residential land to farmland, to preserve farm land and demonstrate the multifaceted functions of the city. It has supported a total of 11 projects.

Water circulation and quality at the Games

TMG and Tokyo 2020 formed a working group in August 2018, working with the IOC and IFs (the International Swimming Federation and International Triathlon Union) to investigate ways to stabilise the water quality at Odaiba Marine Park, where the marathon swimming and triathlon events will be held. In 2018, surveys and tests were conducted from July to September, the months during which the Games will be hosted, in an effort to stabilise water quality in this area through measures designed to prevent E. coli and other bacteria from flowing into the water after it rains. *See* the "Appendices" (*page 252*) for details of the surveys and tests conducted in 2018.

In 2019, water quality and temperature surveys were conducted during the test events and the months during which the Games will be hosted.

Case Study 2019: Water quality and temperature surveys

- Conducted by: Tokyo 2020
- Dates: 24 July – 18 August and 25 August – 6 September 2019 (total of 39 days)
- Location: Odaiba Marine Park
  6 locations
- Details: Survey to measure water temperature and water quality (E. coli count, fecal coliform bacteria count, enterococci count, pH level, COD (chemical oxygen demand), transparency and oil film).
- Results:

Water quality

[Without underwater screen (24 July – 6 August and 25 August – 6 September 2019)]

- E. coli: When there was no rainfall, most values were within the water quality criteria. The values tended to increase after rainfall but recover to within the criteria after a period of 3 days with no rainfall.
- Enterococci: The number of bacteria exceeded the water quality criteria on one day only.
- COD/Transparency: Values exceeded the water quality criteria on some days during the test event.

[With underwater screen (7 – 18 August 2019)]

- E. coli: Due to rainfall on 14 and 15 August, the value outside the screen exceeded the water quality criteria from 15 to 18 August, but the value inside the screen was within the criteria, except on 17 August.
- Enterococci: All values were within the criteria during the period of the survey.

Water temperature

- Temperature was within the criteria at all measurement points during the period of the survey.

For the Games, we are planning to install three-ply screens which have been found to be more effective than single-ply screens used in a test. We are working with related parties towards a complete system.

Improving water circulation in the city

The national government, TMG and Tokyo 2020 are working together to create a healthy water environment that befits the host city and will be a lasting legacy of the Games. These initiatives include comprehensive flood control measures such as sewage facility construction to reduce the pollution load being discharged into the water area of the competition venues, rivers, the ocean and other bodies of water in the city during strong rains, as well as water circulation measures through installation of advanced facilities for processing treated sewage.

The national government and TMG will accelerate efforts to further improve the water environment by the Game.

(1) Improving water quality in the moat surrounding the Imperial Palace Garden

The Japan Ministry of the Environment is continuing to operate purification facilities of the moat water seven days a week.

A water purification policy review meeting is held every year to investigate possible ways to improve water quality. The moat is managed appropriately by surveying and controlling aquatic plant life.

(2) Reducing pollution load discharged into rivers and the ocean

TMG is working to construct retention facilities to hold the particularly dirty sewage that flows into the system when it starts raining and high-speed filtration facilities to efficiently remove pollutants to reduce the pollutant load from sources such as fouled rainwater discharged into rivers, the ocean and other bodies of water during strong rains. It plans to construct retention and other facilities with a total capacity of 1.50 million cubic metres by the Tokyo 2020 Games. As of June 2019, 1.199 million cubic metres of retention space had been completed.

(3) Improving the water quality of treated sewage

The TMG is working to build advanced treatment and semi-advanced treatment facilities capable of removing large quantities of nitrogen and phosphorus to improve water quality of treated sewage. The goal is to boost total treatment capacity to 4.3 million cubic metres per day by fiscal 2020. As of June 2019, treatment capacity has reached 3.81 million cubic metres per day.

(4) Monitoring water quality in Tokyo Bay

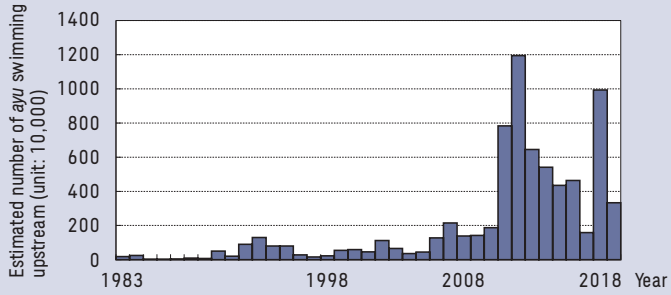
TMG is working with the national and local governments, companies and citizens' groups to conduct large-scale environmental surveys of the Tokyo Bay area and the rivers that flow into it. A total of 172 entities participated in surveys conducted from July to September 2019, which included water quality and biological surveys as well as awareness-raising activities.

Case Study Improved water quality in the Tama River causes *ayu* to return

The Tama area underwent rapid urbanisation during the period of Japan's economic growth. Water quality in the Tama River deteriorated due to pollution from domestic and industrial wastewater, becoming so bad that it earned the nickname "the river of death".

TMG took steps to improve this situation by introducing river basin drainage and working with local municipalities to provide an integrated sewerage system. In 2010, sewerage coverage in the Tama area reached 99 per cent. This has resulted in an increase in the number of *ayu* (sweetfish) swimming upstream, regarded as a sign of clear water. In 2018, 10 million fish were counted swimming upstream.

This improvement in the water quality has restored the riverside environment along the Tama River, bringing back pleasant spaces for local residents to enjoy. It also provides resources for local fishery and tourism, including an increase in anglers fishing for *Edo-mae ayu* (sweetfish from Tokyo).



Ayu fish swimming upstream

People fishing for *ayu* in the Tama River

Air and soil considerations

Tokyo 2020, the national government and TMG all work together in being mindful of chemicals and the health of the soil and air.

(1) Environmental impact assessment

TMG is conducting the Tokyo 2020 Olympic and Paralympic Environmental Impact Assessment, a voluntary assessment of the impact of construction projects associated with venue development for the Tokyo 2020 Games. In the course of developing facilities, TMG is implementing all required surveys and, in the event a contamination exceeding the statutory limit, is committed to taking actions to prevent its spread while explaining the event to nearby residents and relevant institutions in a timely manner. These activities are governed by the Soil Contamination Countermeasures Act and other laws and regulations.

(2) Climate and air quality

For Games-related shipping, Tokyo 2020 strives to use public transport systems as often as possible and also use clean and fuel-efficient vehicles, such as fuel cell electric vehicles, as Games fleet vehicles.

To reduce environmental impacts and cut carbon dioxide emissions, we have issued the Venue Delivery Guide* and are training drivers to ensure they practice eco-driving, such as limiting sudden starts and stops.

For construction machinery, we strive to minimise gas emissions and noise as a consideration for the surrounding environment. We employ vehicles that comply with non-road vehicle regulations and emit less exhaust and noise, while also taking steps to prevent unnecessary idling.

* Venue Delivery Guide
A guidebook sent to shipping businesses hired by FAs, delivery partners and other stakeholders that explains safe and efficient vehicle entry and exit routes for Games-related distribution and rules for moving in and out of venues at different time periods.

Case Study TMG's Clear Sky Supporter Program

Reducing PM2.5 and photochemical oxidants that are the cause of air pollution requires reducing source pollutants of nitrogen oxides (NOx) and volatile organic compounds (VOCs).

TMG has registered businesses which work to reduce these source pollutants as Clear Sky Supporters and publicises their initiatives on the Bureau of Environment website and at events.

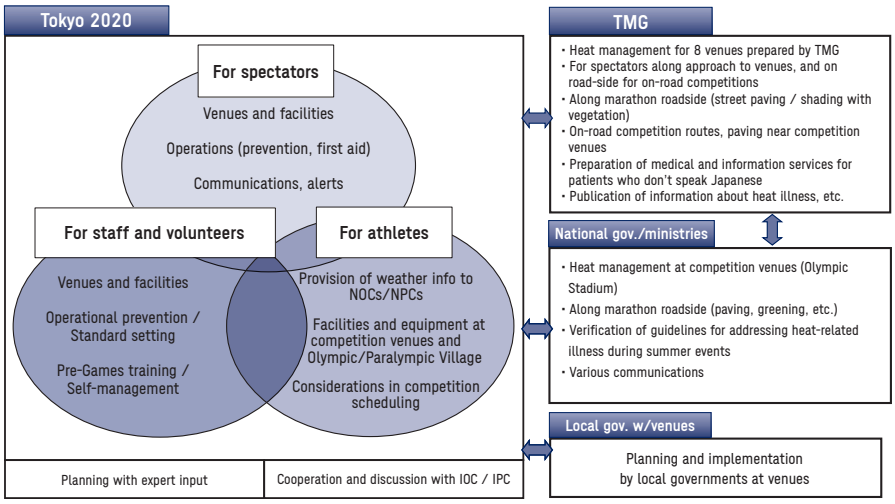
Heat-related measures

The Tokyo 2020 Games will be held during a period typically characterised by intense heat in Japan (July through September). Many people who are not accustomed to the heat of Japan, including those with impairments, are expected to visit the country from around the world. We will work in partnership with the national government and TMG to implement effective initiatives.

The national government promotes both tangible and intangible measures so that these become part of the legacy of the Tokyo 2020 Games. These measures are being implemented based on the Interim Report of Heat Measures for Athletes, Spectators, and

Others for the Tokyo 2020 Games, which was formulated by the Liaison Conference of the Relevant Ministries and Agencies on Heat Measures for Athletes and Spectators at the Tokyo 2020 Games, a group whose members include relevant government ministries and agencies, TMG and Tokyo 2020.

Tokyo 2020 Games heat management and organisations



(1) For spectators

Various practical measures will be taken depending on the time and location, including upon arrival in Japan, on the last mile*1 to venues, in pedestrian screening areas (PSAs) at venues entrance, inside venues and in spectator stands.

*1 Last mile refers to the spectators' route from transport hubs such as a train, subway or shuttle bus station to the venue.

a. Facilities development

We will install shaded spaces, rest areas for people not feeling well and cool-air circulators.

b. Beverage provision

In addition to beverage sales, we decided to allow spectators to bring water into venues under certain conditions.

c. Other prevention

We will actively alert people through audio announcements and visual presentations*2, distribute hand fans along with awareness-raising messaging, and install flower lanes (*see Case Study* below).

*2 Presentations employing video and other media inside venues to make matches more exciting for athletes, convey useful information about the competition and make the Games more memorable for spectators.

Case Study　Flower Lane Project to welcome Games spectators

The Flower Lane Project is a Tokyo 2020 initiative to decorate all competition venues of the Tokyo 2020 Games with flowers that greet arriving spectators.

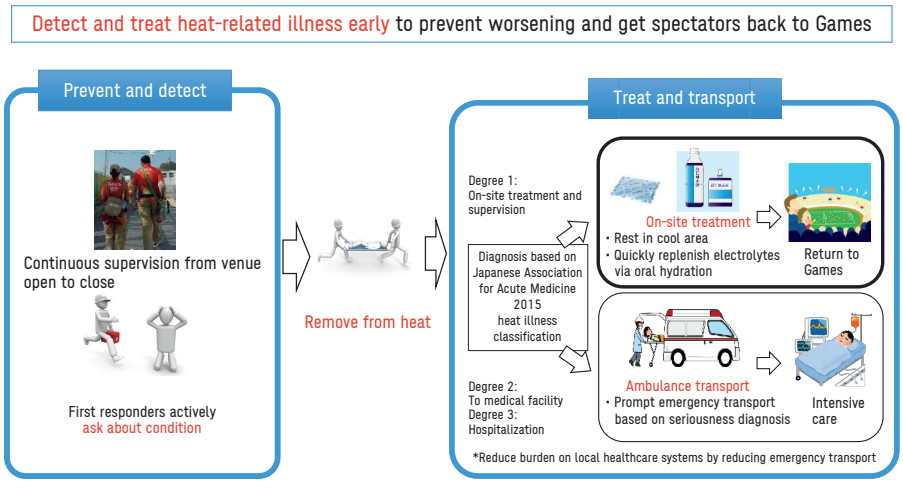
The project will use potted plants of morning glories and other flowers in place of the metal fencing and belt partitions typically used to create spectator lanes. The flowers will line PSAs, where spectators will undergo security screening as they enter the venues. The flowers will have been planted from seed and raised by Japanese schoolchildren, with messages of greetings and cheer attached, offering a warm welcome to people coming from across Japan and the world.

At the Enoshima Yacht Harbour sailing test event

d. Medical response

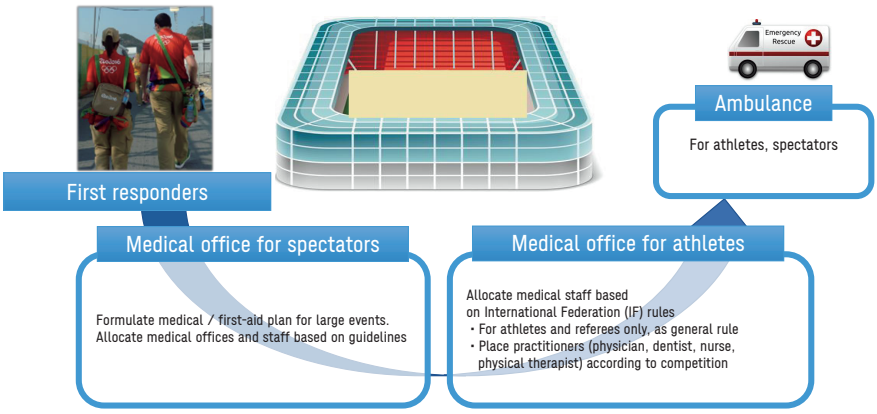
We will implement measures to detect and treat heat-related illness at an early stage to prevent a worsening of symptoms and allow spectators to return to the Games. These include having two-person teams of first responders patrol venues, providing access to medical offices and securing a sufficient number of ambulances for spectators.

Medical operations (1)



Medical operations (2)

Appropriate allocation of medical offices, ambulances, and first responders to athletes and spectators

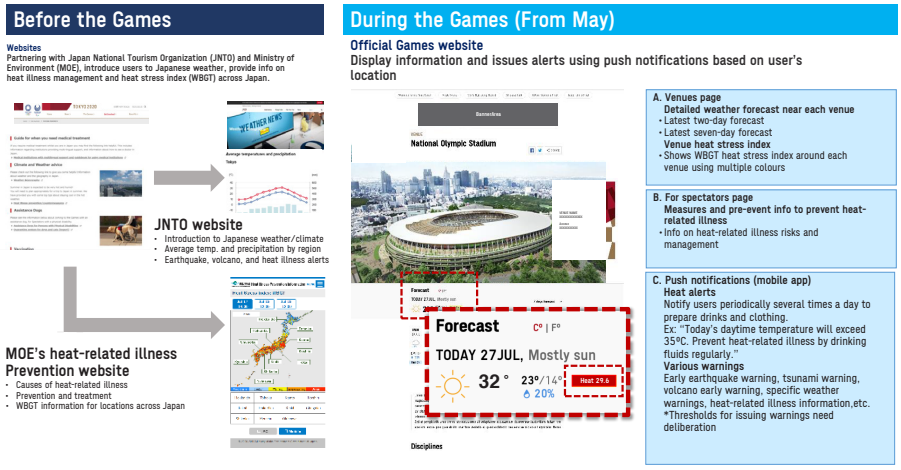


*Medical services at venues during the Games will be decided based on personnel and other requirements with support from medical a associations and other relevant institutions

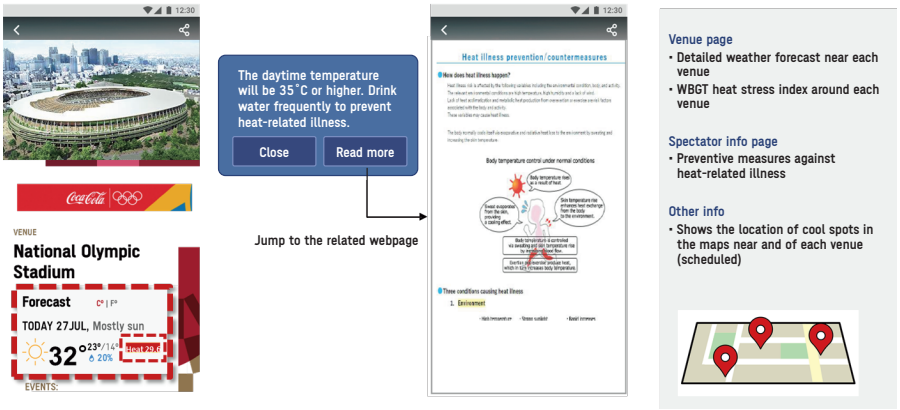
e. Information provision

In addition to audiovisual guidance at venues, we will use the Tokyo 2020 Games official website, a mobile app, the guides sent as e-documents to spectators with a registered Tokyo 2020 ID and leaflets produced by national ministries and agencies.

Planning of official Games website

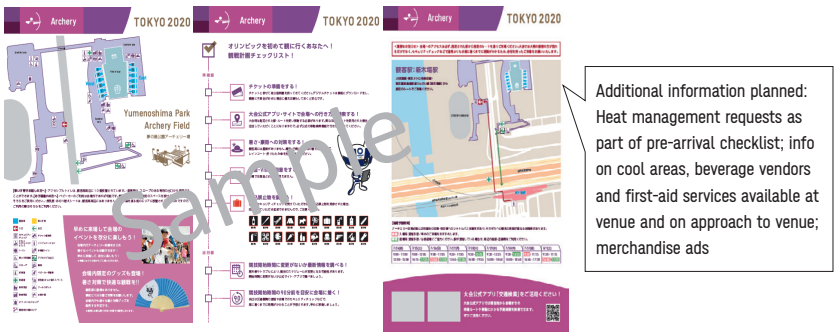


Planning of mobile app



Planning of spectator guidebook

Digital guidebook sent to ticket purchasers, published by competition and venue.
Carefully communicates precautions, provided services and preparation requests for each venue.



f. Piloting heat-related measures at test events

Tokyo 2020 and TMG are considering heat-related measures for the Tokyo 2020 Games based on the results of pilot studies conducted at test events* in partnership with the national government, International Federations (IFs) and National Federations (NFs). The results will be utilised in the actual Games.

* A test event is a sporting event carried out prior to the Games to ensure successful operations of the competitions and the Games.

Heat management trials at test events

Competition	Key locations *Some subject to change	Schedule (2019)	Event name	Organisers
Beach Volleyball	Shiokaze Park	Wed. 24 - Sun. 28 Jul.	FIVB Beach Volleyball World Tour 2019 4-star Tokyo	International Volleyball Federation
Rowing	Sea Forest Waterway	Wed. 7 - Sun. 11 Aug.	2019 World Rowing Junior Championships	International Rowing Federation
Triathlon	Odaiba Marine Park	Thu. 15 - Sun. 18 Aug.	ITU Olympic Qualification Event, etc. (Para Triathlon also held)	ITU World Triathlon Olympic Qualification Event Executive Committee (tentative name)
Hockey	Oi Hockey Stadium	Sat. 17 - Wed. 21 Aug.	Ready Steady Tokyo - Hockey	The Tokyo Organising Committee of the Olympic & Paralympic Games
Marathon	Along marathon route	Sun. 15 Sep.	Marathon Grand Championship	Japan Association of Athletics Federations

TMG and Tokyo 2020 carried out the following to test various approaches.

○ Facilities

We installed on a trial basis shade canopies, air circulators, water dispensers, and light and heat-blocking sails to examine ways to improve rest areas for spectators and the working environment for Games staff*. We also installed misters as oases spectators can visit to cool down.

* Games staff includes paid employees, volunteers, and contractors involved in Tokyo 2020 Games activities.

○ Distribution of cooling goods

Also on a trial basis, we distributed paper hats, paper hand fans, instant cold packs and cool-touch neck towels.

PSA waiting line assessment (Shiokaze Park)

○ Operational measures

On 25 July 2019, we conducted an assessment of PSA waiting lines at Shiokaze Park, and took head stress index (wet bulb globe temperature: WBGT) measurements at multiple locations.

We also tried out different ways of taking adequate breaks to keep staff and volunteers from falling ill due to heat.

○ Medical response

First responders patrolled the venue on a trial basis.

○ Information provision

We disseminated information on the Tokyo 2020 Games official website and test event websites to raise awareness on heat-related illness.

We will utilise the results collected at these test events, including questionnaires given to users of facilities and goods, the PSA waiting line assessment and heat stress index (WBGT) measurements, in the actual Tokyo 2020 Games.

g. Enhancing communication to international visitors

In summer 2019, we conducted surveys of international visitors in partnership with the national government to improve heat-related pre-Games communications on the Tokyo 2020 Games official website.

◯ Pre-Games communications on the official website

We intend to strengthen heat-related communications through deeper partnerships with the national government and relevant institutions.

◯ Survey of international visitors in partnership with national government

We conducted a questionnaire survey with the Japan Tourism Agency and another survey with Japan Ministry of the Environment at Narita Airport. Pre-Games communications will be modified to reflect the questionnaire results.

(2) For the workforce

a. Facilities and equipment

We will install air-conditioned and shaded break areas.

b. Beverage provision

We will provide beverages or install water dispensers.

c. Preventive operations

We are examining different ways of taking adequate breaks and will explain these methods to staff. We are considering using a self-management booklet as a tool for staff to self-assess their physical condition, including proper hydration and sodium intake. We are also considering distributing cooling goods (beverages, electrolytes, ice cream, and cool packs).

d. Medical operations

We will provide access to medical offices for spectators and secure a sufficient number of ambulances.

e. Information provision

At pre-Games training and other opportunities, we will make sure staff perform self-assessments and urge them to take proper actions to prevent heat-related illness.

In training sessions for Games staff, we will provide basic information and alert them to use the self-management booklet. For those with a chronic illness that can increase their risk of heat-related illnesses, we will advise them to consult their primary care physician beforehand.

We will also inform and raise awareness among staff in leadership positions through leadership training. We will instruct them to create a checklist for confirming that staff are managing themselves properly.

(3) For athletes

a. Facilities and equipment

We will set up lounges and break areas for athletes.

b. Beverage provision

We will provide beverages.

This section contains statements that assume that the Tokyo 2020 Games will be held in 2020.

c. Preventive operations

After discussions with the IOC, IFs, and relevant parties, during December 2018 and February 2020, we have decided to change the schedules for competitions in some instances moving the start times earlier.

- Rugby: All morning sessions will begin 1 hour and 30 minutes earlier, at 9 a.m.
- Cycling (mountain bike): Will begin 1 hour later, at 3 p.m.
- Triathlon (Individual, Men/women): Will begin 1 hour earlier, at 6:30 a.m.
- Para Triathlon (Individual, Men/women): Will begin 1 hour earlier, at 6:30 a.m.
- Triathlon (Mixed Relay): Will begin 1 hour earlier, at 7:30 a.m.
- Eventing (Cross-Country): Will begin 45 minutes earlier, at 7:45 a.m.

Working with the IFs, we are examining specific heat-related measures for each competition.

We talked with experts on heat management for outdoor competitions in the Paralympic Games. By providing ice for icing, for example, we will work to optimise heat management based on the nature of the competition and on IF standards.

We are considering distributing and explaining to the National Olympic Committees (NOCs) and National Paralympic Committees (NPCs) a list of items athletes should consider for managing their condition in heat, produced by IOC's medical expert group.

d. Medical operations

Measures we are considering include providing adequate access to medical offices and ambulances for athletes and using ice buses for medical purposes.

e. Communications

We will provide weather status information to the IFs and NOCs/NPCs during NOC/NPC visits, athlete team leader meetings and at other opportunities so athletes of each country and region can train for the Tokyo 2020 Games in conditions that anticipate Japan's weather.

(4) For media

We will also take the following measures to help prevent heat-related illness of the media workers.

a. Facilities development

i. For Broadcast workers and their equipment:

We will implement solar shading at mixed zones, camera positions and commentary positions as well as at the IBC transport mall of the media transport (TM) system*.

* Media transport (TM) system will provide the transportation services specially for media workers from IBC/MBC (main hubs) and to/from their hotels, venues and the Olympic/Paralympic Village.

ii. For journalists and photographers:

For press conferences at the mixed zones, we will install canopy tents and shades for TV cameras, and provide sunshade for computers.

We will also implement solar shading at the parking lot in the IBC P5 area and pedestrian screening areas (PSAs).

b. Beverage provision

We will provide beverages to media workers, and cooling goods to broadcast workers.

c. Others

We will provide broadcast workers with weather information.

d. Medical operations

We will provide media and broadcast workers with access to medical offices for spectators and secure a sufficient number of ambulances.

(5) Public involvement and collaboration

Tokyo 2020, the national government, TMG and other local governments are working together to implement the following specific initiatives related to heat management.

a. Cool spots

We are working with local governments and partner businesses to expand the number of cool spots, places for escaping direct sunlight and heat.

A cool area near
Tobitakyu Station in Chofu, Tokyo

b. Cool areas and cool spots

TMG set up in fiscal 2018 two "cool areas" as its own initiative and plans to set up four more (for eight locations total) by the end of fiscal 2019.

TMG set up 29 cool spots in Tokyo by the end of fiscal 2018, and plans to set up 11 more (for a total of 40) by the end of fiscal 2019.

c. Heat-related measures in areas near competition venues and the Paralympic marathon course

TMG and the Japan Ministry of Land, Infrastructure and Transport have installed solar-heat-blocking pavements to manage heat on the road. They completed installation of 4.8km as of December 2019 and 129km as of March 2019, respectively.

TMG has also set up a heat management rapid response team at Tokyo Environmental Public Service Corporation to implement heat management for spectators along routes approaching competition venues.

Case Study Interview with heat management rapid response team member

TMG has organised a heat management rapid response team at Tokyo Environmental Public Service Corporation to advance heat management in a concentrated and efficient manner. The move comes in response to disaster-level high temperatures in 2018. We talked with Mr Miyajima, who has been on the team since its inception.

Interviewer: What kind of projects is the team working on?

Miyajima: We have three main projects.

The first is heat management for the Tokyo 2020 Games. To safeguard the health and safety of spectators and tourists, which include local residents and visitors from abroad, from Tokyo's intense heat, we're implementing various tangible and intangible measures to alleviate felt heat. Specifically this includes setting up and operating shaded break areas and distributing cooling goods at the Games.

The second is promoting the installation of equipment for managing heat. We offer a subsidy for construction and related expenses to wards, cities and businesses that install equipment in areas near Tokyo 2020 Games competition venues that will attract many spectators and be an important opportunity for broadcasting TMG's initiatives. Another subsidy covers all of Tokyo and goes toward municipal and business expenses incurred from installing equipment to alleviate felt heat as well as mitigate the heat island effect.

The third is a program to support the installation of air-conditioning systems in indoor PE facilities of Tokyo public schools, which are used as emergency evacuation sites. During disaster-level heat, it's imperative that we ensure a hospitable environment for evacuees as well as for students. To do that, we support municipalities when installing such equipment in their gyms for the first time.

Interviewer: Mr Miyajima, your main responsibility is heat management for the Tokyo 2020 Games. What aspects do you pay special attention to when carrying out this work?

Miyajima: I think about what strategies would be most popular and effective.

At the test events this summer, we tried various approaches to see which were most popular. For example, we set up break areas with canopies and fans. We also passed out hand fans, neck coolers, instant cold packs and paper hats. I also think about the best ways to inform spectators and others to take precautions against heat-related illness, because it's also important that everyone know how to manage their condition.

Cooling goods

Break area

Interviewer: Which goods were most popular?

Miyajima: The neck coolers. People said they worked well for cooling the neck.

Interviewer: Have there been any challenges?

Miyajima: New issues have come up, such as how to get more people to use the break areas, and how to create goods that people will bring home and reuse, given the problems with plastic waste.

Interviewer: So you're exploring how to beat the heat in sustainable ways.

Lastly, what are your aspirations for the 2020 Games?

Miyajima: Everyone on our team wants to play a part in hosting a Games that will leave everyone involved—spectators and athletes—feeling happy and excited when they go home, so they can look back on it with fond memories.

Interviewer: Thank you.

Members of the heat management rapid response team

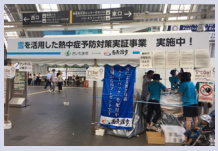
As heat-related measures along roads approaching competition venues and at and near the venues, Saitama City implements measures using snow, working with Minamiuonuma City, Niigata, a snowfall area.

Case Study　Using snow to beat midsummer heat in Saitama

At a test event in Saitama City in 2019 the city used "snow coolers" to keep air and spectators inside the venue cool. The snow coolers used snow collected in Minamiuonuma in northern Japan as a source of cooling energy. WBGT values recorded inside the tent were 5 – 7ºC lower than outside.

The city also distributed "snow packs", snow packed in plastic bags. The packs, which had a cooling effect lasting approximately 30 minutes when applied directly to skin and an hour when wrapped in a fabric, were portable and could be used repeatedly by refilling with snow.

Using natural snow piques spectators' interest and saves energy, being a renewable alternative to electricity and fossil fuels. Saitama City is studying the trail results with plans to implement similar measures during the Tokyo 2020 Games.



At the test event

Snow packs

d. *Uchimizu* events

TMG held three *uchimizu* events (where participants sprinkle recycled water on the streets to cool them down) each in 2017 and 2018 to build momentum for heat management during the Games. Some 500 organisations participated.

e. Tokyo 2020 COOLING Project

The Tokyo 2020 COOLING Project is an initiative to help Games stakeholders protect themselves from the sweltering temperatures expected for the Tokyo 2020 Games by helping them keep their bodies cool and spend the time more comfortably.

We invited Games partners to support the project and have received a public commitment from 24 companies (as of December 2019). Various measures are being explored in the run-up to the Games, including cool spots (providing spaces with shade or cool air), cool item sampling (distributing cooling goods) and cool activities (such as *uchimizu* events).

4.4
Human Rights, Labour and Fair Business Practices

Celebrating Diversity
– Inspiring Inclusive Games for Everyone

4.4 Human Rights, Labour and Fair Business Practices

Overview

The international community has made progress in addressing human rights issues worldwide and protecting and promoting human rights. However, many human rights challenges remain, and this is true also for mega-sporting events. Olympic and Paralympic Games are a focus of the world's attention. As the world's largest sports event bringing together athletes and spectators from across the globe, it must be an event that is inclusive to everyone, complies with international human rights norms and recognises diversity and inclusion, with zero tolerance for any discrimination, based on the fundamental principle of respecting human rights. The Olympic Charter states in the Fundamental Principle 4 and 6 of Olympism that the practice of sport is a human right, and the enjoyment of the rights and freedoms set forth in the Olympic Charter shall be secured free from discrimination of any kind, including race, colour, sex, sexual orientation, language, religion, political or other opinion, national or social origin, property, birth or other status.

Our ambition is for the Olympic and Paralympic Games Tokyo 2020 to be the first Olympic and Paralympic Games to follow the UN Guiding Principles on Business and Human Rights. In an age of growing recognition of the fundamental value of human rights, we aim to demonstrate leadership in practicing respect for human rights through this mega-sporting event. To achieve our goal of "Celebrating Diversity—Inspiring Inclusive Games for Everyone", we are creating the environment to deliver a Games of inclusiveness, in which no one experiences discrimination or harassment based on race, colour, sex, sexual orientation, gender identity, language, religion, political view, social status, age, or impairment.

This work has begun with the important mindsets of ending discrimination and promoting diversity and inclusion (D&I). So that anyone can succeed in and enjoy the Games, we have been raising D&I awareness among Games staff, partners and other related personnel; integrating D&I perspective into Games facilities and operations; ensuring accessibility to Games-related infrastructure and services; and developing mechanisms to address potential human rights harms.

As an organisation with a strong public profile, we at the Tokyo Organising Committee of the Olympic and Paralympic Games are enforcing our commitment to conduct fair business practices, free of corruption and anti-competitive behaviour, in our own organising activities.

Because preparation and operation of the Tokyo 2020 Games involve many workers, we are paying special attention to the labour and working conditions of the Games staff. We also require our supply chain to ensure proper labour management and work condition in accordance with the Sustainable Sourcing Code for the labour to manufacture and distribute procured goods and services as well as licenced products.

In order to implement the Games without discrimination, more work needs to be done in giving Games staff practical education and training so they can take appropriate action during the Games at venues, and in creating an atmosphere at venues that embodies D&I. In partnership with various stakeholders, we are stepping up efforts to create a post-Games legacy on human rights.

Summary of progress

Key area	Status
(1) Actions on respecting human rights and labour	
<Actions on respecting human rights and labour of all people involved with the Games>	
Secure diverse human resources	Implementing initiatives to recruit diverse Games staff, especially 80,000 Games volunteers
Raise awareness of D&I and provide training opportunities for staff	・Raised D&I awareness among Tokyo 2020 staff by formulating a D&I strategy, holding D&I Pledge events, and conducting D&I trainings ・Expanding D&I awareness to Games volunteers and contractors through D&I Pledge events and trainings
Collaborate with stakeholders (partners)	Working with stakeholders to publicise information on D&I, and holding D&I Pledge and other D&I events
Secure accessibility (develop and implement guidelines)	・Formulated guidelines ・Working in our organisation and beyond to properly implement guidelines in Games operations and venue development ・Advancing initiatives in mobility support, information accessibility, and venues development based on the guidelines
Ensure Games facilities and operations reflect the D&I and accessibility perspectives	Incorporating D&I and accessibility into Games venues and various aspects of Games operations, including medicine, food, security, and athlete support
<Reasonable accommodation in working environment>	
Implement and ensure flexible working	・Promoted introduction and use of various systems looking ahead to operations of the Games ・Coordinated work content and positions of non-Japanese employees and employees with an impairment
Provide appropriate working environment	・Developed appropriate office working environments in tangible and intangible ways to accommodate non-Japanese employees and employees with an impairment. ・Developing facilities and planning heat management to address labour-related issues that may arise at venues in preparation of and during the Games
Implement necessary training	Continuing to hold required training for all management-level staff to ensure good workplace management in accordance with labour laws and regulations

<Implement consideration for fair business practices>	
Ensure procurement considering fair business practices	・Ensuring compliance through our staff's training on compliance ・Urging suppliers to practice fair business through implementation of the Sourcing Code
<Implement consideration for actions in procurement>	
Develop a Sustainable Sourcing Code and properly implement it	Revised the Code as necessary and implementing accordingly
(2) Measures for handle problems	
Prepare a communication system and properly understand the situation of human rights issues	・Have set up and are operating hotlines in and outside Tokyo 2020 to receive inquiries on human rights and labour-related concerns in day-to-day operations in preparation for the Games. ・Discussing a system to appropriately detect and respond to any Games-related human rights and labour issues that may arise related to the Games
For management control areas of Tokyo 2020, proactively request correction to abusers and protect victims	・Discussing the system for corrective and remedial actions related to human rights and labour-related issues by anticipating issues that could arise at competition venues, etc., during the Games. ・Developing tools that will provide guidance to Games staff in their initial response to issues that arise, and planning to implement staff training.
Establish and operate a grievance mechanism for the Sustainable Sourcing Code	Completed establishment of a grievance mechanism and operating with the national government and TMG
For areas not under Tokyo 2020's direct control, promptly communicate with responsible organisations/parties and request adequate actions for remedy	Discussing a cooperation system with relevant organisations with experts

Key areas of operations with human rights risks

The UN Guiding Principles on Business and Human Rights calls on businesses to fulfil their responsibility to respect human rights. In the Sustainability Plan (Version 2), Tokyo 2020 has set forth a clear policy committing us to fulfil our responsibility to respect the human rights of everyone involved in the Tokyo 2020 Games, with zero tolerance for any type of discrimination.

The Guiding Principles also describe businesses' responsibility to implement human rights due diligence. This means identifying actual and potential direct and indirect adverse impacts of its operations on workers and other stakeholders as human rights risks, and establishing systems for addressing such risks according to their size (this includes respecting the right of human rights victims to access effective remediation). Businesses should also have a series of internal controls for addressing impacts (including remediation), monitoring (tracking) responses, and disclosing the process.

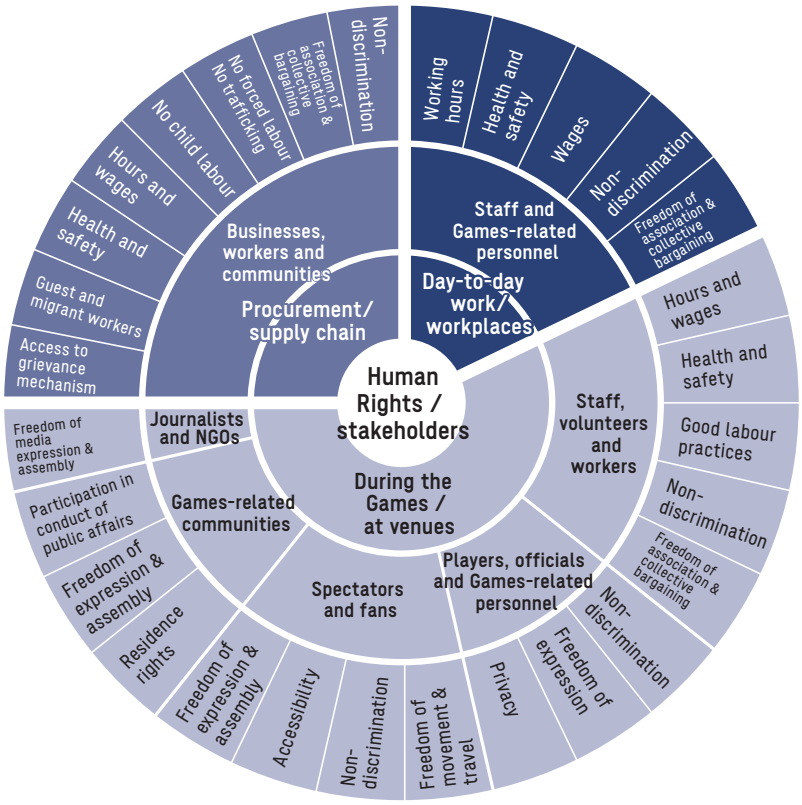
We have identified three key areas of our operations associated with human rights risks: day-to-day work/workplaces, during the Games/at venues, and procurement/supply chain.

Key areas of operations requiring management of human rights risks

key areas	Primary type of person involved
Day-to-day work / workplaces	Staff, Games-related personnel, and persons interacting with these people
During the Games / at venues	All persons involved in the Games during the Games, particularly at competition venues
Procurement / supply chain	Supply chain-related business operators, workers and local communities

Risks in day-to-day work and workplaces will be managed primarily by Tokyo 2020's human resources and administrative departments, assisted by organisational governance systems and a consultation desk (*see page 142*). Risks in procurement and the supply chain will be managed primarily by Tokyo 2020's Sustainability Functional Area through sustainable procurement activities, which include implementing the Sustainable Sourcing Code and operating a grievance mechanism (*see page 142*). Management of risks during the Games and at Games venues is under practical investigation and will be decided at a final stage prior to the Games (*see page 142*).

Stakeholders and Impacted Human Rights



To build a society that is diverse and free from discrimination, it is vital for every organisation that plays a role in society to identify how their activities are linked to human rights risks, and take appropriate action. For example, TMG and other local governments run various initiatives that are based on policies related to respect for human rights, diversity, and coexistence, while private companies create reports specifically on human rights. We anticipate that the 2020 Games will serve as an opportunity for each level of society to develop human rights initiatives, and further work towards creating a diverse society free from discrimination.

Case Study TMG Ordinance Seeking Realization of the Principle of Respect for Human Rights Outlined in the Olympic Charter

The Olympic Charter stipulates fundamental principles that prohibit any form of discrimination and demand respect for human rights. To further increase local citizens' understanding of these principles, in October 2018 TMG established TMG Ordinance Seeking Realization of the Principle of Respect for Human Rights Outlined in the Olympic Charter. As the host city for the 2020 Games, TMG recognises the importance of promoting public awareness and elimination of discrimination based on gender identity or sexual orientation, and more actively dealing with discriminatory language and behaviour towards people from outside of Japan. Establishing these regulations allows TMG to further clarify at home and abroad their stance of prohibiting any form of human rights-related discrimination, and to comprehensively operate policies that educate about human rights.

Case Study All Nippon Airways (ANA) Human Rights Report

A human rights report is a report companies issue focusing on their activities in the area of human rights. Tokyo 2020 Games sponsor All Nippon Airways (ANA) published a human rights report in May 2018, becoming the first Japanese company and one of only a few companies worldwide to do so. The company has since followed with a 2019 report and announced its intention to continue publishing them, thus demonstrating accountability for respecting human rights. In the report, ANA discloses its efforts in accordance with the UN Guiding Principles on Business and Human Rights and the UK Modern Slavery Act. These include establishing a human rights policy, training employees, implementing due diligence, and holding dialogues with various stakeholders and experts worldwide.

ANA Group Human Rights Report 2019

For businesses seeking to fulfill their social responsibility, creating effective mechanisms of societal checks through stakeholder dialogue is crucial. We hope that ANA's leadership and ongoing commitment to publishing the human rights report as a tool for such dialogue will create a post-Games legacy by motivating many other companies to act and be more transparent on human rights.

Know Differences, Show Differences.

The tagline of D&I for the Tokyo 2020 Games

Diversity and inclusion (D&I)

Diversity and inclusion (D&I) refers to a state in which people of all walks of life can understand and accept each other's differences, allowing everyone to be their fullest selves, without experiencing discrimination or harassment.

Because the Tokyo 2020 Games will bring together people from all around the world, Tokyo 2020 is positioning D&I as a core component of Games preparations and delivery. This perspective is encapsulated in the tagline, "Know Differences, Show Differences". To achieve this, we have formulated and updated the Tokyo 2020 D&I Strategy as a summary of our organisational goals and specific initiatives, and are making sure all members of the organisation are familiar with it. The D&I Strategy consists of four pillars for advancing D&I: fostering D&I mindset, hiring and inclusion of diverse human resources, creating a pleasant working environment for those who are involved in the Games, and collaborating and sharing information with Games stakeholders including spectators and associated entities.

(1) Securing diverse human resources and mainstreaming D&I awareness

We are working to secure diverse human resources so everyone has the chance to contribute meaningfully to the Tokyo 2020 Games. We are also making ongoing efforts to raise D&I awareness among Games staff (Field cast*) and related personnel so that practical aspects of Games preparation and operations reflect the D&I perspective.

* The name Field Cast refers to the Games staff including Tokyo 2020 members and contractor staff as well as the Games volunteers.

a. For Tokyo 2020 staff

i. Diversity of Tokyo 2020 staff

Tokyo 2020 is formed of directly employed staff along with secondees from the Government of Japan, TMG, administrative organs of local authorities as well as private businesses and organisations including sponsors. This organisation embodies diversity. We

are still actively and openly recruiting directly employed staff (contract employees), making our team increasingly diverse. We also work with other local governments and private companies to encourage more active seconding and direct hiring of those with impairments. Our working environment is one marked by an intention to be aware of diversity and accepting of differences in day-to-day operations as well as during the Games.

Some data on Tokyo 2020 staff diversity are shown in Section 3.1"Tokyo 2020 : Organisational Structures" (see *page 26*) and "Appendices" (see *page 241*).

ii. Mainstreaming D&I awareness

Tokyo 2020 has created a D&I Handbook which describes specific differences between cultures, gender identities, generations, life stages, physical & intellectual abilities and so on, as well as specific actions for respecting them. We are sharing this resource across the organisation to support staff in their understanding and practice of D&I.

Tokyo 2020 is setting up opportunities to experience and participate in to deepen understanding of D&I, including:

- Induction training and management training required to ensure basic knowledge of D&I;
- Service and support training for people with a visual or hearing impairment and wheelchair users, in which staff members with an impairment serve the role of lecturer;
- Language training to enable understanding when communicating with speakers of different languages (Japanese, English); and
- Get-togethers with LGBT*[1] people

[Key Performance Figures (FY2018 – 2019)]

[FY2018]

- Induction training: 12 times, participation rate: 84%
- Management training: 2 times, participation rate: 85 %
- Service and support training: 12 times
- Language training: (Japanese) 28 participants for a total of 80 hours per person
  (English: e-learning) 1,368 participants
- LGBT get-togethers (Human Library*[2]): once

[FY2019: Apr. 2019 – end of Jan. 2020]

- Induction training: 10 times, participation rate: 95%
- Management training: 2 times, participation rate: 70 %
- Service and support training: 2 times
- Language training: (Japanese) 9 participants for a total of 80 hours per person
  (English: e-learning) 1,051 participants

*1 Lesbian, gay, and bisexual (LGB) are sexual orientations (sexual or romantic attraction) toward people of the same sex or both sexes, while transgender (T) refers to a gender identity that does not match one's biological sex. While there are various sexual and gender identifications other than LGBT, the term is used in this report to refer to all sexual minorities.

*2 Human Library is an event in which a reader (participant) and a book (guest) freely read (converse) on the life and experiences of the book (guest), like a library in which the reader takes out a person rather than a book.

Case Study Service and support training taught by people with an impairment

Tokyo 2020 staff members who have an impairment speak on the barriers they experience and also teach basic attitudes and methods for providing service and support. The goal is for trainees to acquire practical support skills not just for the Games but for the workplace and daily life. Offered in three parts—visual, hearing, and wheelchair—trainees gain basic knowledge and participate in hands-on exercises for communicating with people with an impairment, including exchanging business cards while wearing an eye mask, communicating through writing and sign language, and pushing a wheelchair.

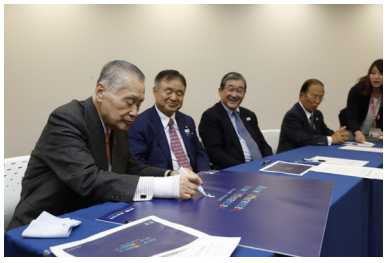
[Hearing] A lecturer with a hearing impairment explains basic sign language

[Visual] A lecturer with a visual impairment shows how to guide someone

D&I sticker

iii. D&I Pledge

Tokyo 2020 management and staff made D&I Pledges in December 2018 and 2019, coinciding with UN Human Rights Day, to demonstrate their commitment to D&I across the organisation. Other ways we are showing our commitment to advocating D&I include putting up posters on which staff members have written their pledges and signatures, and distributing D&I stickers for staff to show their personal support.



Managers sign the D&I Pledge

Staff sign the D&I Pledge

Case Study Spreading the D&I Pledge

We are spreading our D&I Pledge to people beyond our own staff. Our goal is to further encourage many people to support for D&I in the Tokyo 2020 Games so that D&I takes root in each of their fields and across society.

- All participating members of the Tokyo 2020's Athletes' Commission (Feb. 2019) and the Urban Planning and Sustainability Commission (Mar. 2019) have signed and written personal messages on a D&I Pledge poster.
- Making the D&I Pledge is also a part of general training that was held from October 2019 for the roughly 80,000 Games volunteers.

The Tokyo 2020 Athletes' Commission made the D&I Pledge

The Urban Planning and Sustainability Commission made the D&I Pledge

b. For Games contractor staff

Contractors account for more than half of personnel involved in preparation for and operation of the Games. At communication forums for Games contractors, we encouraged contractors to build diverse workforces that are inclusive of various ages, genders, and other characteristics.

We have also provided D&I training materials to all contractors that will be working during the Games so that, as part of the Games staff, they may have the same awareness of D&I as Organising Committee members. By gaining an understanding of D&I and experiencing it during the Games, we hope D&I will become part of the culture of these companies even after the Games.

c. For Games volunteers

We are working to invite diverse people to join as a Games volunteer to do so, regardless of age, gender, nationality, or impairment.

A leaflet for recruiting Games volunteers

i. Status of Games volunteer recruitment and applications

To recruit the approximately 80,000 Games volunteers, we have implemented over 100 recruitment promotion activities in a range of settings, such as nationwide universities and local authority events. We have also distributed some 300,000 leaflets to partner universities, organisations for people with an impairment, and other organisations. Further, we have improved our application system for people with visual impairments.

More than 200,000 people applied to the recruitment process from 26 September 2018 to 21 December 2019, and to 18 January 2019 for those who need input support.

[Status of applications]

Completed applications: 204,680

Status of applications by applicant

- Gender: Male 36%, Female 64%
- Nationality: Japanese 64%, Non-Japanese 36%

ii. Games volunteer orientation and interviews

Interviews underway at a Games volunteer orientation

From February to July 2019, we held orientations for Games volunteer applicants. The orientations consisted of an explanation of the Tokyo 2020 Games, group activities and interviews.

Participants were those who had completed the application process, been assigned a preferred activity or location through a careful matching process and received invitations for orientations for participating as a volunteer.

We encouraged a range of people to participate as Games volunteers, including people with an impairment and non-Japanese people. When planning the orientation, we considered timing and participants' home location, and offered support at the orientation venue.

Communication support offered at interviews for people with a hearing impairment

Orientations held	
Locations	・Held not only in Tokyo but in 11 prefectures nationwide to accommodate residents of non-metropolitan areas. ・Held video interviews for applicants living outside Japan.
Schedule and number	・Held at different hours morning to evening on weekdays, weekends and holidays to enable people of all lifestyles, including students and working professionals, to participate. ・Held more than 500 total.
Considerations for participant diversity	・Conducted interviews in Japanese and English. ・Set up an interview support booth for applicants with special needs. ・Provided sign language interpreters, written communication tools and tablet device-based sign language video interpreting for people with a hearing impairment. ・Provided child day care for applicants who requested it.

Based on their orientation and interview results, some 80,000 Games volunteer candidates will undergo general training. Of these, people of nationalities other than Japanese account for about 12 per cent and represent some 120 countries and regions.

Games volunteers: Approx. 80,000

Breakdown:

- Male-female ratio: Male 40%, Female 60%
- Ages ranging from teenagers to people in their 80s.
  Teenagers: 17%, 20s: 16%, 30s: 12%, 40s: 19%,
  50s: 22%, 60s: 12%, 70s: 2%, 80s: Below 1%
- Nationality: Japanese 88%, Non-Japanese: 12%

Volunteers from Tokyo 2020 (including staff from abroad), volunteer groups, partner companies, staff of local governments hosting competition and orientation venues, and other associated organisations participated as interviewers to enable a diverse range of people to participate in the Games volunteer orientation.

Games volunteer training

iii. D&I communication and support training

Since October 2019, we have set up opportunities in general training (group training, text and e-learning) for Games volunteers to learn D&I concepts and the basic attitudes and methods of providing support. Because Games volunteers will be involved in Games operations, training content is the same as that for Tokyo 2020 staff and is aimed at spreading D&I awareness and promoting its practices during the Games. Going forward, we will hold accessibility training at venues as part of venue-specific training programmes.

We have held general training (group training) at venues across Japan, both in and outside Tokyo. We will also hold group training for volunteers who live abroad.

(2) Integration of D&I into Games facilities and operations

Games staff are bringing D&I awareness to Games facilities development and operational planning to ensure operations and services reflect D&I perspectives. We aim to achieve D&I in all settings during the Games, including medicine, food, security and athlete support.

[Examples of D&I planning for the Tokyo 2020 Games]

Serving a Haral menu in the dining of the Olympic/Paralympic Village (past Games)

- Food diversity
  We plan to provide diverse food options at the Olympic/Paralympic Village, including Halal and vegetarian menus.

- Multi-faith spaces for spectators, athletes and Games staff
  We plan to set up multi-faith spaces for athletes at the Olympic/Paralympic Village and for spectators and Games staff at competition venues and other locations.

- Women athletes' department in the Olympic/Paralympic Village polyclinic
  We plan to provide services that take diversity into consideration in the polyclinic of the Olympic/Paralympic Village. This includes balancing genders among physicians and, in particular, establishing a women athletes' department as a medical service for female athletes, the first of its kind at the Olympic and Paralympic Games.

- Diversity considerations in security
  We will allow spectators to register their chosen name when entering competition venues to respect their preference. At security checkpoints, we plan to set up areas for wheelchair users and also provide consideration for religion and gender, by matching security officers to spectators of the same sex, for example. We will also hold preliminary D&I training for private-sector (contracted) security officers.
- Multifunctional restrooms (accessible toilets) and assistance dog toilets
  We plan to install multifunctional restrooms at all competition venues and the Olympic/Paralympic Village. Assistance dog toilets are under study to be installed competition venues except on-road competition.
- Uniform designs for Games staff and related personnel
  Uniforms for Games staff were created with a unisex design to honour "diversity" as a core element of the design policy. Formal uniforms for technical officials are designed in a way that can be worn by everyone regardless of nationality, age, sexual orientation and gender identity, which is the first time in the history of the Olympic and Paralympic Games. The uniforms include pants for everyone, a unisex design jacket and a shirt with a choice of tie or scarf.
- Selection of torchbearers
  We selected torchbearers for the Olympic Torch Relay and Paralympic Torch Relay from members of the public with consideration for balance between characteristics such as nationality, impairment, gender and age. As a general rule, torchbearers in the Paralympic Torch Relay will consist of teams of three people who have not previously met.

Formal uniforms for technical officials

Case Study Hosting the IOC Refugee Olympic Team

Refugee athletes in the Olympic and Paralympic Games are refugees whose status is recognised by the UN High Commissioner for Refugees (UNHCR), possess a certain degree of skill in a specific sport, and are recognised as such by the IOC. At the UN General Assembly in October 2015, IOC President Thomas Bach announced the creation of the Refugee Olympic Team—the first of its kind—to participate in the Olympic Games Rio 2016.

The IOC has also announced a list of 37 scholarship-holders who aim to be part of the IOC Refugee Olympic Team Tokyo 2020. Tokyo 2020 is currently exploring what it can do to host the refugee team so that diverse athletes can participate and find success in the Games regardless of nationality.

(3) Collaboration with stakeholders

To mainstream D&I values as a legacy before and after the Tokyo 2020 Games, we are sharing information and promoting collaborative initiatives on D&I with stakeholders.

a. Tokyo 2020's stakeholder communications on D&I

We are actively publicising our own D&I initiatives. For example, we have provided information on D&I to sponsor companies in meetings held by HR managers of partner organisations (held six times through 31 December 2019) and meetings of the Sponsors Sustainability Network (*see page 146*). We are also broadly publicising ongoing D&I initiatives through the official Tokyo 2020 website.

b. Stakeholder partnerships

In addition to one-way communications, we are also partnering with stakeholders to deliver the D&I message. We have been taking part in D&I events organised by these stakeholders. These communications and partnerships are, however, still insufficient. We will proactively address the challenge going forward.

Case Study Panasonic hosting Diversity & Inclusion events

D&I is spreading as a social movement, and businesses are joining in.

Tokyo 2020 Games sponsor Panasonic Corporation has been holding D&I events as a Tokyo 2020 recognised programme to create opportunities for contemplating D&I in the run-up to year 2020, when people from around the world will gather in Tokyo. As of December 2019, the company has held seven events with everything from panel discussions to workshops and movie screenings on the topics of diversity, LGBT issues, and Paralympic sport.

The first event in March 2019 featured a presentation by Tokyo 2020 on D&I initiatives for the Games, a panel discussion on diversity within Tokyo 2020's organisation, and a Human Library workshop. In the panel discussion, Asao Tokoro, designer of the Tokyo 2020 emblems, and Gon Matsunaka, who is openly gay and heads a non-profit organisation supporting sexual minorities, shared their perspectives on the meaning of diversity incorporated into the Tokyo 2020 emblems and on grassroots D&I initiatives for the Tokyo 2020 Games. In the Human Library workshop, people of various identities and backgrounds, including Paralympic athletes and LGBT individuals, became open "books" and had discussions with participating "readers".

Event participants have been diverse, sparking conversations on D&I between students and working professionals from academia, business and civil society. It is expected that D&I events organised by each stakeholder will lend further momentum to the D&I movement in society.

At the first D&I event

"Diversity of Tokyo 2020" panel discussion

Human Library workshop

Networking session for event participants

Case Study The Diversity & Inclusion Collection

We have launched the Diversity & Inclusion (D&I) Collection, official Tokyo 2020 licensed merchandise aimed at disseminating D&I concepts to a wide audience.

The Collection is designed to accommodate people with a visual impairment, and includes t-shirts with sign-language hand signs or embossed lettering bearing the Paralympic emblem, stationery (letter paper, Braille desktop calendar, and planner) with white lettering on a black background and D&I pins.

- T-shirts with sign-language hand signs

The sign language t-shirt spells "Tokyo 2020" in hand signs.

- Embossed lettering T-shirts

The embossed lettering t-shirt can be read by touch.

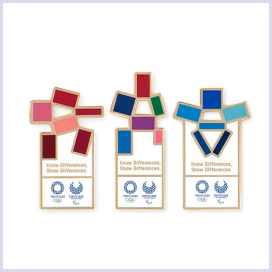
- Stationery with reversed text colours

White text on a black background makes this stationery easier to read and use for people with a visual impairment.

- D&I pins

D&I pins are convenient for many people to purchase, wear and share with others, helping to spread understanding of D&I. Because of their D&I message, D&I pin is the first Tokyo 2020 official licenced goods that have the Olympic and Paralympic emblems together. The pins are available in two types of designs aiming at building the society where everyone can live in harmony with a peace of mind, understanding and respecting each other's differences.

We are all people, regardless of the differences that exist between countries, cultures, ways of thinking, generations, SOGI, and so on. The first design uses the chequered pattern of the Tokyo 2020 emblems, which symbolises diversity, to depict various types of people.



The other design can be worn in various combinations of four types of pins designed for each concept. Inclusive society is expressed with the logo of Diversity & Inclusion, "Culture" is depicted as the continent of Pangaea,*1 "Generations" a pictogram of different generations, and "SOGI*2" the rainbow flag.

*1 A supercontinent scientists believe existed some 300 millions years ago. Its break-up led to the formation of today's continents.

*2 SOGI: sexual orientation and gender identity

Case Study "Barrier-free mind"

The Cabinet Secretariat of Japan is promoting "barrier-free mind" as a concept for promoting inclusiveness during the Tokyo 2020 Games and beyond.

The "barrier-free mind" concept refers to a state in which people of various physical and emotional circumstances and opinions are able to communicate in ways that are mutually understanding and supportive. The concept comes from the Universal Design 2020 Action Plan, approved by the Ministerial Council on Universal Design 2020 in February 2017*.

Developing a barrier-free mind requires a sustained personal commitment to specific actions. The action plan offers the following three points for anyone wanting to embody a barrier-free mind.

(1) Understand the social model of disability, which states that it is the responsibility of society to remove social barriers faced by people with impairments.

(2) Stop discriminating (treating unfairly and withholding reasonable accommodation) against people (and their families) with an impairment.

(3) Develop skills for communicating with people whose life conditions are different from one's own, along with the ability to imagine and empathise with the pains and hardship all people face.

To use the Tokyo 2020 Games as an opportunity to promote barrier-free minds, the action plan calls on stakeholders to implement barrier-free mind education in schools, training for business and government personnel, and community-based awareness raising through partnerships between government and local stakeholders.

For this purpose, the Cabinet Secretariat in fiscal 2017 created an animated teaching resource on the barrier-free mind concept, with the involvement of representatives from nine organisations for people with impairments, academic experts and private businesses. The resource is an easy introduction to communicating with people of different life circumstances, such as those with an impairment, offering important knowledge as well as tips for managing one's own thoughts and emotions. With the Tokyo 2020 Games approaching, the resource has been made publicly available so it can be widely used to encourage this mindset on an individual level, thus helping to create a society where everyone can understand and communicate with people who have an impairment or are otherwise different.

https://www.kantei.go.jp/jp/singi/tokyo2020_suishin_honbu/udsuisin/program.html

(Japanese)

* https://www.kantei.go.jp/jp/singi/tokyo2020_suishin_honbu/ud2020kkkaigi/ (Japanese)
https://www.kantei.go.jp/jp/singi/tokyo2020_suishin_honbu/ud2020kkkaigi/pdf/2020_keikaku.pdf (Japanese)

Ensuring accessibility

In order to ensure that everyone, including people with diverse impairments and needs, has an equal opportunity to access the Tokyo 2020 Games, we are working on mobility support, information accessibility and venue facilities development based on the Tokyo 2020 Accessibility Guidelines*[1, 2].

In order to make Tokyo 2020 Games a catalyst for accelerating accessibility improvement both in infrastructure and services, we are sharing our guidelines with the wider society and promote change.

*1 Accessibility is the availability of smooth access to social infrastructure, facilities, equipment, products and services for people of all ages and all abilities.

*2 https://gtimg.tokyo2020.org/image/upload/production/szeds908srd4rhk0gknx.pdf

All Accessibility Matters

(1) Mobility Support

We are collaborating with the Government of Japan, TMG, related local municipalities and public transportation companies to ensure seamless accessibility from official Games entry airports and train/subway stations to seats in competition venues and other destinations for spectators, athletes and Games staff.

a. Mobility support for spectators

*3 Accessible routes are access routes to competitions venues that are designated by Tokyo 2020 as routes potentially used by people with accessibility needs. This includes designated transportation vehicles running on the routes.

Based on the Tokyo 2020 Accessibility Guidelines, we designated accessible routes*[3] from stations to venues that are easy to travel for spectators with accessibility needs and their companions. Barrier-free designs are incorporated in many parts of Tokyo, by eliminating steps, reducing the gradient of the pathways and installing guiding blocks (blocks with stripes or dots) for visually impaired people. Many roads and stations in Tokyo sufficiently meet the standards of accessible routes. Where the current provision falls short of the standard set in the Tokyo 2020 Accessibility Guidelines, we are driving infrastructural improvements and, where this may not be sufficient, looking into service-based solutions.

We are examining the Olympic and Paralympic session schedules, gross venue capacities and the proportion of seats for which accessibility must be considered to assess the number of spectators whose needs would be difficult to meet through infrastructural solutions alone. We are planning to run an accessible shuttle service that provides a vehicular mobility solution for wheelchair users from park and ride locations and transport hubs near train stations, and we are currently examining how best to operate it. Furthermore, we are looking into and coordinating measures such as the installation of temporary guiding blocks where needed and the provision of adequate route guidance using signage and by staff, as well as the provision of information in advance.

Case Study Accessibility improvements at major stations

Under national programmes such as the urban rail development programme and the urgent programme for the development of infrastructure for international visitors, Japan is working to enhance major train stations and other facilities so that they are more accessible to travellers from countries other than Japan and people with impairments. The measures include increasing the number of and expanding the size of lifts, installing multifunctional restrooms, installing safety gates on station platforms, and adding multilingual signage at train stations around competition venues. For example, at Sendagaya and Shinanomachi stations, the two train stations expected to be used by spectators to visit Olympic Stadium, enhancements such as the installation of new and larger lifts and platform safety gates have taken place.

We will continue working with railway operators to ensure continuous accessibility from stations to inside Games venues.

b. Mobility support for athletes and Games staff

We will provide transportation support using accessible vehicles (buses and cars) to ensure accessibility for athletes and Games staff as they move around.

During Paralympic Games in particular, when many athletes and Games staff use wheelchairs, accessible vehicles that can be boarded without leaving the wheelchair will also be introduced.

As a mobility support for athletes and Games personnel within the Olympic/Paralympic Village, buses that circulate around the Village will be introduced, which will be equipped with a low floor and electric ramp for easy boarding.

Olympic/Paralympic Village loop bus (left: exterior; right: interior)

Case Study Accessibility for moving within venues

In order to ensure spectators, athletes and Games staff with accessibility needs can move around Games venues safely and without difficulty, we plan to provide mobility services, wheelchair rentals and human assistance from Games staff.

Case Study Accessibility improvements at entry points (official airports)

As for the official airports that are the official entry points to the host country, we are working to provide spaces anyone can use without difficulty through infrastructural improvements as well as service-based solutions in accordance with the Tokyo 2020 Accessibility Guidelines and the Universal Design 2020 Action Plan.

Tokyo 2020 holds regular meetings on the universal design of airports, in conjunction with the government, the operators of the official entry airports and airlines. At these meetings, we have checked the compliance of airports to the Tokyo 2020 Accessibility Guidelines, and held workshops walking the lines of movement of Para athletes arriving at the Narita Airport to identify areas and issues requiring action.

Official airport	Current status and challenges
Tokyo International (Haneda)	Current provisions include: spacious accessible restrooms designed to provide multiple functionalities for diverse needs; every terminal assistant qualified as a Service Care-Fitter; and toilets for assistance dogs such as guide dogs, hearing dogs and mobility assistance dogs.  Multifunctional restroom  Toilet for assistance dog
Narita International	Improvements have been made based on the Narita Airport Universal Design Basic Plan, including: distributing various functions previously installed in multifunctional restrooms to general restrooms; installing all-gender restrooms; installing wheelchair-accessible lifts; providing information through signage and improved website, and support for users with intellectual, mental or developmental impairments.  Quiet room
New Chitose	Universal design improvements were made to the domestic terminal, which included toilets for assistance dogs, flashing lights to provide light in an emergency situation in toilet booth and accessible counter for wheelchair users, with the extension of the international terminal slated for completion in March 2020.
Sendai	Improvements to satisfy universal design criteria are being carried out in the airport's passenger terminals.

* Quiet room: space provided to offer an escape from external stimuli that may trigger panic attacks.

(2) Information accessibility

We take accessibility into account in the design of the Tokyo 2020 official website, app and publications as well as in information notices and announcements at Games venues to ensure that spectators, athletes and Games staff receive the information they need.

a. Considerations for official website, app and publications

The Tokyo 2020 official website is designed to meet the needs of people with visual and auditory impairments based on the website standards in the Tokyo 2020 Accessibility Guidelines. We are also considering making the website and app multilingual, providing information in Japanese, English and French in the period prior to the Games, and in Japanese, English, French, Chinese, Korean, Hindi and Spanish during the Games. (Please note that not all content will be multilingual as some content will be targeting a specific audience and also the time constraints make it difficult for news flashes to be translated.)

We are also looking into steps to make our various publications accessible to people with impairments as well as international visitors.

Case Study Accessibility in production and sale of Tokyo 2020 Games tickets

The needs of people with a physical impairment, international visitors and elderly people will be considered when we produce and sell tickets.

(1) Accessibility in ticket sales

- Measures implemented include the production of easy-to-follow ticket purchase guides in Japanese and English, support for people requiring special assistance for ticket purchase via our call centre, and introduction of a text-to-speech system for the official Tokyo 2020 website. For people with a visual impairment, we have also introduced telephone sales.
- The call centre and official ticket outlets can handle enquiries in English.
- The needs of wheelchair users will be considered in the location and design of official ticket outlets within the Tokyo Metropolis and near competition venues.

(2) Production of accessible tickets

Paper tickets are designed in accordance with the TMG's Colour Universal Design Guidelines to take account of the needs of people with visual impairment or colour vision deficiency.

b. Notices and announcements at Games venues

We are investigating how we can ensure full delivery of information to international visitors and people with impairments through notices and announcements at competition venues. For example, we are considering the use of multilingual symbols, pictograms and speech-to-text translation technology.

(3) Venue facilities development

We have run awareness-raising and promotional activities targeting Tokyo 2020 staff as well as owners and managers of competition venues and Olympic/Paralympic Village to which the Tokyo 2020 Accessibility Guidelines apply to ensure that facility construction and improvement work is implemented in accordance with the guideline standards. Improvements such as the installation of wheelchair accessible seats and widening of doorways are being planned.

For the design of permanent municipal facilities being developed by TMG, accessibility workshops with organisations representing people with physical impairment were to ensure their views will be reflected. With post-Games use in mind, our aim is to make these facilities easy for everyone to use. For details, see the Chapter 5. "Venue Development" (*page 184*).

All venues will be examined for accessibility and audited by the Tokyo 2020 staff and the IPC from the construction stage and during the Olympic Game and to the transition to the Paralympic Game.

Case Study Accessibility of accommodation facilities

Tokyo 2020 established an accommodation plan to secure accommodation facilities for Games staff and related personnel during the Games. In creating the plan, we examined the demand for accessible rooms and carried out a survey of room facilities in accommodations for Games staff. We endeavour to match rooms appropriately to the different accessibility needs of users based on the accommodation plan.

Tokyo 2020 has held orientation sessions for hotels for the Games staff and accommodation providers likely to host visitors during the Games, and given presentations on the Tokyo 2020 Accessibility Guidelines to the participants to promote better accessibility.

Accessibility improvement at accommodation facilities is being led both by the Government of Japan and TMG in the run up to the Tokyo 2020 Games. The national government has revised the government ordinance concerning the proportion of wheelchair accessible rooms in accommodations above a certain size, and the TMG has followed suit by revising its corresponding municipal ordinance. A supplement to the building design standard for hotels and ryokans (traditional Japanese inns) has also been drawn up to take account of mobility considerations for the elderly and people with a physical impairment. Grants are provided to help with accessibility improvements. All these initiatives to improve accessibility in accommodation facilities will create a legacy of the Games.

Freedom of media, expression and assembly

Freedom of media, expression and assembly is a modern human rights issue. International guidelines* define the right of the people to assemble peaceably as a fundamental human right that can be enjoyed and exercised by individuals, groups and organisations, and assemblies may serve many purposes, including the expression of diverse, unpopular or minority opinions. Internationally, the problem of attacks on the civil society and human rights activists in prior to and during mega-sporting events has been highlighted and is

*Guidelines on Freedom of Peaceful Assembly (Organization for Security and Co-operation in Europe, 16 March 2012)
https://www.osce.org/baku/105947

Venice Commission Guidelines on Freedom of Peaceful Assembly (2nd Edition) (European Commission for Democracy Through Law (Venice Commission) together with OSCE Office for Democratic Institutions and Human Rights (OSCE/ODIHR), 4 June 2010)
https://www.coe.int/en/web/youth/-/osce-odihr-venice-commission-guidelines-on-freedom-of-peaceful-assembly-2nd-edition-

attracting attention. It is important that the freedom of media, expression and assembly is respected during the preparation, operation and hosting of mega-sporting events.

We respect the freedom of media, expression and assembly relating to the Tokyo 2020 Games and never tolerate unjust attacks on such freedom. We are aware that not all media coverage of the Games is positive; concerns have been expressed and criticisms have been made. We welcome frank opinions on Tokyo 2020 through public consultation, feedback and reports to our support desks. We listen carefully to diverse views expressed to us as we continue moving forward to achieve our vision and bring a sustainable Games.

Respect for residents' rights

The problem of forced eviction of community residents to make way for the construction of venues and facilities for mega-sporting events has been highlighted internationally.

In Japan, an appropriate process must be followed when public works take place, including informing the affected community and paying compensations where necessary. Rebuilding of the Olympic Stadium required demolition of the nearby Kasumigaoka apartments, an old and run-down publicly operated housing complex, requiring 231 households to move. TMG officials worked carefully through due process to minimise the impact on residents, paying compensation for relocation and providing multiple public housing units, including new public housing very close to the old complex, so that groups of residents could move together where possible. They also listened closely to residents' relocation plans and held individual consultation sessions to offer support.

Securing workers' rights

Workers' rights must be upheld. Issues around the human rights of workers from other countries involved in the construction of mega-sporting event venues in particular are increasingly controversial across the world. The human rights of such workers are also a hot topic in Japan, where labour shortages are a major social issue.

Preparation and hosting of the Tokyo 2020 Games requires the labour and assistance of a great number of people, including Tokyo 2020 staff, employees of contractors, workers involved in the construction and preparation of Games venues, and some 80,000 Games volunteers. We are committed to upholding rights associated with these activities.

Occupational health and safety measures relating to the works on the Tokyo 2020 Games venues are shown in Chapter 5. Venue development (*see page 184*). Also, Tokyo 2020 has set up a grievance mechanism relating to the Sustainable Sourcing Code, and sometimes it receives reports of issues concerning working conditions. See Section 4.6 "Sustainable Sourcing"(*page 167*) for the reports we have received.

Case Study Addressing human rights and labour issues of guest and migrant workers

Tokyo 2020 is working to address human rights and labour issues of guest and migrant workers. For example, the labour standards set forth in the Sustainable Sourcing Code require employment practices and labour management applied to guest and migrant workers (including technical interns) to be in compliance with relevant laws.

We are also working with the ILO to raise the awareness of businesses on these issues. As part of this effort, we have prepared a collection of case studies on socially responsible labour practices, showcasing work done by sponsor companies to assess the working environment of guest and migrant workers and to make improvements. See Section 4.6 "Sustainable Sourcing" (*page 167*) for the case studies prepared with the ILO.

Case Study The airline industry's effort to prevent human trafficking

Human trafficking is said to be the fastest growing criminal trade in the world. With the increasing recruitment of workers from abroad and the expected surge in international visitors from around the globe for the Tokyo 2020 Games, the world's eyes are on Japan. Actions Japan takes against human trafficking are being scrutinised, and it is important that the country as a whole tackles this issue.

Airline services can unwittingly become part of this illegal activity as third parties seek to use them for trafficking. To counter this, airlines, industry bodies and NGOs from around the world are joining forces to take action. In Japan, All Nippon Airways (ANA) and Japan Airlines (JAL), the airline sponsors of the Tokyo 2020 Games, are working together to tackle human trafficking, which they see as one of the key human rights issues within the airline industry.

- ANA provides an annual e-learning programme on business and human rights for all ANA Group employees, and the topic for 2018 was "preventing human trafficking". Also in 2018, ANA held a workshop at Haneda Airport as part of its external cooperation initiative with NGOs and non-profits from the US and Japan as well as the International Organisation for Migration (IOM). The event was also attended by people from other airlines such as JAL as well as governmental agencies. Training was given to all cabin crew members afterwards, and a new procedure was introduced in April 2019 for reporting suspicious cases spotted on board to the Immigration Services Agency. Further collaborations with various stakeholders are also taking place.

  e-learning screen samples:

- JAL has been making ongoing efforts to increase its employees' awareness of human rights and human trafficking through its new staff training and new managers' training programmes. It has also invited a lawyer specialising in business and human rights to teach a workshop for members of the procurement and human resources departments who work to prevent human trafficking and other modern slavery practices. The company plans to provide training on human trafficking for cabin crew and ground staff as part of its effort to prevent the use of aircrafts for trafficking.

Narita International Airport Corporation, an airport services sponsor of the Tokyo 2020 Games, has also pledged commitment to work with the Government of Japan and international agencies to prevent human trafficking. Its initiatives so far include collaboration with the police and international organisations to hold a lecture on the subject; and awareness-raising campaign for airport workers and travellers to help victims of trafficking to report their cases by distributing tissue packs containing leaflets. With the help of airlines and the airport police, the company continues to promote the industry-wide drive against trafficking also at the airport.

It is hoped that the Tokyo 2020 Games, which will attract many visitors from around the world, will become a catalyst for the airline industry's effort to tackle human trafficking not only during the event but also in the future.

Seminar held by Narita International Airport

Awareness-raising campaign at Narita International Airport

Digital signage publicising anti-trafficking campaign at Narita International Airport

Good labour practices

We are committed to making our organisation a pleasant work environment for the Games staff.

(1) Workplace management and workforce diversity

a. Ensuring appropriate workplace management

We hold ongoing management training sessions for all department and section managers to ensure workplaces are managed in compliance with labour laws and regulations.

FY2019 result (Apr. 2019 – end of Jan.2020):

Manager training*: 2 times, 70 per cent participated

* Diversity and inclusion training is provided as part of manager training.

b. Allowing diverse people to flourish

Tokyo 2020 has a diverse workforce; we have placed various measures to make sure everyone can bring their unique qualities and work together to their fullest potential.

International staff as well as people with a physical impairment work at many departments of Tokyo 2020. In 2019, we employed a job trainer to coordinate the optimal placement and job allocation for staff with a physical impairment.

We also make our workplace environment accommodating for our diverse staff. We have installed temporary accessible toilets, and the use of voice recognition software is encouraged to facilitate communication and ensure full access to information. These measures are explained in induction training and on the intranet to raise awareness. Beyond the office environment, we are also examining how best to provide an optimal working environment for the Games staff at various venues during the preparation and hosting of the Games in terms of accessibility and heat-related measures.

(2) Providing for flexible and diverse work styles

We are implementing various measures that help the Tokyo 2020 staff to work flexibly and in diverse ways in order to maintain physical and mental health as well as work-life balance.

We have "no overtime days" an "no overtime weeks" to reduce overtime hours. On the weekly no-overtime day, an email is sent as a reminder. There is also a no-overtime week set by Tokyo 2020 and another set by each office.

In addition, the following schemes are in place to accommodate individual circumstances:

Workplace schemes (type: January 2020 result of users):

- Parental leave: 5
- Family care leave: 0
- Child sick leave: 18
- Exemption from overtime work: 0
- Shortened working hours for childcare: 3
- Introduction of teleworking and commuting by car (April 2019)

We also encourage staff to take more paid annual holidays. We extended the period during

which summer holidays can be taken in the summer of 2019, when many test events were to be held.

With the complex competition scheduling and venue use timings in the run up to and during the Games, it will be necessary to structure shifts flexibly for each sport and role to suit the frontline situation. We plan to introduce flexitime working to facilitate this.

Case Study Smooth Biz and other initiatives

The TMG is running an initiative called Smooth Biz, through which it promotes staggered working hours, teleworking and traffic demand management among businesses and residents in the run up to the Tokyo 2020 Games.

Tokyo 2020 also participated in the initiative during the Smooth Biz promotion period (22 July – 6 September 2019) by encouraging staff to take planned summer holidays and other annual leaves, stagger work hours to avoid rush hours, make use of satellite offices and use public transport.

The aim of the Smooth Biz initiative is to encourage Tokyo residents and businesses to adopt diverse work styles. Our commitment goes beyond the duration of the Games as we endeavour to create a society where everyone can have a fulfilling and rewarding working life as our Olympic legacy beyond.

Case Study Japanese government promoting work-life balance required for the advancement of women

Based on the Act on Promotion of Women's Participation and Advancement in the Workplace (Women's Participation Act, 2015), public procurement by the government and other bodies uses an evaluation system where additional points are granted to companies that are actively promoting better work-life balance (additional point system). In fiscal 2018, the procurement spending under the additional point system was approximately 1,210 billion yen by the government and approximately 670 billion yen by incorporated administrative agencies and other public bodies. Local authorities, for whom the Women's Participation Act sets only an obligation to endeavour, also follow the national initiative.

For more detail, see the Gender Equality Bureau Cabinet Office website:

http://www.gender.go.jp/english_contents/index.html

Case Study Gold award in PRIDE Index 2019

Tokyo 2020's work on diversity and inclusion has been awarded Gold in the PRIDE Index, which assesses organisations' efforts in the inclusion of LGBT people in the workplace.

The PRIDE Index assesses each organisation's policies and initiatives on its "action declaration", "LGBT network", "awareness raising activities", "human resources management policy and programmes" and "social responsibility and external activities". Tokyo 2020 defines "spouse" as a "partner in legal or de facto marriage (regardless of sex)" in its rules of employment and HR schemes such as family care leave to make it easier for staff in diverse family circumstances to benefit. We also actively engage in awareness raising activities in and outside the organisation to promote the understanding of LGBT issues. The Gold rating, an improvement from last year's Silver, recognises our work on diversity and inclusion.

The PRIDE Index 2019, the fourth instalment of the awards, received applications from 194 companies and organisations. The number has been increasing steadily, from 82 applications in 2016 to 110 in 2017 and 153 in 2018, and this year's number represents a 1.3-fold increase from the 2018 figure. The expansion of the LGBT ally* community within Japanese companies and the increase in the number of applications for the PRIDE Index assessment are evidence of the progress made also in companies and organisations on LGBT inclusion.

* A person who does not identify as a sexual minority but takes or has publicly expressed a position of understanding and support for sexual minorities. The term has increasingly been used in reference to other minorities as well, including women, people with an impairment, and foreigners.


表彰状

work with Pride

Gold

公益財団法人東京オリンピック・パラリンピック
競技大会組織委員会　様

PRIDE 指標 2019 においてゴールドを
獲得され日本における LGBT などの
性的マイノリティも自分らしく働ける職場
づくりに多大な貢献をされました
これまでの取り組みに深く敬意を表する
とともにより一層の取り組みの推進を期
待しここにこれを表彰します

2019 年 10 月吉日

wwP PRIDE 指標運営事務局

work with Pride

Gold award in PRIDE Index 2019

Many ally companies participated

Ensuring fair business practices

We are implementing initiatives to ensure fair business practices in the development and operation of the Games. We seek thorough compliance via training to ensure staff do not engage in corrupt or anticompetitive activities in the course of their work. We are also promoting fair business practices throughout its supply chains by raising awareness of the Sustainable Sourcing Code.

The TMG is also promoting sustainable procurement in the Japanese business community in conjunction with its Business Chance Navi 2020 portal, which helps small and medium enterprises across Japan to grow. All of the competitive contracts drawn up by Tokyo 2020 between April and December 2019 used the system of Business Chance Navi 2020 portal.

We will continue working with various sustainability initiatives to ensure fairness in our procurement activities.

Sustainable Sourcing Code

We work with many stakeholders in the supply chain through its procurement activities. It is therefore very important to promote respect for human rights in the supply chain.

We have been engaged in sustainable sourcing that incorporates respect for human rights, based on the Sustainable Sourcing Code. A grievance mechanism relating to the Sustainable Sourcing Code has also been in operation to provide effective remedy.

See Section 4.6 "Sustainable Sourcing" (*see page 167*) for details of the Sustainable Sourcing Code.

Human rights governance and support desk

We have a dedicated point of contact for human rights and labour issues that may arise in the day-to-day preparation work for the Games. These issues include working relationships and harassment, mental health and breach of laws and regulations, and we have separate consultation desks (grievance mechanism) to deal with different issues. Additionally, we provide an external point of contact to ensure transparency and anonymity in the handling of grievances. Information on these services is provided as part of induction training and posted on a Web portal to ensure staff can discuss issues as and when needed. The number of reports on human rights or labour issues by Tokyo 2020 staff tended to increase in 2019. The rapid growth of Tokyo 2020's organisation is significant causal factors. With the size of the Games staff continuing to increase, we are committed to preventing human rights or labour issues including harassment and stress- and heat-related illness, and further enhancing our system to deal with human rights issues appropriately when any incidents occur also during the Games.

Topic of consultation	Desk	
	Within organising committee	Outside
Normal workplace concerns and troubles	✓	✓
Human relations and harassment	✓	✓
Mental health consultation		✓
Legal violations and misconduct	✓	✓

We are consulting experts to consider how best to manage the venues and ensure the safe and smooth operation of the Games so that we can stand up firmly against hate messages, discriminatory behaviours and harassments occurring in competition venues and create a welcoming environment in which everyone can enjoy the experience. As a result, we have so far set up a governance structure for monitoring and dealing with human rights and labour issues during the Games and developed a tool that serves as initial response guidelines.

Where the Tokyo 2020 does not have direct authority (i.e., where incidents occur in other organisations involved in the Tokyo 2020 Games), we aim to implement a system that allows collaboration with other organisations.

We will continue working to resolve human rights and labour issues relating to day-to-day tasks as well as during the Games in order to create a joyful atmosphere for everyone inside the venues.

4.5
Involvement, Cooperation and Communications (Engagement)

United in Partnership & Equality
– Inspiring Inclusive Games for Everyone

4.5 Involvement, Cooperation and Communications (Engagement)

Overview

Tokyo 2020 aims to create an open, inclusive Games by engaging and partnering with a wide spectrum of stakeholders, such as those identified in the SDGs. We are broadly publicising our engagement initiatives as well as those related to sustainability to increase understanding and encourage voluntary actions for sustainability.

Summary of progress

Key area	Status
Promote preparation and operation of the Games through collaboration and engagement of various parties	・Pursuing partnerships with Games sponsors, related local governments and other stakeholders, and is making real progress on its goals, such as the use of recycled plastic and preparations for the reuse of Games-related goods ・Partnered with international organisations such as ILO and the UN to advance concrete initiatives that promote decent work and awareness on contribution to the SDGs
Inclusion of a wide range of people through talent development	・Training our staff and volunteers, and raising public awareness of sustainability ・More efforts needed to ensure sustainability is given consideration at each venue
Facilitating broader involvement with the public through the projects	・Implemented engagement projects such as those for fabricating the Olympic medals and podiums that have attracted numerous participants ・Promoting education for and facilitating engagement with younger generation together with schools and universities
Provide communication to encourage understanding and actions for consideration of sustainability	・Publicising sustainability initiatives for the Games with our stakeholders ・Communication needed for increased awareness and behavioural changes towards sustainability that are effective both during and after the Games in broadly conveying the Games' positive impacts also as a legacy

Collaboration with organisations

Tokyo 2020 is preparing for the Games in collaboration with diverse actors such as the Government of Japan, the Tokyo Metropolitan Government (TMG), sponsors, and other groups.

(1) Sponsors Sustainability Network

We organised the Sponsors Sustainability Network in June 2017 as a forum for sponsors to

collaborate and exchange ideas on sustainability. As of January 2020, 51 companies are involved and advancing sustainability initiatives for the Tokyo 2020 Games. While getting concrete contributions to the Games' sustainability from sponsors has been a challenge for Tokyo 2020, the network has facilitated the following opportunities for involvement.

[Key actions of the Sponsors Sustainability Network]

- Sponsors Sustainability Network conferences (5 times)
- Participation in Tokyo 2020 Trash Picking Competition (3 times)
- Posting sustainability efforts of network participants on Tokyo 2020 website (Total 39 companies)
- Involvement in the Sustainability Forum in cooperation with the ILO (3 times)
- Call for participation in project to upcycle decorations under Look of the Games programme

Sponsors Sustainability Network's growing membership

Date	Participating businesses
5 June 2017 (founded)	37 (of 58)
1 April 2018	45 (of 63)
1 April 2019	48 (of 76)
1 January 2020	51 (of 82)

(2) International organisations

Tokyo 2020 is working with international organisations such as the UN to help solve universal sustainability challenges.

In July 2018, we joined the UN Global Compact*. As a member of Global Compact Network Japan (GCNJ), we also actively participate in working group activities and learning forums to build our knowledge on the SDGs and human rights education.

As we continue to support the Ten Principles of the UN Global Compact, by summer of 2020 we plan to submit a Communication on Engagement (COE), a periodic reporting requirement, to the UN Global Compact headquarters.

In November 2018, we signed a Letter of Intent with the UN aimed at supporting achievement of the SDGs through the Tokyo 2020 Games. Both parties have agreed to commit their respective resources to increasing public knowledge of the link between sports and the SDGs and raising awareness of the specific contribution of the Games to the SDGs.

* A voluntary initiative in which participating companies and organisations commit at the highest levels of leadership to building a global framework for sustainable growth through responsible, creative action. Members align their operations to 10 principles in 4 areas: human rights, labour, environment, and anti-corruption

At the UN International Sport Day for Development and Peace special event

Case Study International Day of Sport for Development and Peace

The UN has declared 6 April, when the first modern Olympic Games were held in 1896, as the International Day of Sport for Development and Peace (IDSDP). On 3 April 2019, IDSDP was celebrated at the UN Headquarters in New York. At this special event, Tokyo 2020 delivered a video message on sustainability in Tokyo 2020 Games and their contribution to the SDGs.

In Japan, we also participated in commemorative actions hosted by the UN Information Centre. Tokyo 2020 joined the Sports for Climate Action Framework* in December 2018, and at this event we presented our contributions to climate action through sport.

* A framework announced at the 24th Conference of the Parties to the UN Framework Convention on Climate Change (COP24) in December 2018 that, together with the IOC and other sports organisations, advocates the significance of climate change to sports and collective climate action. Tokyo 2020 joined the framework at the time of its founding.

Through this partnership, we plan to engage with the UN on mutual support for implementing the SDGs.

Tokyo 2020 has also signed a Memorandum of Understanding (MoU) with the ILO to promote decent work in preparations for and operation of the Tokyo 2020 Games. Together we have hosted a Sustainability Forum and disseminated examples of socially responsible labour practices. (See Section 4.6 "Sustainable Sourcing" (*page 176*))

(3) Other entities

Tokyo 2020 is also engaging and collaborating with businesses, universities and other parties in our preparations for the Games.

Case Study Upcycling of Look of the Games decorations

Tokyo 2020, in partnership with TMG, plans to upcycle* some of the decorations fabricated for the Games by reprocessing them into shopping bags and other products.

* A method of reusing materials that goes beyond recycling by transforming them into products of higher quality or value

Project overview

Look of the Games decorations

Processed for reuse

Upcycled products (example)

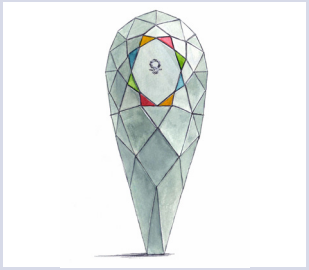
Case Study Team *Mottainai* and "sorting navigators"

On 1 August 2018, TMG launched Team *Mottainai* (the concept of avoiding waste) to raise conservation awareness and change consumption patterns. The team, joined by businesses, NGOs, and members of the public, is working to cut food loss and waste, reduce use of single-use plastic shopping bags, and save energy. It will also post "sorting navigators" at venues of the Tokyo 2020 Games. Sorting navigators will raise awareness by encouraging spectators to sort resources and waste. (See Section 4.2 "Resource Management" (*page 84*) for more information.)

Case Study Tokyo 2020 Recovery Monuments

Tokyo 2020 Recovery Monuments are a project aimed at facilitating communication between Olympic and Paralympic athletes and communities devastated by the 2011 Tohoku earthquake and tsunami. Monuments bearing messages of appreciation and encouragement from Tohoku communities will be installed at Games-related facilities during the Games. After the Games, monuments bearing the athletes' signatures will be installed in affected communities.

Students of the Tokyo University of the Arts and junior and senior high school students in Tohoku collaborated in designing the monuments and writing messages. The monuments will be made from recycled aluminium provided by Games partner LIXIL. The aluminium was previously used in windows and other parts of temporary housing in the three affected prefectures. Three monuments will be constructed, one for each prefecture: Iwate, Miyagi, and Fukushima.



Design illustration for Iwate and Miyagi prefectures

Design illustration for Fukushima prefecture

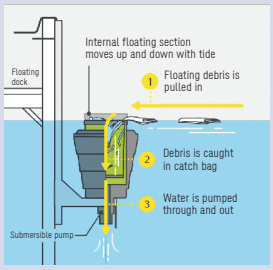
Case Study　Collecting marine plastics with Seabins at Enoshima

Kanagawa has announced a "No Plastic Waste Declaration" in support of achieving the SDGs. As part of this initiative, it's tackling the global problem of marine microplastics. In May 2019, the prefecture installed two Seabins, marine plastic waste collectors, at Enoshima Yacht Harbour (Port of Shonan), the venue for Olympic Sailing, marking the first installation in Japan. The installation was in response to a call from World Sailing, which is active in the area of sustainability.

Each Seabin measures roughly 50 cm in diameter and is installed on the ocean's surface. Its pump generates a current, sucking up microplastics and other waste into its internal net.

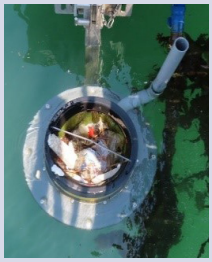
Tokyo 2020 is partnering with World Sailing and Kanagawa Prefecture to promote sustainability and help solve marine pollution through the Tokyo 2020 Games.

Kanagawa No Plastic Waste Declaration



Mechanism for capturing waste


An installed Seabin


A Seabin in operation

Engagement through training and education

We are providing sustainability training and education to our staff and to volunteers directly involved in preparation for and operation of the Games. Through schools and other public learning spaces, we are also promoting an understanding of sustainability and involvement in sustainability initiatives for the Games.

(1) Sustainability training for staff and volunteers

Because Tokyo 2020's organisation is growing, we educate all new staff members on the importance of sustainability in the Tokyo 2020 Games in their induction training. We also carry out e-learning for all enrolled staff to encourage a deeper understanding and continued efforts towards sustainability for the Games. We also share information across the organisation through briefings with Sustainability (SUS) administrators and coordinators appointed in the respective functional areas.

Training sessions for all Games volunteers (group and e-learning) encourage actions for realising a sustainable Games by explaining sustainability concepts and presenting actions everyone can implement.

Going forward, we plan to educate staff at each venue to ensure sustainability goals are pursued during the Games.

[Key Training (Apr. 2018 to Jan. 2020)]

- Induction training: 22 times, 90% participated
- e-learning: 87% attended (for those who attended by May 2019)
  *Continuing to implement e-learning
- Briefings for Sustainability (SUS) administrators and coordinators: 5 times

(2) Seminars and symposiums on sustainability

Tokyo 2020 is promoting collaboration and actions on sustainability through seminars and symposiums in Japan and abroad that are open to the general public.

[Key Events (fiscal 2019)]

SDG Global Festival of Action 2019

- SDG Global Festival of Action 2019

  At this event held in May 2019, we presented contributions being made to the SDGs through initiatives such as the Tokyo 2020 Medal Project and the Tokyo 2020 Accessibility Guidelines. The event, organised by the UN Development Programme (UNDP) and first held in Bonn, Germany, in 2017, brings together governments, international organisations, the private sector, social entrepreneurs and other stakeholders to discuss ways to achieve the SDGs and the 2030 Agenda for Sustainable Development.

G20YEA Fukuoka Japan 2019

- G20 Young Entrepreneurs' Alliance (YEA) 2019 Summit in Fukuoka, Japan

  Held in Fukuoka in May 2019 on the theme "Imagination Economy—For a Sustainable Future", this event saw proposals of social business models that will contribute to the SDGs on a global level. Tokyo 2020 participated as a juror and spoke on its hopes that the Tokyo 2020 Games and their contributions to the SDGs will help catalyse the spread of global social enterprises. The G20 YEA is a network of organisations that support young entrepreneurs in the world's 20 leading economies. It holds dialogues and engages G20 governments through advocacy.

(3) Olympic and Paralympic education in schools by the Tokyo Metropolitan Board of Education

The Tokyo Metropolitan Board of Education (Tokyo BOE) is carrying out the following initiatives as part of a broader Olympic and Paralympic education programme aimed at boosting education for sustainable development in Tokyo public schools.

School Action *Mottainai* Plan

An environmental programme offered at all public schools in Tokyo aimed at deepening students' understanding of the environment and the 3Rs (reduce, reuse, recycle). Children set specific action targets and work with their families and communities to implement them on a continual basis.

Examples of initiatives

- Students organised their own campaigns to reduce leftover food from lunches during a set reduction period; classes that eliminated leftover food were awarded
- Set 3R targets for each class, such as sorting waste and reducing paper use, based on discussions held by student groups and classes

Inclusion of people with impairments

Tokyo BOE organised a Para Sports Exchange to raise awareness of Para sports and enable interaction between students of special schools and other primary and secondary schools in the city. Sitting volleyball and boccia matches at the event sparked an ongoing exchange between the students, including writing each other letters and participating in boccia practices.

Tokyo BOE has designated schools to support Paralympic sports (20 and 50 schools in the 2018 and 2019 academic years, respectively), to promote Para sports and inclusion of people with impairments. The schools offer opportunities for students to socialise with athletes and experience and watch Para sports.

Children w/wo impairments playing boccia together

As a new initiative in fiscal 2019, Tokyo BOE designated boards of education of certain cities to promote community-level exchange through boccia. The programme is aimed at promoting understanding of children with impairments and realising a society of inclusion and collective support.

Interactions with athletes and students of special schools through Para sports are making a real difference in children's understanding. Some have commented, "I realised that Para sports aren't any special kind of sport; anyone can do them," and "I learned the importance of mutual connection, of treating people with consideration and kindness, regardless of impairments."

Nationwide engagement projects

Tokyo 2020 is working to deepen understanding of sustainability in and outside Japan and embed voluntary activities to create a sustainable society, by providing opportunities for many people to participate and share experiences.

(1) Tokyo 2020 Medal Project: Towards an Innovative Future for All

Tokyo 2020 Olympic Games (top) and Paralympic Games (bottom) medals manufactured through the Tokyo 2020 Medal Project

The Tokyo 2020 Medal Project is a nationwide initiative to manufacture the medals awarded to athletes in the Tokyo 2020 Games through urban mining.

This project aims to manufacture some 5,000 medals for the Olympic and Paralympic Games from recycled metals extracted from used mobile phones and other consumer electronics. NTT DOCOMO, the Japan Environmental Sanitation Centre, the Japan Ministry of the Environment and TMG are participating organisations.

Metals were collected from April 2017 to March 2019 at more than 18,000 locations including participating organisations, Games partners, government ministries, and municipal offices, post offices, chambers of commerce and other locations across Japan.

Thanks to broad public participation, the project succeeded in obtaining the amount of metals needed to produce the medals, as shown below.

Final amount of metals collected

Gold	Approx. 32kg
Silver	Approx. 3,500kg
Bronze	Approx. 2,200kg

Amounts collected (From Apr. 2017 to Mar. 2019)

Collection by local governments (Mobile phones and other consumer electronics *1)	Approx. 78,985 tonnes
Collection by NTT DOCOMO shops (Mobile phones*2)	Approx. 6.21 million units

*1 Collected across Japan through certified consumer electronics recycling businesses
*2 Collected across Japan at some 2,300 shops

Key contributions to collection

Participating local governments (more than 90 per cent of municipalities across Japan)	1,621 municipalities
Support from Games partners	38 companies
Support from the national government (installed collection box in relay style at central ministries and agencies)	12 buildings
Support from TMG (permanently installed collection boxes at government offices, major public subway stations, and public cultural and fitness facilities)	35 locations
Support from educational institutions (installed collection boxes at primary schools across Japan and educational institutions in host town governments; held educational programmes through the project)	Approx. 1,300 locations

In July 2019, Tokyo 2020 announced the final collection results (shown above) and on 24 July and 25 August 2019, announced the medal designs. During the announcements, we reiterated the significance and success of the project to further mainstream electronics recycling and urban mining as a legacy of the Tokyo 2020 Games.

Another legacy is the After Medals Project, launched in April 2019 by the Japan Ministry of the Environment in partnership with local governments and certified consumer electronics recycling businesses. The project will promote urban mining and the creation of a circular economy by supporting local governments that collect consumer electronics and by holding promotional and collection events.

Mobile phone and smartphone collection boxes are being installed at participating municipal offices, educational institutions, and other locations. Donations tied to the number of collected devices are funding sports activities for people with intellectual impairments, while the sorting and disassembly work is also creating jobs for people with intellectual impairments. Continuing momentum of collecting small consumer electronics begun with the Tokyo 2020 Games is thus contributing to support for people with impairments.


Empty container collection box

(2) Recycled Plastic Podium Project

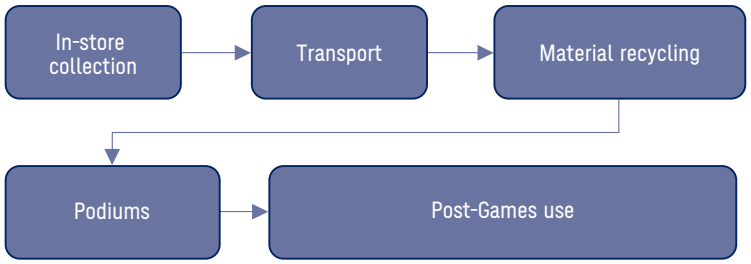
Tokyo 2020 is conducting the Recycled Plastic Podium Project, an initiative to manufacture the medal podiums used in the Tokyo 2020 Games from post-consumer plastic collected in Japan along with smaller amounts of marine plastic waste. The project is implemented in collaboration with P&G, our global partner.

This will be the first time in the history of the Olympic and Paralympic Games that the medal podiums are to be made from plastic waste collected by the public.

From June 2019 to February 2020, empty plastic containers generated as consumer and household waste have been collected at retails stores and schools across the country. We are also discussing how to utilise the podium after the Games.


Podium Project joint press conference (13 Jun. 2019)

Workflow for container collection, podium fabrication and post-Games use



With the disposal of plastic waste and marine plastic pollution becoming major issues, carrying out this project presents a new model to global stakeholders for using post-consumer plastic and creating a sustainable society that makes the most of available resources.

Case Study College students participate in Recycled Plastic Podium Project

Students of Jissen Women's University, one of our partner universities, have been helping to implement the Recycled Plastic Podium Project by setting up collection boxes and calling on their fellow students to collect post-consumer plastic containers. At an event in December 2019, they announced their collection results from a roughly two-month period (approximately 25 kilograms, which is equivalent to approximately 400 detergent bottles and 1,800 refill packs) and marked their donation to Tokyo 2020 with a ceremony. Participating students stated, "We're pleased that the containers we collected will become medal podiums. The Games, being a major event, will teach more people that used plastic containers can be recycled."

The project thus served as an opportunity for the students to confront and take personal action on the problem of single-use plastic.


Collection box set up by students


Donating the collected containers to Tokyo 2020

(3) Operation BATON: Building Athletes' village with Timber Of the Nation

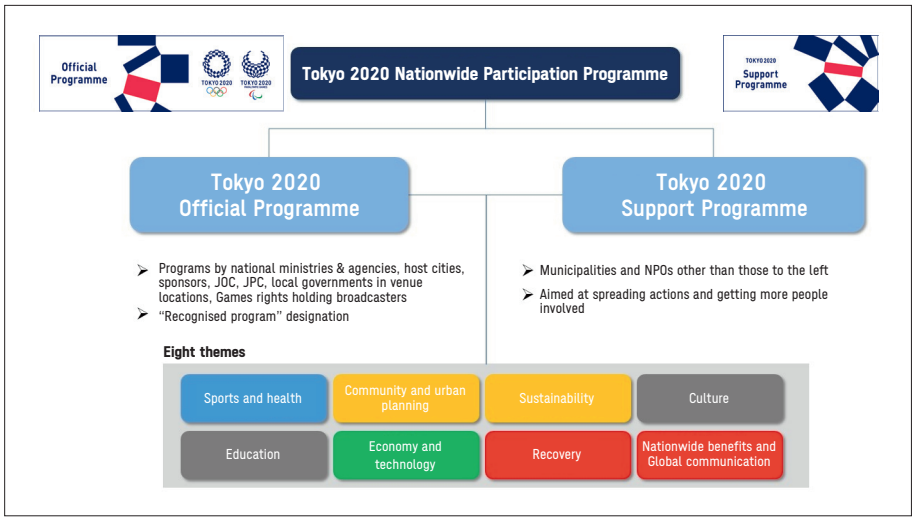
Operation BATON is a project to construct the Olympic/Paralympic Village Plaza using Japanese timber loaned free of charge from 63 local authorities across Japan. After dismantling, the timber will be returned and used in local public facilities as a post-Games legacy.

The plaza will be a centrepiece of Olympic/Paralympic Village, a venue for the welcoming ceremony, equipped with stores, cafes, and a media centre. The goal of using timber from forests across Japan is to express diversity and harmony throughout the site while also reducing environmental impacts. See Chapter 5. "Venue Development" (*page 205*) for more information.

(4) Tokyo 2020 Nationwide Participation Programme

Tokyo 2020 aspires to deliver an Olympic and Paralympic Games that, through widespread public participation, is recognised as having sparked transformation in all areas of society.

The Tokyo 2020 Nationwide Participation Programme promotes voluntary involvement in the Tokyo 2020 Games by as many people as possible. On a dedicated online platform, organisations can register events and projects (actions) that build momentum for the Games or build post-Games legacy. Actions are categorised into eight themes, one of which is sustainability.



Overview of the Tokyo 2020 Nationwide Participation Programme

As of 31 January 2020, roughly 98.76 million people have participated in 143,000 registered actions. Of these, some 22,000 actions were approved under the sustainability theme. These actions, held nationwide and spanning numerous fields, include the above-mentioned Tokyo 2020 Medal Project, as well as: educating local stakeholders on Good Agricultural Practice (GAP) certification through use of certified ingredients in cafeterias, promoting the use of sports for advancing the SDGs and holding an event to communicate the importance of selecting environmentally conscious products.

Tokyo 2020 Nationwide Participation Programme (as of January 2020)

Number of party registrations	2,352
Number of action registrations	Approx. 143,000 (including sustainability-related, approx. 22,050)

Case Study Host Town Initiative

Japan's Cabinet Secretariat is advancing a Host Town Initiative to take full advantage of the opportunities presented by athletes, spectators and other stakeholders' visiting Japan for the Games. The initiative aims to revitalise communities across Japan through exchange in sports, culture, business, and other fields. As of 31 October 2019, 464 municipalities and 156 countries and regions are registered as host towns and already engaged in exchange.

One such exchange is between Wadomari and China, towns on the southern Japanese island of Okinoerabu (registered in February 2019) , and the Dominican Republic and Grenada, respectively. A delegation including athletes from both countries visited the island in August 2019. In addition to a children's cultural exchange involving sports and music, the two towns and countries also held an Island Meeting on Environment and Lifestyle.

Surrounded by ocean and confronted by a shared set of issues including climate change and waste, Okinoerabu and the two island nations exchanged case studies and ideas on solutions to their unique challenges as remote islands. Participants included academic experts, residents, and students tackling environmental issues on Okinoerabu in their own ways. Families presented a study of the source of marine waste that washes ashore on Okinoerabu, identified by reading product labels, and students presented their efforts to pick up litter along school routes. Representatives of the two countries presented national public policies aimed at reducing plastic waste, including mainstreaming paper shopping bags and prohibiting single-use plastic at restaurants and bars. The exchange of ideas on shared environmental issues was an opportunity for participants to consider such issues on a global scale.

Island Meeting on Environment and Lifestyle

The Tokyo 2020 mascots visit a school

(5) Tokyo 2020 Education Programme "*Yoi Don!*"

Tokyo 2020 is promoting the "*Yoi Don!*" (Get Set!) Tokyo 2020 Education Programme in which children, who represent our future, learn about the value of the Olympic and Paralympic Games and experience the power of sports for future self-growth. Through this programme, we are cultivating three legacies for children: self-belief and courage, an understanding of diversity, and voluntary and active social participation.

In this programme, schools administering Olympic and Paralympic education are certified as


An open lesson on the Olympic Games and peace

Tokyo 2020 Olympic and Paralympic education schools (or *Yoi Don!* Schools).

We are also distributing teaching materials and lesson plans to promote Olympic and Paralympic education in elementary, junior, senior high and special needs schools nationwide. One such offering is the Japanese version of "I'mPOSSIBLE", a pack recognised by the International Paralympic Committee (IPC) which uses the Paralympics as subject matter for teaching about inclusion (The Japanese version was developed based on the international version by the Japanese Para-Sports Association's Japanese Paralympic Committee and the Nippon Foundation Paralympic Support Center). Another is lesson plans based on the "Sustainable development through the Olympic Games" unit of IOC's Olympic Values Education Programme (OVEP). The plans cover specific sustainability initiatives such as the Tokyo 2020 Medal Project and are designed for elementary and junior and senior high school classrooms.

Another initiative in this programme was the promotion of interaction between the Tokyo 2020 mascots and children. This included selecting the mascots based on votes from elementary schools across Japan, and having the mascots visit schools. We also invited athletes to visit *Yoi Don!* schools by conducting flag tours. Since fiscal 2019, we've been promoting the Olympic Games as a "festival of peace" and raising awareness of efforts in the Tokyo 2020 Games for promoting Tohoku's reconstruction. This includes holding the Tokyo 2020 High School Student English Speech Contest and promoting education on the Olympic Games torch relay.

Key performance figures in "*Yoi Don!*" programme (as of February 2020)

Activity	Number of schools
Certified as *Yoi Don!* school	18,592
Elementary schools participating in Tokyo 2020 Mascot vote	16,769
Hosts of flag tour school visits	118 in 44 prefectures
Recipients of I'mPOSSIBLE pack	Approx. 36,000
Recipients of teaching materials / lesson plans*	Approx. total 44,000

*1 Not including I'mPOSSIBLE

*2 Includes website downloads

Case Study　Sustainability open lessons "Tokyo 2020 Medal Project"

With support from Tokyo 2020, Japan Ministry of the Environment held open lessons at elementary schools in Omuta, Fukuoka, and Niihama, Ehime, to deepen students' understanding of electronics recycling and promote a sustainable society. In the classes, which used the Tokyo 2020 Medal Project as subject matter, ministry staff explained how valuable metals such as gold, silver, copper and steel can be extracted from consumer electronics such as recycled PCs and mobile phones. With guest appearances from the Tokyo 2020 Olympic and Paralympic Games mascots as well as Olympic and Paralympic athletes, they explained the value of Olympic and Paralympic medals and encouraged the students to participate in the Medal Project.

Scenes from the open lessons (© Japan Ministry of the Environment)

Case Study　Paralympic education with "I'mPOSSIBLE" resources

The Japanese "I'mPOSSIBLE" curriculum is a two-part package (classroom and practical learning) that has everything educators need to teach a class, even without the participation of others associated with the Paralympic Game or someone with an impairment. The I'mPOSSIBLE Japan Office has distributed the resources to some 36,000 elementary, junior and senior high and special needs schools across Japan, offer training workshops for educators and are promoting Paralympic education through their website (https://www.parasapo.tokyo/iampossible/ in Japanese), which shows examples of how to use the resource in schools.

Left: "I'mPOSSIBLE" teaching resources (© "I'mPOSSIBLE" Japan Office)
Right: A training workshop (practical) for educators held in Aug. 2019 in Urayasu, Chiba

(6) University collaboration

Tokyo 2020 is responding to the IOC recommendation in the Olympic Agenda 2020 which describes the Olympism spirit and states "Engage with youth". The number of students participating in Games-related activities is growing and should contribute to the Games' success. In June 2014, we started making partnership agreements with universities and

junior colleges across Japan, and as of January 2020, 810 schools have signed the agreement.

In addition to communications and publicity directed at partner universities and their students, we have organised a visiting lecture programme, hold momentum-building events and provide support for voluntary initiatives by partner universities.

In the visiting lecture programme, lecturers speak on the Olympic and Paralympic Games and on sustainability, giving students the opportunity to study and think about this topic. At momentum-building events, Recycled Plastic Podium Project collection boxes were set up and students were invited to participate.

Visiting lecture programme key performance figures (as of end of January 2020)

Lectures	159 (including 5 on sustainability)
Participants	Approx. 19,000 (including approx. 700 on sustainability)

Case Study Tokyo 2020 Athlete Support Programme

The Tokyo 2020 Athlete Support Programme aims to assist the families and friends of competing athlete's during their stay in Japan while giving them opportunities to interact with Japanese university students. Students of participating partner universities will meet families and friends at the airport, escort them to Games venues, and offer transport and sightseeing guidance, among other support, all while engaging in international exchange. The programme is expected to foster in students an international perspective and deeper understanding of diversity.

Case Study　Voluntary actions by partner universities

Partner universities are taking actions that leverage their strengths and specialisations. They've given lectures and courses on the Olympic and Paralympic Games and the Tokyo 2020 Games, held sporting events and Games immersions for local communities, and hosted pre-Games camps for national teams.

Examples of sustainability initiatives

Example	Description
Trash Picking Competition	Students formed teams with local residents and competed on the quantity and quality of litter picked up within a specified timeframe and area.
Volunteer waterfront cleanup	Cleaned up a waterfront where litter is difficult to clear. Used the event to study Tokyo's waterways and raise awareness of city beautification for the Games.
Community service via accessibility information app	Student volunteers gathered accessibility information from facilities around the university and entered it into a smartphone app.
Visually impaired marathon immersion	Participants took part in a visually impaired marathon and learned what the sport is like through the experience of being a visually impaired runner or escort runner.

(7) Encouraging public contributions to decarbonisation

Activities of CO_2 reduction by citizens at the Tokyo 2020 Games

We are using the opportunity presented by the Tokyo 2020 Games to promote efforts by Japanese citizen society organisations and local governments to reduce carbon dioxide emissions, bringing Japan closer to a decarbonised society.

By widely publicising organisational initiatives and their CO_2 reduction, we aim to build awareness on climate change, encourage more people and organisations to join and continue the effort for the future.

The initiative forms part of the Tokyo 2020 Nationwide Participation Programme.

See Section 4.1 "Climate Change" (*page 67*) for amounts reduced and sequestered.

Number of project applications and participants: 7 projects (108,875 participants*) (as of 31 January 2020)

* For the number of the participants, numbers of households, schools and other organisations are calculated as those of one person. When a project is continuing for more than a year, the above figures indicate the total number of the participants in the period. For the initiative in Yokohama City, the number is as of the end of December 2019.

Promoting initiatives to citizens at an event (Yokohama City)

Green Curtain Project (Shinjuku City)

Case Study Examples of carbon reduction initiatives by public stakeholders

Action	Description
Go Ecology with the Tokyo 2020 Games in City of Yokohama!	Yokohama City is calling on citizens and businesses to implement energy conservation and other carbon reduction efforts in preparation for a climate-friendly Tokyo 2020 Games and other major international sporting events.
Kumamoto BDF	Kumamoto Prefecture's program is cutting carbon emissions by partnering with local residents to collect used cooking oil (*tempura* oil) and use it as a local energy source (BDF: biodiesel fuel).
Shinjuku Green Curtain Project	Shinjuku City in Tokyo is promoting carbon reduction by encouraging city residents and city-operated facilities to make "green curtains" from climbing plants such as bitter melon and morning glory, in an effort to tackle climate change and the heat island effect.
Challenge energy saving in Kodaira	Since fiscal 2005, Kodaira City has been operating its own environmental household accounting book in partnership with local civic groups. Every year from July to December, it promotes energy conservation by setting an annual reduction target for carbon dioxide emissions from electricity and gas use.
Kodaira Eco-Challenge Tree	Working with civic groups and universities, Kodaira City organises visiting lectures on global warming at local elementary schools. Part of this program is the Eco-Tree Challenge, in which the children choose eight resource-saving actions and colour a leaf of their tree every day that they take action during a month period.
The Energy Conservation Challenge	Through this program, Hachioji City promotes household conservation efforts in an aim to raise awareness of ways everyone can save energy. Check sheets guide households in reducing their electricity and gas use.
Stop Climate Change! Join us for eco-lifestyles	Run by Nerima City, participants in this programme choose one day in October to designate as their "eco-lifestyle day". Using a checklist of 12 environmentally conscious actions, they spend this day conscious of their environmental impact. Comparing their behaviour on normal days compared to their eco-lifestyle day, participants can see just how much they can reduce their personal CO_2 emissions.

Flyers distributed at hotel briefings for people involved in the Games

(8) Requesting actions on sustainability

Tokyo 2020 aims to scale up actions on sustainability issues such as the environment and human rights by urging everyone affiliated with the Tokyo 2020 Games.

Examples of requested actions on sustainability

- Olympic and Paralympic families:
  Sort waste at Games venues
- National Olympic and Paralympic Committees, athletes and team officials:
  Sort waste in Olympic/Paralympic Village and at Games venues
- Shippers of Games-related goods
  Employ start-stop systems, minimise containers and packaging, ensure occupational health and safety
- Owners of existing venues:
  Procure electric power with high percentage of renewables and low carbon emissions conversion factor
- Hotels for Games affiliates:
  Conserve energy in lighting, HVAC, etc.; reuse and recycle goods; use eco-friendly vehicles
- Operators of Tokyo 2020 Lives Sites, Community Live Sites and public viewings:
  CO_2 emission reduction and avoidance; reuse and recycle procured goods; reduce, reuse and recycle waste

Communication for sustainable actions

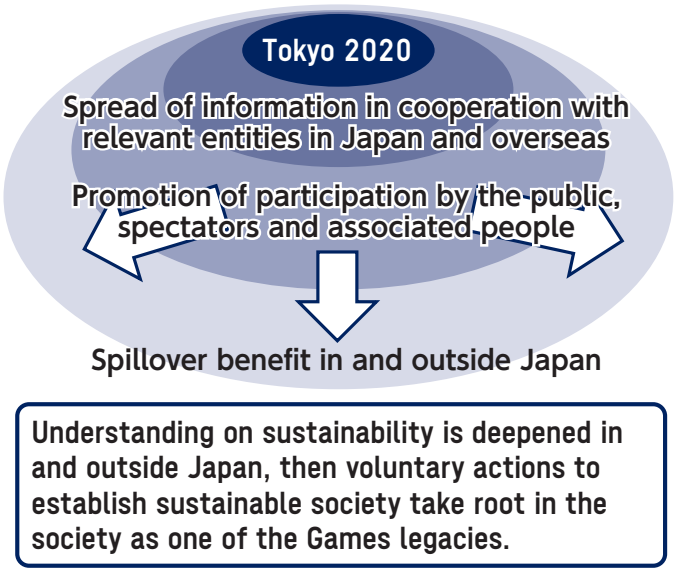
(1) Basic approach to communication on sustainability

By widely publicising sustainability through the Olympic and Paralympic Games, one of the world's largest sporting events, we hope many more people will recognise its importance. The challenge is to make the broad concept of sustainability personally applicable. We aim to do this through clear messages and practical examples set by the Games.

The following outlines our basic approach to engaging stakeholders on sustainability for the Tokyo 2020 Games. Our goal in these efforts is to educate and inspire many stakeholders worldwide to take lasting voluntary actions on sustainability as a legacy of the Games.

- We aim to inspire people of all levels of awareness regarding sustainability. We will do this by implementing pioneering initiatives related to the Games' main sustainability themes and encapsulated by the Games sustainability concept: "Be better, together — For the planet and the people". We will communicate these initiatives in ways that are easy to understand.
- We will not act alone but collaborate with a diverse range of actors, such as Games stakeholders, to effectively convey this message.
- We will promote the participation and sharing of experiences among as many people as possible via nationwide participation projects such as the Tokyo 2020 Medal Project. We will encourage people to take voluntary actions that will help create a more sustainable society.

Basic approach to communication



Understanding on sustainability is deepened in and outside Japan, then voluntary actions to establish sustainable society take root in the society as one of the Games legacies.


BE BETTER, TOGETHER
OLYMPIC AND PARALYMPIC GAMES TOKYO 2020

We now have less than 400 days left until the opening of Tokyo 2020. We are proceeding with preparations to ensure an exciting Olympic and Paralympic Games that prioritises sustainability.
The Organising Committee launched the concept of "Be better, together – For the planet and the people" to demonstrate its commitment to sustainability, and some initiatives include manufacturing the medals from recycled metals and working to ensure that the Games will be free from all forms of discrimination and harassment.
We are committed to raising awareness of the Sustainable Development Goals and actively communicate our contribution to the Goals.
Sport has the power to change the world and our future. We will keep working with all those involved in the Games to ensure that Tokyo 2020 will mark an important step in realising a sustainable society.

Games sustainability concept posted at the G20 Summit (June 2019)

Sustainability concept posted on the 2nd floor of TMG main building No.1

(2) Publicising the sustainability concept of the Games

In June 2018, we announced the sustainability concept of the Games "Be better, together — For the planet and the people" as set out in the Sustainability Plan (Version 2). This concept expresses our commitment to contributing to the SDGs by preparing for and operating the Games in ways that are considerate of sustainability based on long-term thinking and in partnership with diverse stakeholders.

We are working to mainstream the concept by including it in announcements of our various sustainability projects and posting at international forums and sustainability events.

TMG, meanwhile, has posted it on its website, includes it in public newsletters, and posts and distributes it in government buildings and at various events.

We will continue to use various media to ensure the Games' sustainability concept is delivered to a wide audience.

The Sustainability Concept of the Tokyo 2020 Games

Be better, together

For the planet and the people

(3) Publicity through collaboration

Our delivery partners serve a vital role in preparing for and delivering the Games. It is important that this partnership include implementing sustainability initiatives and communicating a unified sustainability message for the Games.

Partners who have joined us in conveying the sustainability message thus far include

international organisations such as the UN, local governments that have announced support for the Games' carbon offset programme, and Games partners with whom we are implementing sustainability projects.

Additionally, members of the Urban Planning and Sustainability Commission, which from an early stage provided expert advice on sustainability policy formulation and planning for the Tokyo 2020 Games, have promoted sustainability through various media during the deliberation and implementation process.

We will continue to work with stakeholders to effectively publicise sustainability of the Games.

Major communications issued with Games sponsors

- Recycled Plastic Podium Project announcement
- Tokyo 2020 Recovery Monuments project announcement
- Announcement of Games staff and city volunteer uniforms

Case Study 2020→30xSDGs Seminar: University students contemplate Games' legacy

On 10 February 2019, Tokyo 2020 joined the Asahi Shimbun Company, Dai Nippon Printing and Tokio Marine & Nichido Fire Insurance in hosting a workshop-style seminar for university students. The event focused on how tangible and intangible legacy of the Tokyo 2020 Games will be shared and contribute to a more sustainable society from an SDGs standpoint.

After a talk session by Games officials on sustainability and the SDGs in the Tokyo 2020 Games, students discussed efforts to achieve the SDGs by the 2030 target year, looking at three themes: diversity and urban planning, climate change, and universal design.

Tokyo 2020 Sports Director Koji Murofushi's comments during talk session

The world right now is in crisis over the impacts of plastic on our oceans. You can't play sports in a polluted environment. Some professional surfers pick up rubbish every time they go to the beach to compete or practice. Maybe the most important thing in sports is what happens behind the scenes.

What we need to achieve the SDGs is a change in every person's awareness. The type of thinking that says I can litter and it won't cause problems on a global level is having the consequence of causing global problems. It's critical that we think globally and act locally.

(4) Publicity by athletes

Athletes are an important partner for increasing public understanding of sustainability through sports. When athletes stress the importance of sustainability in sports based on their personal experience, more people get the message.

Tokyo 2020 is enlisting the support of many athletes in communicating sustainability in

various projects and events, including the Tokyo 2020 Medal Project (*see page 151*) and Tokyo 2020 Trash Picking Competition (*see page 165*).

Case Study Athletes and sustainability

At the Podium Project joint press conference held in June 2019, professional athletes spoke on the connections between sport and sustainability and ways they're trying to be more environmentally friendly.

UEKUSA Ayumi (Karate), Japan Airlines

The karate Japan team makes a habit of picking up litter at venues and keeping our space neat and organised, which has motivated athletes from other countries to do the same. Drinking water regularly is important for athletes, so I'd like to make a point of using a water bottle.

I think recycling plastic products to make podiums for the Games is a great idea. My goal is to win the gold and stand the highest on that podium made of recycled plastic, to bring more excitement to Japan and the karate sport and help the Japan team have a successful Tokyo 2020 Games.

UEKUSA Ayumi (left) and HATA Yukako (right) speaking on sustainability

HATA Yukako (Para Triathlon), Canon Marketing Japan, Mars Flag, Inage International Triathlon Club

Nature is our venue for triathlons, so I have an interest in environmental issues. From early on, I've done what I could, like carrying around my own tea or water from home, or not using plastic wrap when putting away food.

Right now I want to focus on prioritising the future. For me, this means thinking about whether the products I buy are truly eco-friendly or made by companies that care about the environment.

Sports and environmental issues are closely connected. Like sustainability, I'm approaching sports as something we couldn't live without. I'll do my best to make it to the podium in 2020.

This section contains statements that assume that the Tokyo 2020 Games will be held in 2020.

(5) Publicity through events

Tokyo 2020 is raising the profile of sustainability for the Tokyo 2020 Games by continually publicising sustainability initiatives and highlighting their importance through a range of business and environmental events.


Exhibition booth at the 2019 G20 Osaka Summit

Panel and mock-up exhibition of the Olympic /Paralympic Village Plaza

Case Study Promoting the Tokyo 2020 Games at 2019 G20 Osaka Summit

At the international media centre of the G20 Osaka Summit held from 27 to 29 June 2019, Tokyo 2020 exhibited a PR booth introducing the Tokyo 2020 Games along with our sustainability and other initiatives.

To many journalists who visited our booth with an interest in resource recycling and the marine plastic waste issue, we promoted the Medal Project, Operation BATON, the Podium Project, and the Tokyo 2020 Olympic and Paralympic relay torch.

Case Study Tokyo 2020 Trash Picking Competition

Since 2017, Tokyo 2020 has hosted a Tokyo 2020 Trash Picking Competition on World Environment Day, 5 June. In this sport, teams compete by picking up litter within a specified area and time, earning points based on the quantity and quality of litter removed.

As of 2019, the event has been held three times in four locations near Tokyo 2020 Games venues, attracting participation from athletes, members of the UN Information Centre, Tokyo 2020 Games sponsors, local governments, residents, and students. We plan to continue the event to engage the wider public and raise environmental awareness through sports.

Event	Date	Location(s)	Participating stakeholders	Participation
1st	5 June 2017	Meiji Jingu Gaien area (Olympic Stadium)	Athletes, embassy staff, Tokyo 2020 sponsors, Tokyo 2020 staff, civic groups, students	Approx. 110 people
2nd	5 June 2018	Ariake & Aomi areas (near Urban Sports Park)	Athletes, Tokyo 2020 sponsors, Tokyo 2020 staff, civic groups, students, staff associated with venue construction	Approx. 200 people
3rd	5 June 2019	Katase Higashihama Beach (near Enoshima Yacht Harbour) Tsurigasaki coast (near Tsurigasaki Surfing Beach)	Athletes, UN Information Centre, Tokyo 2020 sponsors, Tokyo 2020 staff, host town staff, host town residents, civic groups, students	Approx. 310 people

Other events where Tokyo 2020 has exhibited

- EcoPro 2017: International Exhibition on the Environment and Energy (December 2017)
  (Organisers: Japan Environmental Management Association for Industry, Nikkei Inc.)
- Earth Hour 2018 (March 2018)
  (Organiser: World Wide Fund for Nature Japan (WWF Japan))
- Countdown Showcase (September 2018)
  (Organisers: Japan Ministry of Economy, Trade and Industry, All Japan Business Committee)
- CEATEC Japan 2018 (October 2018)
  (Organiser: CEATEC Japan Executive Board)

This section contains statements that assume that the Tokyo 2020 Games will be held in 2020.

We stage the "Tokyo 2020 Nippon Festival" as a compilation of the Tokyo 2020 Nationwide Participation Programme and maximise momentum for the Games. The event, centred on the concept "Blooming of Culture", will be geared toward raising anticipation for the Tokyo 2020 Games by showcasing Japanese culture to an international audience, facilitating interactions and engagement among diverse people toward a more inclusive society, and providing opportunities for everyone to get involved in the Games through arts and culture activities.

The cultural programme in this event focused on inclusion has been titled "ONE — Our New Episode" in hopes of writing a new narrative in which uniqueness is respected and people are united in their diversity, creating a society marked by mutual acceptance. The programme will feature events of mixed genres involving people of all sorts—musicians, artists, performers—who come together as a "human orchestra". The goal is to move hearts and inspire people to begin their own transformation, thus helping to create an inclusive society.

(6) Communicating sustainability during the Games

We provide easy-to-understand information through our website and other media to inform the public on ways to take sustainable actions for the Tokyo 2020 Games, such as proper sorting of waste and resources at venues.

We plan to set up a Weather Centre as a weather information source for Games staff. The Weather Centre will support efficient Games operations, including heat management, by monitoring and forecasting temperatures and other conditions in areas where Games venues are located.

As a heat-related measure for spectators, we will provide information such as heat-related alerts and strategies for preventing heat stroke through the Games website and a mobile app.

Because many journalists are likely to seek information just prior to the Games, we plan to set up a sustainability communications hub in the International Broadcast Centre / Main Press Centre (IBC/MPC) where we'll display the Games' sustainability concept and various sustainability projects and initiatives. The space will also be used to answer questions on sustainability, helping international journalists become familiar with the Games' sustainability.

4.6
Sustainable Sourcing

4.6 Sustainable Sourcing

Overview

We at the Tokyo Organising Committee of the Olympic and Paralympic Games need to procure a large volume of items for the preparation and operation of the Tokyo 2020 Games. Our sourcing activities have an impact not only on first-tier suppliers, but on the entire supply chain, and are critically important as we promote sustainability efforts. We have formulated the Sustainable Sourcing Code, and call on businesses offering goods, services and licensed products for the Games to ensure sustainability in their supply chain. For example, we have established the standards in the Sourcing Code in light of significant social challenges, such as compliance with laws and regulations; prevention of environmental pollution; bans of illegally long working hours and any form of discrimination and harassment; and appropriate labour management of guest workers. We have also established a grievance mechanism to receive reports of non-compliance with the Sourcing Code and respond with rapid and appropriate solutions.

More items are being procured as the opening of the Games draws closer. We are continuing to demand that sustainable goods and services are supplied. There has been a certain amount of progress in the sourcing of materials like timber and paper.

We hope that, by participating in sourcing for the Tokyo 2020 Games, businesses will increase their awareness of the challenges related to sustainability, leading to improvement in the environmental and social impacts of their businesses, including after the Games. We also would like to publicly communicate our efforts to encourage the general public to be more interested and engaged in sustainability initiatives.

It is important to establish this as our legacy. We are already seeing many positive changes that can lead to the spread of sustainable sourcing and grievance mechanisms. Increasing the number of businesses and consumers who participate in these movements will help achieve SDG 12: ensuring sustainable consumption and production patterns.

Sustainable sourcing is still a new initiative in Japan. Ideas regarding sustainability also differ depending upon the stakeholder. Progress will not be made in a single bound, but we will continue engaging more companies, raising their awareness of sustainability and encouraging concrete actions to achieve the sustainable consumption and production that the global world strives for.

Summary of progress

Key area	Status
Communication with suppliers/licensees	・Continuing to interview and review checklists from suppliers and licensees
Sourcing sustainable timber	・Used timber that meets the Sustainable Sourcing Code for Timber, such as certified forest products to construct Ariake Gymnastics Centre, the Village Plaza and other facilities ・Conducted monitoring surveys for concrete formwork plywood

Sourcing sustainable agricultural, livestock and fishery products	・Devising menus for the Olympic/Paralympic Village considering the use of ingredients that conform to the Sustainable Sourcing Codes for Agricultural, Livestock and Fishery Products, such as those certified under Good Agricultural Practices (GAP) or fishery eco-label certifications
Sourcing sustainable paper	・Using sustainable paper, such as certified forest products, for photocopy paper, envelopes and other office supplies, as well as for printing PR materials related to the Games and in packaging for licensed products
Sourcing sustainable palm oil	・Included the use of palm oil products that follows the Sourcing Code for the Promotion of Sustainable Palm Oil in sourcing any food, beverage and cleaning agents during operation of the Games
Partnership with the International Labour Organization (ILO)	・Implementing collaborative initiatives with ILO such as organising Sustainability Forums and producing a case study collection
Operating a grievance mechanism	・Received 11 reports as of 31 January 2020 since setting up the grievance mechanism

Implementation of the Sourcing Code

(1) Overview

Sourcing by Tokyo 2020 increased greatly in 2018 and 2019, with approximately 1,800 sourcing contracts concluded between April 2018 and September 2019 alone. The number of licensee companies has also increased to 117. Applying the Sourcing Code to these contracts means that an extremely large number of businesses, as well as their supply chains, are affected by it directly or indirectly.

We continue to interview and review checklists from suppliers and licensees. During the interview, we discuss risks that should be paid attention, such as discrimination, harassment, illegally long working hours and unfair treatment of guest workers, based on the Sourcing Code. Such activities not only allow us to check the progress of supplier and licensee initiatives, but to also increase their awareness of sustainability, providing them an opportunity to consider improvements. We also explained the Sourcing Code to contractors that will be operating during the Games period.

Based on checklist responses from approximately 360 companies and interview, the progress of supplier and licensee sustainability initiatives is summarised below. Many of the initiatives are supposed to have started before they became suppliers or licensees of the Games, and we expect that compliance to the Sustainable Code included in the contracts with suppliers and licensees will enhance the initiatives.

- On the environmental side, many companies have responded that they are introducing LED lighting, solar power and other renewable energy, and non-fluorocarbon refrigerant. They are also engaged in green purchasing, such as certified forest paper for printing and photocopying.
- Regarding human rights, many companies are striving to improve workplaces for women by introducing childcare leave and other systems. In consideration of those who are LGBT, there are some more specific initiatives that go one step beyond training and other educational activities, such as making marriage leave available to same-sex partners and creating gender-neutral toilets.
- On the labour side, many companies have conducted stress checks, workplace patrols and deliberation on improvements by health and safety committees formed of labour and management. Some companies have been certified by construction industry occupational health and safety management systems. There are also examples of companies that offer Japanese language learning support for guest workers, or that provide systems for advice in English and their first languages.
- Regarding fair business practices, the manufacturing industry in particular widely operates initiatives to prevent violation of third-party intellectual property rights, and to ensure appropriate advertising and labelling. Licensees using gold strive to manage risks and source conflict-free gold.

Case Study　Explanation for contractors about the Sourcing Code

We run explanatory meetings for businesses contracted for services such as cleaning, food and beverage, and security during the Games. We use this opportunity to ensure compliance with the Sourcing Code, with a particular emphasis on appropriate labour management.

An explanatory meeting for contractors

(2) Sourcing sustainable timber

Sustainable timber sourcing is a major theme for the Tokyo 2020 Games. To this end, we have established the Sustainable Sourcing Code for Timber, and demand that timber used in the construction of facilities such as Ariake Gymnastics Centre and the Olympic/Paralympic Village Plaza meet the Code. For example, certified domestic timber is being used for beams and the interior and exterior of Ariake Gymnastics Centre. The Sourcing Code was also applied to competition venues developed by the Tokyo Metropolitan Government (TMG), and to the Olympic Stadium developed by the Japan Sport Council (JSC). Up until now, it was normal for legal timber to be required in green purchasing by the Government of Japan (GOJ) and TMG, but the more extensive concept of sustainable timber sourcing can be considered a new initiative. It is difficult to accurately gauge how many businesses participate in such timber sourcing, but it is thought to be an extremely large number of businesses both in and outside Japan, considering the long supply chain between logging and timber processing and distribution. It appears that many businesses had little knowledge of forest certifications or experience handling certified wood, yet having taken concrete action regarding sustainability in their sourcing of timber for the Tokyo 2020 Games, the knowledge and know-how they gained can greatly contribute to the spread of sustainable forest management and timber sourcing in the future.

We also worked together with the TMG to conduct monitoring surveys for concrete formwork plywood.

Case Study　Sourcing timber for Ariake Gymnastics Centre

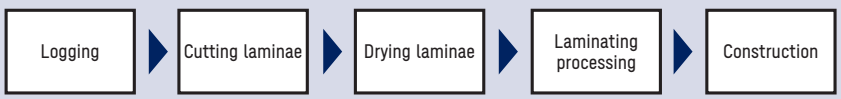
Domestic timber has been actively selected for use in the structure, interior and exterior of Ariake Gymnastics Centre. In particular, approximately 1,670m^3 of Japanese larch has been used in the large beams, and 430m^3 of Japanese cedar in the external wall. These were sourced according to the Sustainable Sourcing Code for Timber.

Exterior built using timber

The construction company in charge used large amounts of timber, so they began sourcing directly after the order was received. While researching the spread of certified timber and availability, they worked with specialist construction agencies and timber businesses to source timber that meets the Code, but they struggled with increases in certified timber prices, and the labour involved with paperwork and managing timber sorting. On the other hand, some businesses used the Games sourcing as an opportunity to acquire Chain of Custody (CoC) certification*, so it can be said that there has been progress in creating a sustainable timber supply system.

It is hoped that the number of certified forests further increases in the future, and that supply routes expand and diversify, making it easier to source certified forest timber.

Supply chain of laminated timber for large beams



Laminae: Planks that form laminated timber

* Chain of Custody (CoC) certification certifies timber and wood products from certified forests and can be traced through the manufacturing, processing and distribution stages.

Sourcing of timber used in Ariake Gymnastics Centre

Section	Sourcing Code	Amount	Notes
Large beams (laminated timber)	Forest certification in Section 3 of the Code	Approx. 1,670m^3	Domestic timber (Hokkaido, Nagano)
Exterior (sawn timber)	Forest certification in Section 3 of the Code	Approx. 430m^3	Domestic timber (Akita, Shizuoka, Tottori, Tokushima, Kochi, Saga, Miyazaki)
Spectator seating (laminated timber)	Due diligence in Section 4 of the Code	Approx. 100m^3	Domestic timber (Mie)
Stairs (plywood)	Forest certification in Section 3 of the Code	Approx. 330m^3	Domestic timber (Yamanashi)
Stairs (sawn timber)	Forest certification in Section 3 of the Code	Approx. 70m^3	Imported timber (Russia, Canada)
Concrete formwork plywood	Forest certification in Section 3 of the Code	Approx. 4,900 sheets	Imported timber (Malaysia)
	Reused	Approx. 5,100 sheets	—

Case Study Outcomes of monitoring surveys for sourced timber

We worked with the TMG to perform site surveys in Malaysia and Indonesia at the logging and plywood manufacturing stages in the production of concrete formwork plywood.

Surveying trees that are scheduled to be logged

The site surveys confirmed that companies are engaged in sustainable forest management, including conservation of ecosystems and building good relationships with local communities. While some issues were observed regarding occupational safety measures and treatment of waste products at plywood factories, each company was already independently engaged in improvements. See "Appendices" (*page 256*) for details.

(3) Sourcing sustainable agricultural, livestock and fishery products

In December 2018, we selected the contractor that will be in charge of providing food and beverage to the Olympic/Paralympic Village. Since April 2019 we have been working to devise menus for the main dining and casual dining areas of the Village, discussing with IOC. In creating the menus, one prerequisite was the use of ingredients that have GAP or fishery eco-label certifications, or that conform to the Sustainable Sourcing Codes for Agricultural, Livestock and Fishery Products.

The government of Japan (GOJ) is also working to provide support to ensure smooth sourcing of these sustainable ingredients.

Case Study Survey on local governments' intention to supply locally produced food

In 2018 and 2019, GOJ conducted surveys on Japanese local governments' intention to supply locally produced food for the Games, which aimed to have more food produced in Japan including disaster-affected areas used for the Games. The result shows that they intended to supply diverse food that meets the Sustainable Sourcing Codes for Agricultural, Livestock and Fishery Products. Each local government has submitted the data on food they intended to supply and the certification status, and Tokyo 2020 has provided food and beverage contractors with the data for deciding menus, food and suppliers.

Case Study Using sustainable ingredients in the TMG and company cafeterias

To introduce Tokyo residents to sustainably produced ingredients, in February 2019 the TMG staff cafeteria offered menus that utilised ingredients made in Tokyo that are certified by Tokyo GAP or fishery eco-labelling schemes. Information about each certification system was placed at tables to help TMG staff and local residents who use the cafeteria understand their significance. In March and August 2019, the cafeteria further featured menus using Tokyo GAP-certified agricultural products.

The similar initiatives to promote the use of sustainable seafood have been implemented in the cafeterias of private companies in Japan. More processing and distribution businesses are also offering certified seafood. It is thus expected that more sustainable seafood is offered in the market as the supply system improves.

We expect that these initiatives raise people's awareness of sustainable food and encourage them to change their consumption behaviour.

A meal created using ingredients made in Tokyo that are certified by Tokyo GAP and fishery eco-label certifications.

The outer boxes of licensed goods made with FSC®-certified paper

(4) Sourcing sustainable paper

Since we established the Sustainable Sourcing Code for Paper, we have been sourcing photocopy paper, envelopes, office notebooks and business cards in accordance with the Code. We are also promoting the use of certified forest paper and other sustainable paper in Games-related PR materials and other printed items, and packaging for licensed goods (Tokyo 2020's FSC license code: FSC®-N003155). It is hoped that the distribution and sales of such items will help educate people about sustainable use of forest resources.

Case Study Educating licensees

Many licensee companies have no experience sourcing sustainable paper. To help increase their understanding, we explained the Code and introduced forest certification schemes at meetings especially for licensees.

Licensees have given feedback such as "With the cooperation of packaging companies, we were able to source sustainable paper smoothly". If companies continue sourcing sustainable paper based on their experience with the Tokyo 2020 Games, it would be an example of a positive legacy.

(5) Sourcing sustainable palm oil

Palm oil is a type of vegetable oil derived from the fruit of the oil palm, which is known for both having a large harvest volume per planted area and providing a stable harvest year-round. The oil itself is semisolid at room temperature and can be processed in a variety of ways. It is thus used as a raw ingredient in a wide variety of products—from processed foods like margarine and shortening to soaps and cleansers—meaning we encounter it often in our daily lives. On the other hand, concerns regarding exploitation of forests and plantation workers have been pointed out in the production stages of palm oil. Based on awareness of these concerns, we have established the Sourcing Code for the Promotion of Sustainable Palm Oil, and demand that any food ingredients or cleaning agents containing palm oil to be used in providing food and beverage or cleaning services during operation of the Games be sourced according to the Code.

The 2020 Games are an opportunity to increase awareness in businesses and consumers in Japan, and to give long-term momentum to the sustainable palm oil sourcing movement. We believe that these factors will contribute towards improving the actual conditions of palm oil production, which in turn will become a major legacy of the Games.

Case Study The process of establishing the Sourcing Code for palm oil

To establish the Code, an expert working group that was able to include important stakeholders, such as business groups and consumer groups, was tasked with investigation. They also interviewed environmental NGOs and certification system scheme owners, and took public comments on this matter.

The working group had an especially active discussion about certification schemes, and with an emphasis on promoting initiatives that bear in mind small-scale farmers, approved utilisation of the ISPO, MSPO, and RSPO certification systems.

A palm tree

A palm fruit

Even after the Code has been set, we still follow up on progress being made by the three certification schemes adopted in the Code. It is essential for a wide variety of producers, including small-scale farmers, to adopt these kinds of certifications to lift up the level of sustainability for palm oil farms. The following developments regarding expansion and improvement can be seen in each scheme.

- As of January 2020, approximately 5.45 million hectares of farms have been certified by the Indonesian Sustainable Palm Oil (ISPO). The government of Indonesia has been preparing for strengthening the standards.
- As of 31 January 2020, approximately 3.74 million hectares of farms have been certified by the Malaysian Sustainable Palm Oil (MSPO). While there are still challenges with its spread among small-scale farmers, steady progress has been made on certification of large-scale farms. Supply of MSPO-certified palm oil to Japan has also begun.
- At the general assembly held in November 2018, the Roundtable on Sustainable Palm Oil (RSPO) decided on reforms that cover issues such as prohibiting development of peatlands and strengthening human rights standards. New standards were established for small-scale farmers at the same time. As of 31 January 2020, approximately 4.15 million hectares of farms have been certified. A map of certified farms has also been made public, where users can check the status of deforestation and fire outbreak. An increasing number of Japanese companies are also participating in RSPO (181 companies, including ordinary, associate and affiliate members, as of 31 January 2020).

Case Study Promotion of MSPO certification for small-scale farmers in Malaysia

While the Malaysian government plans to impose mandatory implementation of MSPO certification along the whole supply chain of the oil palm industry, promotion to small-scale farmers with insufficient knowledge and funds is a major challenge. To facilitate the certification process, the Malaysian government has grouped small-scale farmers into 162 Sustainable Palm Oil Cluster (SPOCs) and provides support to the famers such as training, provision of safety protection equipment, store, manager of each SPOC and audit costs.

An explanatory meeting for small-scale farmers

Partnership with the ILO

The 3rd Sustainability Forum

In April 2018, we signed a memorandum with the ILO to promote decent work, and the two organisations are developing activities based on this to contribute to the advancement of socially-responsible labour practices in companies. There have been many specific developments particularly in fiscal 2019.

In September 2019, both organisations joint sponsored the 3rd Sustainability Forum to exchange ideas on promoting decent work and practicing labour CSR. A collection of case studies and a handbook were also created to promote socially-responsible labour practices in companies. On the Tokyo 2020 official website, we have made a page to introduce our partnership with the ILO. It features e-learning and other tools and documents provided by the ILO to assist in understanding different labour issues, which businesses can use as a reference in complying with the Sourcing Code.

https://tokyo2020.org/en/games/sustainability/humanrights-ilo

Case Study Awareness-raising activities in partnership with the ILO

On 18 September 2019, Tokyo 2020 and the ILO co-organised the 3rd Tokyo 2020-ILO Sustainability Forum titled "Be better, together: Tokyo 2020 as Game Changers in advancing decent work" at the United Nations University.

Some 120 people participated in the forum, which built upon the results of the previous two forums by sharing specific initiatives for practicing labour CSR, and discussing the roles of companies, governments, athletes, international organisations and other stakeholders in working towards a society with decent work. Along with a keynote announcement from the Tokyo 2020 on sustainable initiatives at the Games, including the Sustainable Sourcing Code and grievance mechanism, the ILO explained a new treaty on harassment and violence at work, as well as points to keep in mind when doing human rights due diligence. They also spoke about the handbook created for companies in partnership with Tokyo 2020, and how it can be used.

3rd Sustainability Forum Report:

https://tokyo2020.org/ja/games/sustainability/si-20191001-01 (Japanese)

Case Study **Case study collection and handbook co-produced with the ILO**

To provide a reference for companies in engaging in socially-responsible labour practices, Tokyo 2020 and the ILO have worked together to produce a collection of examples of sponsor company initiatives, and a handbook on international labour standards and sustainable sourcing.

The case study collection showcases examples of initiatives related to labour environments and working styles in line with the principles of the Sourcing Code, and is to be used in initiatives by a wide variety of companies involved in the Games. It features initiatives by 14 sponsor companies, including examples of improving working environments in the overseas supply chain, promoting workplace diversity, forming sound labour-management relations and actively promoting workstyle reforms, occupational health and safety measures and measures to prevent human trafficking.

The handbook explains the ILO Core Labour Standards and the Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy. It also provides guidance on risk evaluation and supplier dialogue in practicing labour-related supply chain management.

The worldwide attention on the Tokyo 2020 Games is not only a major opportunity to promote decent work, but also a chance to provide companies with tools that we hope will help sustainable and responsible business and labour practices take root in society, even after the Games.

Case study collection and handbook

Grievance mechanism

Since its establishment in April 2018, the grievance mechanism has received a total of 11 reports as of the end of January 2020. The chart below summarises the methods and languages used to make the reports, informant types and processing time. See "Appendices" (*page 253*) for details of each report and processing status.

Reports received and their processing (as of 31 January 2020)

Method	Language	Informant type	Processing time (M=month)
e-mail only: 7 Post only: 3 e-mail and post: 1	Japanese: 6 English: 5 Other languages: 0	Private individual: 2 Organisation: 9	Less than 1M: 4 1 to 3Ms: 5 More than 3Ms: 0 (For 9 reports processed as on 31 Jan. 2020)

Reports have included items related to labour environments, timber and other issues. An informant reported problems with the labour environment at a site of construction ordered by Tokyo 2020. We decided the report is within the scope of the grievance mechanism, and started the process by establishing an Advisory Panel and collecting information.

On the other hand, there were also a number of reports that were not related to the supply chain of goods and services we procure or the supply chain of licensed products. It is difficult for our grievance mechanism to respond to these cases, and informants who made a report hoping our grievance mechanism would resolve the issue are sometimes left feeling dissatisfied. We support these informants as much as possible, such as, if appropriate, by directing them to other grievance mechanisms based on the report content that may be able to help. With issues that are not directly related to Games sourcing, however, the reality is that there is a limit to what we can do.

We understand that some believe sourcing-related grievance mechanisms for the Tokyo 2020 Games should be centralised. In addition to Tokyo 2020, the TMG and JSC have similar grievance mechanisms. Upon receiving a report regarding sourcing issues related to another organisation, each directs informants to the appropriate grievance mechanism, so in effect it is the same as if the grievance mechanisms were centralised.

Grievance mechanism itself seems to be gradually spreading mainly among labour unions and NGOs, but implementation into global supply chains is still a challenge. We have informed that an informant is required to provide specific information indicating that it is related to goods or services procured by the Tokyo 2020, or licensed products, but there are many cases where sufficient information cannot be provided.

It is important that the existence of grievance mechanisms and how to use them are widely known, and we continue to share this information through various networks and opportunities. One specific example of this is the Sustainability Forums co-organised with the ILO, where we introduced the grievance mechanism extensively, including its basic structure, how it is being implemented and the challenges involved. We are also striving to provide more detailed information primarily on our website.

Building a sustainable supply chain

Here we will introduce initiatives within Japan that are working to facilitate widespread adoption of sustainable sourcing and grievance mechanisms. Some of the initiatives have been implemented inspired by the sustainability initiatives of the Games, and others are not. All of them, however, are important for a society that embodies sustainable consumption and production.

These initiatives take various forms, such as developing and spreading sustainability-related certifications and rating systems, and engaging in collective action through corporate and organisational partnerships or other networks.

We believe that further growth of such movements will ensure a sustainable supply chain, as well as make businesses more competitive internationally through risk reduction and improved productivity.

(1) Growth of sustainable agricultural, livestock and fishery products

To further promote GAP, the Government of Japan provides GAP consultation framework by external consultants who have received required training to assist in acquiring certification, as well as strives to increase the number of GAP Partners who seek GAP-certified food products. In March 2019, Japanese Agricultural Standard (JAS) also established a certification called Nofuku JAS for food produced through the participation of people with impairments. We hope that improving awareness of this certification will spur growth of more initiatives combining agriculture and social welfare.

ノウフク

登録認証機関名

Nofuku JAS logo

In December 2019, Japan's Marine Eco-Label (MEL) has been recognised by the Global Sustainable Seafood Initiative (GSSI)*1. Other schemes recognised by the GSSI include those of Marine Stewardship Council (MSC) and Aquaculture Stewardship Council (ASC). GSSI is a framework to ensure that marine product certification schemes meet the United Nations Food and Agriculture Organisation's Code of Conduct for Responsible Fisheries and other related guidelines. GSSI's recognition to MEL is anticipated to help facilitate the spread of marine products certified by the internationally-accepted fishery eco-label certifications.

*1 MEL certifications recognised by GSSI: Fisheries Management Standard (FMS) ver.2.0, Chain of Custody Standard (CoC) ver.2.0 and Aquaculture Management Standard Ver.1.0

(2) Growth of sustainable palm oil

Private-sector companies and organisations are initiating collaborative projects aiming to further the growth of sustainable palm oil. In April 2019, a group of 18 businesses and organisations, including retailers, consumer goods manufacturers and NGOs, formed the Japan Sustainable Palm Oil Network to accelerate the sourcing and consumption of sustainable palm oil in the Japanese market, and in August, Japan Ministry of the Environment also joined as an observer. With the aim of resolving a wide range of problems in the production of palm oil, members work together across industries to collect information on sustainable palm oil sourcing and promote the procurement and consumption of sustainable palm oil.

(3) LGBT support

There are an ever-increasing number of companies and organisations listed in the PRIDE Index run by work with Pride, a Japanese organisation supporting those who are LGBT. In 2019, 194 companies and organisations applied for inclusion in the Index, and Tokyo 2020 received the highest Gold rating. See Case Study "Gold award in PRIDE Index 2019" (*page 141*) for further information.

(4) Business Chance Navi 2020

Business Chance Navi 2020 is a business matching portal operated by the Small- to Medium-Enterprise Global Reach Project Conference. As of the end of January 2020, there were approximately 33,000 companies registered throughout Japan.

Businesses registered on the portal can post information on the products they produce or sell, and what certifications they have acquired. Buyer-side businesses can then search through this information or use a matching function to seek producers they would like to supply from, making it more efficient to discover business partners who can provide

sustainable products. In fact, companies using the portal include those seeking suppliers who provide GAP-certified food products or internationally certified marine products.

(5) Sustainable purchasing

The Green Purchasing Network (GPN) formed of companies and local governments has always promoted green purchasing, which is the selection of environmentally conscious goods and services. In light of the global movement towards a sustainable society, they have expanded their field to include sustainable purchasing, which is also socially conscious.

The GPN has established guidelines for each type of product, including a list of important environmental and social considerations to bear in mind when purchasing. They also publish information about products and services of member companies to help consumers choose items according to the guidelines. They additionally provide support to local governments engaged in sustainable sourcing.

(6) Environmental due diligence

There are no established evaluation standards for supply chain management, and the challenge of knowing what needs to be done and to what extent has become a barrier to its widespread practice. In light of this situation, the Japan Ministry of the Environment has established the Environmental Due Diligence Study Panel to develop the methodology of environmental due diligence and create a handbook that can be used by both companies practicing supply chain management and the businesses involved in the supply chain.

(7) Adoption of grievance mechanisms

In December 2019, Engagement and Remedy Guidelines for Promotion of Responsible Business Conduct and Supply Chains were established by the Japan Responsible Supply Chains Committee, which is formed of multi-stakeholders engaged in the SDGs and human rights issues in business, such as lawyers, corporate officials, investors and civil society. These guidelines promote initiatives that ensure constructive stakeholder engagement, stronger grievance procedures and access to remedies at Japanese companies. They also point out basic actions companies can take to strengthen grievance procedures.

Other issues

(1) Response to stakeholder opinions

We sometimes receive opinions from concerned stakeholders on topics related to sustainable sourcing.

Below are examples of some of those opinions and our thoughts on the issues.

Opinion summary	Stakeholder type	Our thoughts on the issue
The Tokyo 2020 Games Sourcing Code for Timber has been revised, but it is still not enough.	NGOs	Sustainable timber sourcing can be considered a new initiative in Japan. It appears that a large number of businesses had little knowledge of forest certifications or experience handling certified wood, yet there have been positive effects, such as the improved knowledge and know-how gained through conforming to the Tokyo 2020 Games Sourcing Code. We anticipate that, even after the Games, as businesses utilise this experience to further expand their initiatives, there will be gradual improvements to the process and standards for confirming sustainability.
Resource management-related policies have been changed based on reform of the Fisheries Act. Resource Management Plans approved in the Sourcing Code for Fisheries Products, therefore, should be eliminated from the Code.	NGOs	We are aware that when the new Fishery Act is enforced due to its December 2018 reform, marine resources will be managed based on an output control scheme, and in line with targets of marine resource volume to achieve the maximum sustainable yield. However, current Resource Management Plans are created based on scientific information, and have been shown to be an effective system for sustainable resource management that has evaluation and verification schemes to be implemented on an ongoing basis. We believe that this will not change even after reform of the Fisheries Act.

Livestock products considerate of animal welfare should be used, such as eggs and pork produced cage-free or stall-free.	NGOs & athletes	In developing the Sustainable Sourcing Code for Livestock Products, we opened an expert working group to examine the current state of Japanese livestock industry and direction it should take, as well as how much time is required for producers to prepare. We also endeavoured to reflect various opinions in the Code by taking public comments. The Code also covers animal welfare and, more specifically, demands appropriate measures be taken as highlighted in the Animal Welfare-oriented Livestock Management Standards, which are based on the policies of the 180-member-state World Organisation for Animal Health. The Code therefore satisfies international standards of animal welfare.
Japan should stop whaling.	NGOs	Whaling does not fall under the jurisdiction of Tokyo 2020, so we are not in a position to comment on this opinion.
Ivory trading should be prohibited in Japan.	NGOs	Domestic ivory trading does not fall under the jurisdiction of Tokyo 2020, so we are not in a position to comment on this opinion.
There are problems with the work environment at construction sites of Games facilities.	Labour unions & an NGO	Occupational health and safety at construction sites is extremely important to us. Because of this, we requested detailed information from the stakeholders in question to examine the issues pointed out, then also spoke with businesses and performed site inspections. However, we found no specific problems that were in violation of laws and others. Tokyo 2020, the TMG and JSC had a meeting with related stakeholders to discuss the situation.

(2) Role of consumers

In order to guarantee a sustainable provision of goods and services, businesses involved need to recognise issues related to the environment, human rights and labour at each step in the supply chain, understand their actual circumstances, and take action towards improving the situation. We have been using the Sustainable Sourcing Code as a tool to mainstream sustainability amongst businesses that participate in sourcing for the Tokyo 2020 Games. Combined with the increased global concern in recent years about issues such as the environment and human rights, we believe that businesses certainly have a heightened awareness of sustainability.

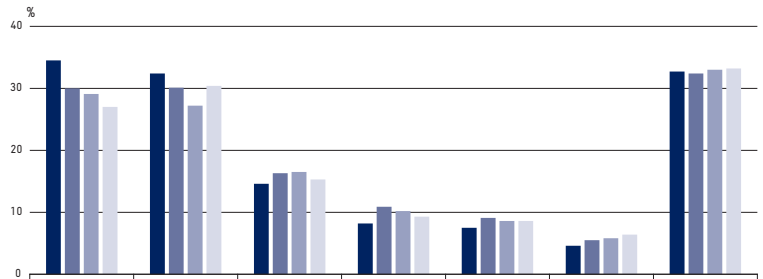
To prevent this from becoming just a passing trend, and instead have it lead to a legacy of achieving sustainable consumption and production, businesses need to continue and expand these initiatives even after the Games. Consumers also play an important role in

backing this movement, as companies operate based on consumer needs. We hope that the Tokyo 2020 Games are a chance to boost consumer interest in sustainable consumption and encourage a movement towards selecting ethical products and services, instead of just price and convenience.

Case Study Consumer awareness of ethical consumption

In 2015, the Japan's Consumer Affairs Agency (CAA) established the Ethical Consumption Research Committee to investigate what kinds of initiatives are necessary to increase people's understanding of ethical consumption and have it take hold in daily life. In 2016, they surveyed 2,500 people regarding their awareness of ethical consumption. According to a report released in April 2017 summarising their findings, more than 60 per cent of survey participants responded that they are "inclined to purchase" ethical products and services. This implies that demands can be expanded further, but, on the other hand, when asked about reasons why they don't purchase ethical products and services, many participants answered it was because, "They are expensive", "I'm not sure if they are really ethical", and "I'm not sure which products are ethical." The challenge is thus how to convey this information to consumers. In light of these issues, the CAA runs events like Ethical Lab and workshops for children to introduce ethical consumption. They also collect and introduce advanced initiatives, create educational leaflets and work with diverse stakeholders to encourage creation of a movement.

Reasons why consumers do not purchase ethical products and services



	I'm not sure if they are really ethical	They are expensive	I'm not sure which products and services are ethical	There are no ethical products and services I want	There are no ethical products and services near me	There are no ethical products and services in the area I'm interested in	There is no particular reason I don't want to buy
Food Products	34.5	32.4	14.6	8.2	7.5	4.6	32.7
Clothes	30.0	30.1	16.3	10.9	9.1	5.5	32.4
Other consumer products	29.1	27.2	16.5	10.2	8.6	5.8	33.0
Appliances/ Luxury goods	27.0	30.4	15.3	9.3	8.6	6.4	33.2

Created based on Ethical Consumption Research Committee Summary

Case Study Raising awareness of ethical consumption by TMG

TMG has been making efforts since fiscal 2018 to disseminate and raise awareness of the concept of ethical consumption, which is a consumer behaviour that considers human rights, society and the environment.

In addition to setting up an ethical consumption introduction page on the website, TMG communicates a wide range of information on ethical consumption through leaflets, TV commercials and other methods. It also implemented awareness-raising programmes at universities in Tokyo to encourage young students to be ethical consumers.

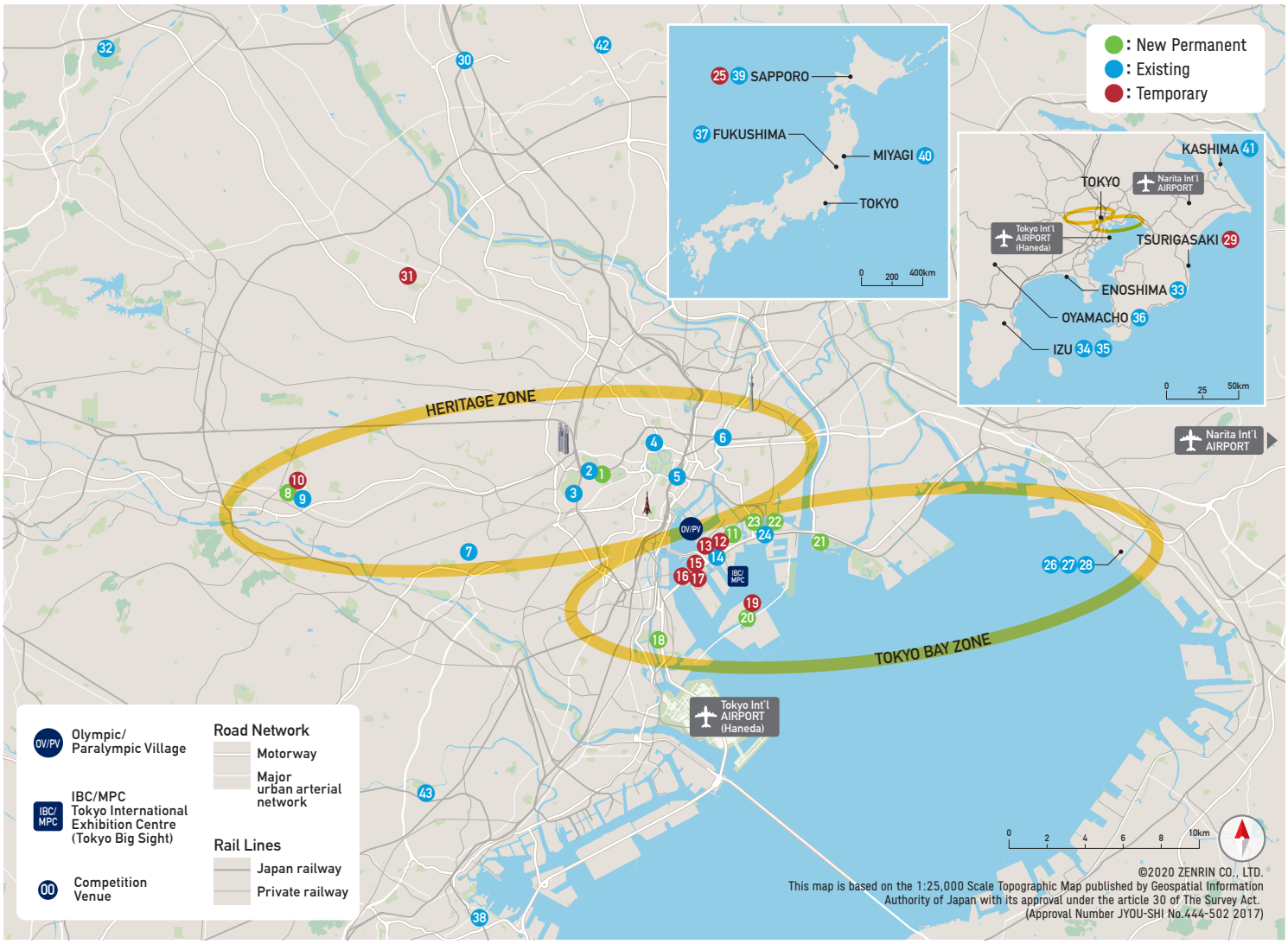
https://www.shouhiseikatu.metro.tokyo.jp/manabitai/ethical/ (Japanese)

5

Venue Development

Olympic and Paralympic Games Venue Master Plan

Olympic Games Venue Master Plan as of December 2019
Paralympic Games Venue Master Plan as of April 2019



HERITAGE ZONE

□ ··· Olympic Games △ ··· Paralympic Games

1 Olympic Stadium
□△ Opening and Closing Ceremonies, Athletics
□ Football

2 Tokyo Metropolitan Gymnasium
□△ Table Tennis

3 Yoyogi National Stadium
□ Handball
△ Badminton, Wheelchair Rugby

4 Nippon Budokan
□△ Judo
□ Karate

5 Tokyo International Forum
□ Weightlifting
△ Powerlifting

6 Kokugikan Arena
□ Boxing

7 Equestrian Park
□ Equestrian (Dressage, Eventing, Jumping)
△ Equestrian

8 Musashino Forest Sport Plaza
□ Badminton, Modern Pentathlon
△ Wheelchair Basketball

9 Tokyo Stadium
□ Football, Rugby, Modern Pentathlon

10 Musashinonomori Park
□ Cycling (Road)

TOKYO BAY ZONE

11 Ariake Arena
□ Volleyball (Volleyball)
△ Wheelchair Basketball

12 Ariake Gymnastics Centre
□ Gymnastics
△ Boccia

13 Ariake Urban Sports Park
□ Cycling (BMX Freestyle, BMX Racing), Skateboarding

14 Ariake Tennis Park
□ Tennis
△ Wheelchair Tennis

15 Odaiba Marine Park
□△ Triathlon
□ Aquatics (Marathon Swimming)

16 Shiokaze Park
□ Volleyball (Beach Volleyball)

17 Aomi Urban Sports Park
□ 3x3 Basketball, Sport Climbing
△ Football 5-a-side

18 Oi Hockey Stadium
□ Hockey

19 Sea Forest Cross-Country Course
□ Equestrian (Eventing (Cross Country))

20 Sea Forest Waterway
□ Canoe (Sprint), Rowing
△ Canoe, Rowing

21 Kasai Canoe Slalom Centre
□ Canoe (Slalom)

22 Yumenoshima Park Archery Field
□△ Archery

23 Tokyo Aquatics Centre
□ Aquatics (Swimming, Diving, Artistic Swimming)
△ Swimming

24 Tatsumi Water Polo Centre
□ Aquatics (Water Polo)

26 Makuhari Messe Hall A
□ Taekwondo, Wrestling
△ Sitting Volleyball

27 Makuhari Messe Hall B
□ Fencing
△ Taekwondo, Wheelchair Fencing

28 Makuhari Messe Hall C
△ Goalball

OTHER VENUES

25 Sapporo Odori Park
□ Athletics (Marathon, Race Walk)

29 Tsurigasaki Surfing Beach
□ Surfing

30 Saitama Super Arena
□ Basketball (Basketball)

31 Asaka Shooting Range
□△ Shooting

32 Kasumigaseki Country Club
□ Golf

33 Enoshima Yacht Harbour
□ Sailing

34 Izu Velodrome
□△ Cycling (Track)

35 Izu MTB Course
□ Cycling (Mountain Bike)

36 Fuji International Speedway
□△ Cycling (Road)

37 Fukushima Azuma Baseball Stadium
□ Baseball/Softball

38 Yokohama Baseball Stadium
□ Baseball/Softball

39 Sapporo Dome
□ Football

40 Miyagi Stadium
□ Football

41 Ibaraki Kashima Stadium
□ Football

42 Saitama Stadium
□ Football

43 International Stadium Yokohama
□ Football

5. Venue Development

Overview

The Tokyo 2020 Games venues are divided in three types: those using existing venues, those constructed as a new legacy and temporary venues erected solely for the Games. As part of the development of these venues, the Tokyo Metropolitan Government (TMG), Japan Sport Council (JSC) and the Tokyo Organising Committee of the Olympic and Paralympic Games (Tokyo 2020) will promote initiatives to form a post-Games legacy, such as saving energy through the application of new technologies, the presentation of an urban model for greater use of hydrogen, advanced resource recycling and reuse of procured goods, and consideration for biodiversity and creation of vibrant green spaces, and convey these advanced ideas to the world.

Venue development holds the greatest risks of environmental impact and use of resources that affect the overall sustainability of the Tokyo 2020 Games. Therefore, TMG, JSC and Tokyo 2020 are giving maximum consideration to sustainability at all stages, from the venue design stage through construction and operation of the Games, to the period following the Games.

Games venues subject to development

This chapter relates to competition venues, as well as the Olympic/Paralympic Village and other non-competition venues.

There are total of 43 competition venues, and these are categorised into the following three types depending on the development involved. TMG, JSC and Tokyo 2020 aim to ensure venue development respects sustainability through the use of existing venues for around 60 per cent of venues, and developing facilities required only temporarily during the Games using primarily rented or leased temporary materials.

(Categories of development for competition venues)

Type of venue	Number of venues	Future use	Summary	Development policy for the Tokyo 2020 Games	Environmental impact
Existing venue	25	All	Utilisation of existing venues including the venues used at the Tokyo 1964 Games and the venues cooperated with local governments outside the Tokyo area.	・Repairs required for the Games ・Addition of specific facilities for the Tokyo 2020 Games through overlays* and removed afterwards	Lower environmental impact through reduced raw material input and use of rental and leasing
New permanent venue	8	All	New venues making a big contribution to the life of the city	・Design and construction enabling effective use after the Games ・Addition of specific facilities for the Tokyo 2020 Games through overlays* and removed afterwards	Lower environmental impact through development of venues with high environmental performance and use of rental and leasing
Temporary venue	10	Ariake Gymnastics Centre only	Erected for the Games	・Including construction of overlays* to be used only during the Games and removed afterwards	Lower environmental impact through use of rental and leasing

* The definition of overlay in this report is something additional to the Games venue which is added temporarily for the operation of the Games or for the duration of the Games (prefabricated structures, tents, broadcast lighting, etc. for operations)

Allotment of works and summary of progress

Venue	Party responsible for construction	Progress
Olympic Stadium	JSC	Completed in Nov. 2019
Permanent venues developed by TMG	TMG	All 8 venues are complete
Temporary venues / overlays	Tokyo 2020	Revising completion date according to postponement of the Games
International Broadcast Centre / Main Press Centre (IBC/MPC)	Tokyo 2020	Revising completion date according to postponement of the Games
The Olympic/ Paralympic Village (permanent)	TMG & private architecture developers	Completed in December 2019
The Olympic/ Paralympic Village (temporary)	Tokyo 2020	Due to be completed sequentially from September 2019 ・Some facilities including main dining hall and the Village Plaza are expected to be completed in April 2020

Olympic Stadium

Olympic Stadium
© Japan Sport Council

The Olympic Stadium will be the venue for both the Opening and Closing Ceremonies as well as the athletics events. The Stadium was completed in November 2019, just less than three years after work started in December 2016. The Stadium was developed based on three basic approach described in the specification document: a people-friendly stadium where everyone can come together safely and enjoy the Games; a stadium in harmony with the surrounding environment, bringing together the latest technologies, and portraying Japan's climate, culture and traditions in a modern light; and a stadium that contributes to regional disaster preparedness and global environmental conservation. The Stadium incorporates a wide-range of sustainability initiatives, including the adoption of energy-saving technologies and renewables, and the use of timber.

Overview of Olympic Stadium

- Sports
  - Olympic Games: Opening and Closing Ceremonies, Athletics, Football
  - Paralympic Games: Opening and Closing Ceremonies, Athletics
- Completed: 30 November 2019
- Location: 10-1 Kasumigaoka-machi, Shinjuku City, Tokyo
- Area: 109,767.83m^2

(1) Reduction of carbon emissions by design review

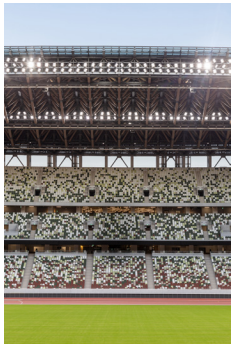
Venue plan was revised, resulting in emission reduction by 153,000 t-CO_2 compared to the previous plan (BAU).

Grand eaves and skylight
© Japan Sport Council

(2) Passive design

The Stadium was designed to improve the thermal environment in the spectator stands. The design includes grand eaves to efficiently draw seasonal winds into the upper spectator stand, terrace for spectators' relaxation that also allows outdoor wind to go through the concourse and the lower spectator stand, and a system has been introduced that allows heat and humidity accumulated in the stadium to be released from the upper levels by effectively using upward air currents generated as a result of the field being heated by sunlight.

Top lights that incorporate natural light have been installed to grow the natural turf and reduce the need for supplemental lightening.



LED lighting at the Stadium
© Japan Sport Council

(3) Energy savings

To plan energy savings of the Olympic Stadium, JSC confirmed in evaluations at the design stage that the Stadium achieves the highest rating of rank S under the Comprehensive Assessment System for Building Environment Efficiency (CASBEE), Japan's green building certification system.

The highest rate (stage 3) under the Tokyo Green Building Program was achieved thanks to a 31.62 per cent equipment system energy reduction rate and a 25.15 per cent building heat load reduction rate.

The council is working to save energy by implementing LED lighting for all lighting facilities in the Stadium, as well as subdividing electrical systems and introducing stand-alone air conditioning systems to fine-tune the energy management. It has optimised energy use by installing a next-generation building energy management system (BEMS) to support optimal energy use based on building characteristics, operating rates, weather conditions and past performance data.

JSC is also working to improve durability and prolong service life through the use of highly durable materials and high earthquake resistant structures.

Integrated solar cells on the roof
© Japan Sport Council

(4) Introduction of renewable energy

JSC actively introduced renewable energy systems, including the installation of integrated solar cells on the roof based on the Strategic Energy Plan (approved by the Cabinet of Japan in April 2014).

(5) Reuse and recycling of resources

In line with the Basic Policy for the Promotion of Procurement of Eco-Friendly Goods and Services established by the Japan Ministry of Education, Culture, Sports, Science and Technology, JSC promoted the procurement of eco-friendly goods such as materials used in construction, and worked to limit the use of materials that damage the environment. See "Appendices" (*page 260*) for more information on its use of eco-friendly materials.

(6) Reductions in construction waste

JSC actively recycled soil and construction waste generated by construction work and appropriately treated any that could not be recycled.

Specifically, JSC promoted reuse of the soil generated by construction at the same or other construction sites. However, due to the timing gap between delivery of the soil and needs by the pre-planned site, a certain amount of surplus soil was disposed. Thus, the recycle rate was approximately 85 per cent.

JSC successfully achieved 100 per cent reuse or reduction of construction waste by carefully separating waste and taking it to appropriate recycling facilities.

Case Study　Thorough separation of construction waste

JSC conducted on-site intermediate treatment activities involving the thorough separation of construction waste generated during the construction of the Olympic Stadium.

In addition to the plan to achieve a recycling rate of at least 99 per cent by separating construction waste into approximately 100 items to facilitate effective use as resources, JSC actively worked to reduce waste by crushing and compressing waste on-site.

Aiming to contribute to maintaining the natural environment and local cultural, welfare and sporting activities, forepersons from each specialist contractor formed a committee to ensure ongoing recycling activities such as encouraging workers to separate empty drink cans, plastic bottles and other waste. Proceeds obtained through such activities are donated for use in activities relating to the Paralympic Games.

© Japan Sport Council

Air flow generating fan
© Japan Sport Council

(7) Heat-related measures

A large roof that covers all stands has been installed in the Stadium as a heat management measure for spectators. Measures have also been implemented to reduce sensible temperatures and improve the environment for spectators by drawing summer winds into the stands from the grand eaves and wind terrace. A breeze similar to natural winds will be created by generating a supplementary airflow using a fan when outside winds are calm and air is not flowing through the Stadium naturally.

Other heat management initiatives for pedestrian areas include the installation of mist cooling systems in areas expected to be crowded such as the areas near ticket gates, systematically planting greenery and creating water features in outdoor areas, and installing water-holding paving.

(8) Air and soil

Construction site notice about eco-driving
© Japan Sport Council

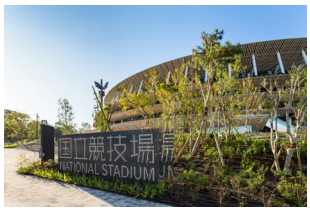
During construction JSC worked to minimise noise and vibrations by using equipment that produces minimal exhaust gases and generates little noise, and by adopting construction methods with less noise and vibrations.

JSC used fuel efficiently by using low-emission construction vehicles wherever possible. Contractors were reminded of the importance of considering the environment when driving and asked to implement regular maintenance inspections.

Unfortunately contamination was discovered in soil during inspections conducted prior to construction. Appropriate measures were taken based on Japan's Soil Contamination Countermeasures Act and the Tokyo Metropolitan Ordinance on Environmental Conservation.

(9) Aquatic environment

All service water needs are covered with consideration given to the water environment. The Stadium includes a system that collects rainwater on the large roof that is then used to flush toilets and water the turf.



New greenery at ground level
© Japan Sport Council

(10) Landscape greening and biodiversity

When building the Stadium, JSC proactively engaged in greening by conserving and replanting existing trees in an effort to preserve them as well as newly planting trees at ground level across at 24,000 m² area to ensure harmony with the surrounding green landscape.

(11) Use of Japanese timber

Use of timber in trusses
© Japan Sport Council

JSC chose to use home-grown timber wherever possible in the construction of the Stadium. A combination of timber and steel was used in the large roof truss. Timber was also used in the external eaves and interior of the building, so that spectators could feel the warmth of the trees.

Priority was given to sustainability when procuring materials. The timber used in the large roof and eaves (approximately 2,000m^3) was sourced from certified forests in Japan.

(12) Accessibility

Accessibility in the restroom
© Japan Sport Council

Initiatives were taken to ensure accessibility to the Stadium so as to create a safe environment in which all spectators can enjoy the Games, irrespective of any impairments, age, gender or nationality.

As an example, after construction started, the contractor continued to invite 14 groups, including wheelchair users, elderly people, organisations for people with impairments and parents with young children, to take part in workshops. During the workshops the participants offered feedback to the contractor which the contractor then strove to reflect in the construction. For example, to ensure accessibility for wheelchair users, the

contractor installed a large elevator with operating buttons placed at a height agreed on in detail during a workshop, and low counters were added at information desks. For people with a visual impairment, guiding blocks (hazard guide), audio guidance, interphones at information desks, tactile information boards and Braille signs have been installed, and for people with a hearing impairment, special group seats with hearing aids and flash lamps in toilets and other facilities have been installed. A soundproof lounge with soft walls has also been installed for people with intellectual, mental or development impairments.

Vertical railing and nursing rooms have been installed for spectators accompanied by young children, and handrails along passages to spectator stands and benches every 50 metres in outdoor areas were installed with older spectators in mind.

Pictograms and multilingual signs have been installed for spectators from abroad. Font size, display height, colours and brightness were adjusted to ensure signs can be understood by a wide variety of people.

In addition to separate toilet entrances and exits that ensure the smooth flow of spectators, the Stadium has been equipped with five types of accessible toilets, including multipurpose unisex toilets. Toilets for the general public include large cubicles suitable for ostomates and parents with young children.

Case Study　Calm-down, cool-down areas

Calm-down, cool-down areas are small rooms designed for people with development impairments and their companions as a quiet private place they can use to calm down.

Such facilities are fairly new to Japan. Rooms have been installed on each level in the Stadium in response to a request from organisations participating in the universal design workshops, as a place for people with impairments to rest when they find themselves under mental or physical duress. The walls in these rooms are made from soft cushion materials.

Notice in the room
© Japan Sport Council

Interior

(13) Labour and fair business practices

Preventing heat stroke by providing beverages
© Japan Sport Council

JSC implemented a number of occupational health and safety initiatives for workers at contractors who work on the construction of the Stadium.

Multiple layers of contractors and subcontractors for construction companies were involved in the venue development process, complicating health and safety management. To address this, JSC held accident prevention meetings and strove to create a safe workplace that motivates workers by providing training on preventing occupational accidents and compliance with laws and regulations; by managing the health of workers on-site, by taking measures to prevent heat stroke (WBGT heat stress index measurements and training, providing beverages and installing air-conditioned rest areas); by providing toilets and changing rooms for female workers; and by endeavouring to reduce long working hours.

JSC reported these occupational health and safety initiatives to the 2020 Tokyo Olympic and Paralympic Games Council for Occupational Safety and Health on the Facility Construction Work set up by Japan Ministry of Health, Labour and Welfare, and shared information with other construction sites.

(14) Local residence

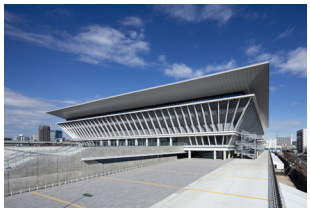
See Respect for residents' rights (*page 136*) of Section 4.4 "Human Rights, Labour and Fair Business Practices" for the move of nearby residence associated with the construction of the Olympic Stadium.

Permanent venues developed by TMG

TMG worked on the construction of the eight permanent venues that will be used during the 2020 Games. Work on all venues was complete by March 2020. Generally, work on the venues proceeded smoothly although work on some of the sites had to be suspended due to a contractor going bankrupt, resulting in a review of the development schedule.

In April 2017, TMG announced a Facility Management Plan for New Permanent Venues. As part of the plan, TMG proposed the building of facilities that people can use to enjoy a wide range of sports and the creation of a spatial legacy for the community, as well as the construction of eco-friendly and user-friendly facilities. In March 2018 many of these venues were positioned as sporting facilities under the Tokyo Metropolitan Ordinance on Sporting Facilities and will not only be used as venues for the Games but will also be highly sought-after facilities that will become permanent valuable assets for many people after the Games.

Eight permanent venues



Tokyo Aquatics Centre
© TMG

(Tokyo Aquatics Centre)

- Sports:
  - Olympic Games: Aquatics (Swimming, Diving, Artistic Swimming)
  - Paralympic Games: Swimming
- Completed: 28 February 2020
- Location: 2-2-1 Tatsumi, Koto City, Tokyo
- Area: 36,198.88m^2
- Legacy use:
  - Will be used as a swimming centre that hosts international competitions and can be used by metropolitan residents

Sea Forest Waterway
© TMG

(Sea Forest Waterway)

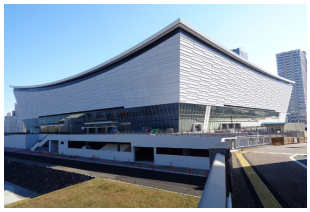
- Sports:
  - Olympic Games: Canoe (Sprint), Rowing
  - Paralympic Games: Canoe, Rowing
- Completed: 31 May 2019

○ Location: 3 Aomi, Koto City, Tokyo

○ Area: Approximately 670,000m² (including water areas)

○ Legacy use:

- Will be used as a venue for rowing and canoeing that can host international competitions, as a venue to promote and strengthen rowing and canoeing, and as a multi-purpose water recreation and relaxation spot for metropolitan residents



Ariake Arena
© TMG

(Ariake Arena)

○ Sports:

- Olympic Games: Volleyball (Volleyball)
- Paralympic Games: Wheelchair Basketball

○ Completed: 9 December 2020

○ Location: 1-11-1 Ariake, Koto City, Tokyo

○ Area: 36,576.06m²

○ Legacy use:

- Will be used as a new sporting and cultural centre that can be used for international and domestic sporting competitions and other events in Tokyo

Kasai Canoe Slalom Centre
© TMG

(Kasai Canoe Slalom Centre)

○ Sports:

- Olympic Games: Canoe (Slalom)

○ Completed: 31 May 2019 (competition area)
17 December 2019 (management building)

○ Location: 6-1-1 Rinkai-cho, Edogawa City, Tokyo

○ Area: 57,715.71m²

○ Legacy use:

- Will be used together with the surrounding park and waterways as a venue for leisure and recreation activities where visitors can enjoy rafting

Oi Hockey Stadium
© TMG

(Oi Hockey Stadium)

○ Sports:

- Olympic Games: Hockey

○ Completed: 27 June 2019

○ Location: 4-1-19 Yashio, Shinagawa City, Tokyo and 1-2-1 Tokai, Ota City, Tokyo

○ Area: 42,400m²

○ Legacy use:

- Will be used as one of Tokyo's leading multi-purpose artificial turf stadiums, and as a base for hockey and other sports

Yumenoshima Park Archery Field
© TMG

(Yumenoshima Park Archery Field)

○ Sports:

- Olympic Games: Archery
- Paralympic Games: Archery

○ Completed: 28 February 2019

○ Location: 2-1-4 Yumenoshima, Koto City, Tokyo

○ Area: 22,734.23m^2

○ Legacy use:

- Will be used as a venue for major competitions and as a base to promote and strengthen archery

Ariake Tennis Park
© TMG

(Ariake Tennis Park)

○ Sports:

- Olympic Games: Tennis
- Paralympic Games: Wheelchair Tennis

○ Completed: 18 March 2020

○ Location: 2-2-22 Ariake, Koto City, Tokyo

○ Area: 163,068.83m^2

○ Legacy use:

- Will be used as a sports and recreation venue that has a new tennis court with 3,000 seats, as well as indoor courts and a club house

Musashino Forest Sport Plaza
© TMG

(Musashino Forest Sport Plaza)

○ Sports:

- Olympic Games: Badminton, Modern Pentathlon (Fencing)
- Paralympic Games: Wheelchair Basketball

○ Completed: 14 March 2017

○ Location: 290-11 Nishimachi, Chofu City, Tokyo

○ Area: 33,473m^2

○ Legacy use:

- Will be used as a comprehensive sports facility in the Tama region. Will be used as a venue for competitions or performance, as well as local sport activities

Case Study　Development schedule review

During the development phase, TMG was forced to review its development schedule due to a contractor awarded part of the construction of the Kasai Canoe Slalom Centre and the Ariake Tennis Park going bankrupt. Construction work was unavoidably put on hold, temporarily throwing doubt on whether the venues would be complete in time for the Games. However, prompt selection of a substitute contractor and a review of the development process ensured that the venues were finished in time not only for the Games themselves but also for test events due to take place ahead of the Games.

(1) Reduction of carbon emissions

Venue plan was revised, resulting in emission reduction by 174,000 t-CO_2 from the new permanent venues built by TMG compared to the previous plan (BAU).

TMG also engaged in initiatives to use timber and made the wooden roof truss at Ariake Tennis Park entirely from Japanese timber.

Case Study Use of properly sourced timber

At Ariake Tennis Park, the structural laminated timber used in the wooden roof truss (assembled to create a triangular shape) over the club house and indoor courts acquired SGEC/PEFC* project certification. Project certification is a mechanism that a third party reviews and certifies the use of properly sourced timber from material procurement to process and construction. The certification body examined and certified that the facility has a wooden roof truss made from properly sourced timber.

As of December 2019, only 46 projects have been certified in Japan and Ariake Tennis Park is the first TMG building to be certified.

http://www.metro.tokyo.jp/tosei/hodohappyo/press/2019/08/13/06.html
(Japanese)

© TMG

* SGEC: Sustainable Green Ecosystem Council.
PEFC: Programme for the Endorsement of Forest Certification

(2) Passive designs

Natural ventilation systems have been installed at Ariake Arena and Musashino Forest Sport Plaza. Ariake Tennis Park use skylights to reduce the number of hours lights need to be used.

(3) Energy saving

TMG gave the utmost consideration to the environment when developing venues so that high energy-saving technologies for buildings developed during the Games can continue to be used after the Games.

Musashino Forest Sport Plaza has an equipment system energy use reduction rate of over 30 per cent and a building heat load reduction rate of over 20 per cent, achieving the highest rating (Level 3) under the Tokyo Green Building Programme. The Ariake Arena, Ariake Tennis Park, Oi Hockey Stadium, Sea Forest Waterway and Tokyo Aquatics Centre have all achieved the same highest rating (Level 3).

Both Ariake Arena and Tokyo Aquatics Centre have acquired Rank S under the CASBEE.

In addition to only installing LED lighting to save energy and prolong service life, TMG installed BEMS and took measures to optimise and minimise energy use at Ariake Arena, Ariake Tennis Park, Tokyo Aquatics Centre and Musashino Forest Sport Plaza.

TMG aimed to develop facilities that can be used with minimal repairs after a major earthquake for Sea Forest Waterway, Kasai Canoe Slalom Centre, Oi Hockey Stadium and Ariake Tennis Park, and horizontal load-bearing capacity (horizontal strength a building should have) was increased 1.25 times. In addition, the roofs at Ariake Arena and Tokyo Aquatics Centre were designed to be quake-absorbing to prolong their service life.

Solar thermal system and solar panels (Musashino Forest Sport Plaza)
© TMG

(4) Introduction of renewable energy

TMG promoted the introduction of solar photovoltaic, solar thermal, and geothermal heating and cooling systems at each venue based on the Energy Basic Plan and the Tokyo Specifications of Energy Saving and Renewable Energy, and actively used renewable energy by encouraging designated administrators to source green power.

See "Appendices" (*page 260*) for specific figures on the rollout at each venue.

TMG also promoted visualisation through the introduction of systems that display data on energy consumption, CO_2 emissions and CO_2 reductions.

(5) Reuse and recycling of resources

TMG worked to procure eco-friendly materials such as materials used in construction work and to limit the use of environmentally-harmful materials in accordance with the TMG's Policy for Procurement of Eco-Friendly Goods and Services (Public Works) and the Resource Circulation and Disposal Plan. For example, sections are made from new materials in general, however, a lot of steel recycled from after-use electric furnace was used instead as materials in constructing several competition venues.

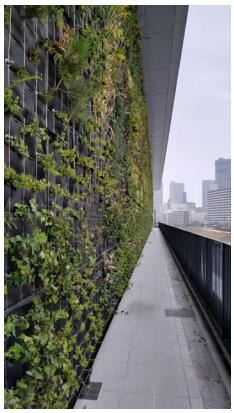
See "Appendices" (*page 261*) for more information on the use of eco-friendly goods at each facility.

(6) Reductions in construction waste

TMG worked to reduce waste generated during construction in accordance with the Tokyo Metropolitan Construction Recycling Promotion Plan.

TMG aimed to recycle and reduce construction waste by more than 99 per cent through its thorough separation and recycling. It also worked on reusing the soil generated from construction work effectively on-site or at other sites by setting the target of over 99 per cent of reuse.

Any trees removed were taken to an intermediate treatment facility and recycled into wood chips, or used as wood biomass fuel in thermal recycling.



Green walls (Ariake Arena)

(7) Heat-related measures

TMG introduced effective air conditioning methods, green roofs and walls, and installed roofing over some spectator stands. In the vicinity of buildings, TMG installed solar-heat-blocking pavements and created shade by keeping existing trees.

(8) Chemical substances

TMG worked to minimise the use of materials containing fluorocarbon, pigments containing lead and hexavalent chromium and paint containing volatile organic compound (VOC) in accordance with the TMG's Policy for Procurement of Eco-Friendly Goods and Services (Public Works).

(9) Air and soil

During construction TMG worked to reduce exhaust gases and noise by using equipment that produces minimal exhaust gases and generates little noise, and by striving to stop unnecessary idling.

TMG appropriately monitored the impact on soil based on Japan's Soil Contamination Countermeasures Act and the Metropolitan Ordinance on Environmental Conservation when constructing the venues, and took proper action for some facilities where soil contamination was found.

(10) Aquatic environment

Venues such as Ariake Arena and Tokyo Aquatics Centre will use water effectively by utilising rainwater and recycled water for non-potable service water needs, based on the TMG's Outline of Promotion of Water Utilisation.

Although Kasai Canoe Slalom Centre will use only potable water, such valuable resource will be used effectively, for example by implementing a water filtration system to recycle stored water for competition courses.

See "Appendices" (*page 262*) for more information on the use of general service water at each facility.

(11) Landscape greening and biodiversity

At the time of the bid for 2020 Olympic and Paralympic Games, canoe slalom centre was planned at a land along with the sea within Kasai Rinkai Park. The place, however, has become a relaxing waterfront area over the years after Tokyo 1964 Games. Considering the historical background and the value of natural environment within the park, TMG changed the construction site to a land adjacent to the Kasai Rinkai Park, which is owned by TMG for future construction of its Bureau of Sewerage (artificially transformed land), and completed the Kasai Canoe Slalom Centre. At the result, the area of natural habitat in the park has been conserved without modification of the green spaces, reducing the impact of the construction on biodiversity in park.

TMG worked to retain existing trees wherever possible and to preserve the trees by, for example, transplanting them within the venues when they needed to be removed. Green spaces are being created, over and above the standards required for each venue.

See "Appendices" (*page 262*) for more information on greening at each facility.

When developing green spaces and selecting trees at Tokyo Aquatics Centre and Ariake Arena, consideration will be given to harmony with the existing landscape and continuity with neighbouring parks, and trees suited to the planned site will be selected. At Sea Forest Waterway TMG worked to create a landscape that harmonises with the surrounding natural environment. For creating a continuous greenery from inside to the outside of the Central Breakwater, TMG developed greening on the rooftops of the boathouse, and it also developed a green belt along the road surrounding the venue.

(12) Accessibility

When developing venues, TMG undertook a number of initiatives based on the Tokyo 2020 Accessibility Guidelines.

Specifically, TMG installed accessible spectator seats in excess of the recommended standards in the guidelines. The seats were arranged with access to seats and escape routes in mind, and dispersed horizontally to secure views from various parts of the venue. TMG also installed multifunctional restroom based on the installation standards in the guidelines, and in addition to wheelchair compatible toilets, installed toilets with handrails, baby chairs and baby changing stations in multiple locations.

While following the standards recommended in the guidelines wherever possible when installing seating, toilets, and elevators, TMG held accessibility workshops to obtain direct feedback from organisations for the physically impaired on what it will be like to use the facilities after the Games. TMG adjusted construction work to create facilities that are accessible to everyone, irrespective of impairments by incorporating feedback wherever possible into its designs.

(13) Labour and fair business practices

TMG implemented a number of occupational health and safety initiatives for workers at contractors and suppliers who work on the construction of the venues.

There are often multiple layers of contractors and subcontractors for construction companies which tends to create a working environment in which health and safety issues are overlooked. To overcome this, TMG implemented risk assessments and health and safety training uniformly to all contractors and subcontractors in cooperation with management and labour. TMG created a safe and secure workplace that motivates workers by thoroughly managing health, providing toilets and changing rooms for female workers and reducing long working hours.

In addition, the Council of Safety and Health of Construction for Tokyo 2020 Olympics and Paralympics Games, established by Japan Ministry of Health, Labour and Welfare, monitored the implementation of health and safety measures and showed the safety of Japanese construction work by disseminating information on health and safety measures during the construction of facilities for the Games.

Temporary venues and overlays

Temporary venues and overlays are being developed by Tokyo 2020. As these venues will only be used during the Games and will be removed after the Games, we took sustainability into consideration when procuring materials and goods required for their development by renting and leasing them wherever possible.

As of March 2020, all preliminary (basic) designs are complete. We are now finalising designs and constructing the temporary venues and overlays in preparation for the Games. Tokyo 2020 is committed to ensuring sustainability from construction to removal. To this end, the contracts signed with contractors include a clause that requires all contractors to consider sustainability not only during the construction process but also when maintaining, managing, dismantling and removing structures.

Main temporary venues

Ariake Gymnastics Centre

(Ariake Gymnastics Centre)

- ○ Sports:
  - Olympic Games: Gymnastics
  - Paralympics: Boccia
- ○ Completed: 25 October 2019 (contracted construction period)
- ○ Location: 1-10-1 Ariake, Koto City, Tokyo
- ○ Area: 96,433.50m^2 (at time of Tokyo 2020 Games)
- ○ Legacy use:
  - Will be used as an exhibition venue by TGM for about 10 years

Image of Ariake Urban Sports Park at a design phase

(Ariake Urban Sports Park)

- ○ Sports:
  - Olympic Games: Cycling (BMX Freestyle, BMX Racing), Skateboarding
- ○ Completed: Revising completion date according to postponement of the Games
- ○ Location: 1-7, 1-8, and 1-13 Ariake, Koto City, Tokyo
- ○ Area: 101,632m^2

Image of Odaiba Marine Park at a design phase

(Odaiba Marine Park)

- ○ Sports:
  - Olympic Games: Aquatics (Marathon Swimming), Triathlon
  - Paralympic Games: Triathlon
- ○ Completed: Revising completion date according to postponement of the Games
- ○ Location: 1-chome, Daiba, Minato City, Tokyo
- ○ Area: Land areas: 75,400m^2, water area: 435,000m^2

Image of Shiokaze Park at a design phase

(Shiokaze Park)

○ Sports:

- Olympic Games: Volleyball (Beach Volleyball)

○ Completed: Revising completion date according to postponement of the Games

○ Location: 1-2 Higashiyashio, Shinagawa City, Tokyo

○ Area: 153,747m^2

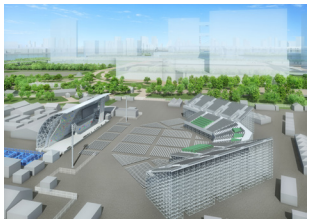


Image of Aomi Urban Sports Park at a design phase

(Aomi Urban Sports Park)

○ Sports:

- Olympic Games: Basketball (3x3 Basketball), Sport Climbing
- Paralympic Games: Football 5-a-side

○ Completed: Revising completion date according to postponement of the Games

○ Location: 1-1 Aomi, Koto City, Tokyo

○ Area: 61,747m^2

Image of Sea Forest Cross-Country Course at a design phase

(Sea Forest Cross-Country Course)

○ Sports:

- Olympic Games: Equestrian (Eventing: Cross-Country)

○ Completed: Revising completion date according to postponement of the Games

○ Location: 3-chome, Aomi, Koto City, Tokyo

○ Area: 556,200m^2

Asaka Shooting Range

(Asaka Shooting Range)

○ Sports:

- Olympic Games: Shooting
- Paralympic Games: Shooting

○ Completed: Revising completion date according to postponement of the Games

○ Location: Niizuka, Niiza City, Saitama

○ Area: Approximately 140,000m^2

Image of Tsurigasaki Surfing Beach at a design phase

(Tsurigasaki Surfing Beach)

○ Sports:

- Olympic Games: Surfing

○ Completed: Revising completion date according to postponement of the Games

○ Location: Ichinomiya-machi, Chosei-gun, Chiba

○ Area: Approximately 174,000m^2

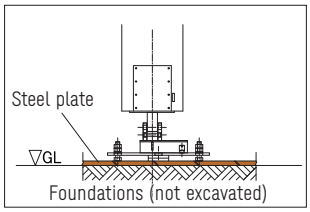
(1) Resource circulation during sourcing and removal

Rental and leasing

Tents, prefabricated units and security fences were rented or leased for the duration of work on temporary venues and overlays. In principle eco-friendly goods are purchased when Tokyo 2020 purchases materials and equipment that are difficult to rent or lease, and goods are reused and recycled wherever possible.

Major items for rental and lease

Tent with aluminium frames	Temporary spectator seats
Modular housing/prefabricated structures	Packaged air conditioners
Modular toilets (including multifunctional restrooms)	Power generators
Containers	Fuel Tanks
Steel fences (more than 2 meters high)	



foundation formats without excavation work

(2) Optimisation of resource procurement through value engineering

Tokyo 2020 implemented value engineering to meet the conditions and functions required of each venue and to reduce overall costs by analysing the materials and equipment used to build the temporary venues and overlays. Taking the time to carefully examine purchases in this way both reduced the volume of materials sourced and the amount of waste generated.

Specifically, we made every effort to reduce the burden of construction, ground changes and soil generated by construction work by avoiding foundation formats (such as steel plate foundations) that involve excavation work when putting up tents, prefabricated units and security fences and by not burying temporary cables and water supply and drainage pipes.

We factored post-use into our sourcing in addition to reducing expenditure by unifying standards and renting, leasing or purchasing materials and equipment necessary for construction work in bulk.

Temporary water supply and drainage system

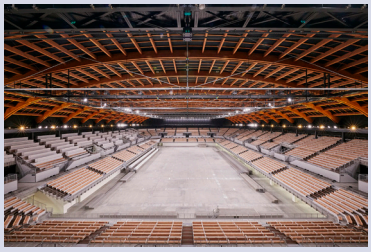
(3) Energy-saving

At Ariake Gymnastics Centre, from the outset consideration was given to the environment through the use of energy-saving and low-environmental impact materials and equipment. The centre acquired the highest rank S under CASBEE for Short-Term Use, which evaluates the overall quality of a building, including indoor comfort and landscape considerations.

Case Study CASBEE Short-Term Use certification

After the Games TMG plans to use Ariake Gymnastics Centre, one of the large temporary venues that will host gymnastics events during the Olympic Games and boccia events during the Paralympic Games, as an exhibition hall for 10 years. This plan made it possible for the venue to acquire CASBEE for Short-Term Use certification during a detailed design stage assessment. CASBEE for Short-Term Use is a comprehensive certification of the environmental performance of temporary buildings intended for short-term use, and the centre is one of the first buildings in Japan to have been awarded it.

CASBEE evaluated the centre's high environmental performance such as using large quantities of timber from sustainable forests in the frame and interior, using highly effective heat insulation and recycled water in the construction and planting trees taking the surroundings into consideration with an eye for future use as an exhibition hall.



(4) Chemical substances

We are working to minimise the use of materials containing fluorocarbon, pigments containing lead and hexavalent chromium and paint containing volatile organic compound (VOC) in accordance with the TMG's Policy for Procurement of Eco-Friendly Goods and Services (Public Works).

(5) Air environment

During construction, we are working to reduce exhaust gases and noise by using equipment that produces minimal exhaust gases and generates little noise, and by striving to stop unnecessary idling.

(6) Aquatic environment

The Ariake Gymnastics Centre uses recycled water (service water volume of 18.5m^3 per day after the Games) and water-saving toilets and similar facilities in accordance with the TMG's Outline of Promotion of Water Utilisation.

(7) Biodiversity

Tokyo 2020 considered the impact development work would have on the surrounding environment when selecting locations for venues. We worked to minimise the need to remove or relocate trees and other vegetation on planned sites, and took existing green areas into consideration by transplanting trees on the same site and planting new trees. We intend to return any relocated trees in their original location after the Games.

At Ariake Gymnastics Centre, we have secured green spaces on the site of the building that will be used after the Games, which meet the greening standards required in the ordinance for planned sites.

(8) Accessibility

When developing facilities, we did its utmost to follow the standards recommended in the Tokyo 2020 Accessibility Guidelines, including imposing consideration based on the guidelines in contracts with contractors.

(9) Labour and fair business practices

Tokyo 2020 implemented a number of occupational health and safety initiatives for workers at contractors and suppliers who work on the construction of the venues.

There are often multiple layers of contractors and subcontractors for construction companies which tends to create a working environment in which health and safety issues are overlooked. To overcome this, we implemented risk assessments and health and safety training uniformly to all contractors and subcontractors in cooperation with management and labour. We worked together with contractors to create a safe and secure workplace that motivates workers by thoroughly managing health, providing toilets and changing rooms for female workers, and reducing long working hours.

Eight sustainability perspectives

- Low energy, low CO_2 buildings
- 3Rs, waste reduction
- Sourcing of eco-friendly goods
- Natural environment / biodiversity
- Air, soil, water, noise & vibration measures
- Heat management
- Ensuring accessibility of buildings
- Health and safety at a construction site

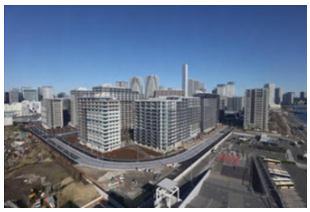
Case Study　Monitoring sustainability during venue development

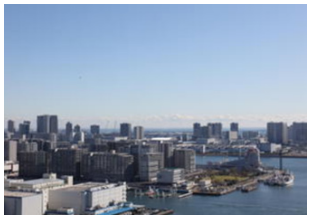
Tokyo 2020 created a list of items and initiatives that should be considered beforehand as a venue developer, to avoid and reduce whenever possible sustainability risks when building temporary venues and overlays, and monitored the progress.

Specifically, at each stage when completing detailed designs, when commencing and completing work before the Games and when completing work after the Games, contractors record the details of implementation in the checklist about eight sustainability initiatives including CO_2 emission reduction, improved energy efficiency, measures for reduce, reuse and recycling, and waste reduction. We check the record and actual status.

Through such initiatives Tokyo 2020, architects and builders of venues and delivery partners are all working together to maximise sustainability when developing temporary venues and overlays.

The Olympic/Paralympic Village





Olympic/Paralympic Village under construction (as of Nov. 2019)
© TMG

The Olympic/Paralympic Village is made up of a residential zone, the Village Plaza, and a management zone.

Private developers are responsible for developing residential blocks, commercial buildings and outdoor facility such as open spaces in line with a type 1 urban redevelopment project plan established by TMG. These facilities will be used to accommodate athletes during the Tokyo 2020 Games.

Overview of the Olympic/Paralympic Village

- ○ Location: 4-chome & 5-chome, Harumi, Chuo City, Tokyo
- ○ Area: Approximately 440,000m^2
- ○ Structures: Residential zone, Village Plaza, management zone

Case Study　City planning in the Olympic/Paralympic Village

Thinking ahead to use after the Games, TMG is developing the Olympic/Paralympic Village and surrounding area based on the following three concepts.

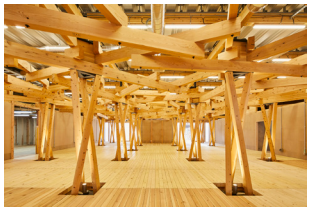
a) A place for diverse groups of people to interact and live comfortably

b) A place with water and greenery where residents can feel relaxed and at ease

c) An environmentally sustainable place that uses new technology

After the Games, the area will be a model for the realisation of a hydrogen society with a hydrogen station to supply buses and other vehicles with fuel cells. On a practical level, it will be the first example in Japan of hydrogen being supplied to residential districts. In addition, TMG aims to make the whole residential blocks in the Olympic/Paralympic Village a model for an environmentally advanced city after the Games through initiatives such as introducing an energy management system, achieving five per cent or more energy reduction rate (ERR) across the entire equipment network, acquiring low-carbon building certification and installing fuel cells and solar panels.

TMG will provide a variety of housing units suitable for foreigners and the elderly, including privately-owned and leased accommodation, and build commercial facilities, nursery schools and other facilities that vitalise the area and make life comfortable. It will be an environment that includes uniform sign and barrier-free designs to help the elderly and foreigners move about easily, landscapes using water and greenery and sea embankments to ensure residents' safety.



Village Plaza

(1) Operation BATON: Building Athletes' village with Timber Of the Nation

In July 2017, Tokyo 2020 launched Operation BATON: Building Athletes' village with Timber Of the Nation, a project to construct the Village Plaza using Japanese timber and to then use the timber in various parts of Japan as a legacy for the Games.

The Village Plaza is the pinnacle of the Olympic/Paralympic Village and will be seen by many people through the media. It will support athletes during the Games, and will be visited by authorised Olympic and Paralympic family members and the media.

The Village Plaza is a temporary venue built using timber loaned for free by local governments throughout Japan. After the Games, the timber will be dismantled for use by local governments as a legacy in their public facilities. Borrowed timber is required to meet the standards laid out in the Sustainable Sourcing Code established by Tokyo 2020, such as being timber that has acquired third-party certification. We consider resource circulation such as local governments reusing the timber after the Games to reduce the burden on the environment and achieve sustainability.

(2) Promoting the 3Rs at accommodation facilities

Residential blocks developed by private developers will be used temporarily as accommodation at the Olympic/Paralympic Village. Private developers will build the basic frame (skeleton) of residential blocks and Tokyo 2020 will add the interior to the skeleton for the Games. After the Games, Tokyo 2020 will remove the interior work and return the blocks to their skeleton form so that the private developers can finish their building work and sell the blocks as new housing.

Specifications for interior materials and equipment such as water heaters added for the Games will differ from the specifications required when selling new housing. It is expected to take two or three years to finish the new housing, during which time equipment will likely deteriorate and be difficult to use. To overcome this, TMG is considering reusing such equipment in other public facilities. To further promote the 3Rs, TMG and Tokyo 2020 are examining ideas it has solicited on how to use as commemorative items, or reuse equipment and interior materials such as water heaters, air conditioners and prefabricated bathrooms.

(3) Human rights, labour and fair business practices

The Olympic/Paralympic Village has been carefully designed to be user-friendly for all athletes and staff involved in the Tokyo 2020 Games, based on the Tokyo 2020 Accessibility Guidelines.

Specifically, Tokyo 2020 took accessibility into consideration, including installing multifunctional restrooms for use by both men and women in shared facilities, and levelling out footpaths to make use of existing roads in bus departure and arrival zones. We will also use buses suitable for wheelchair users, pictograms or multilingual signs for athletes and staff, and set up multi-faith spaces where athletes can pray. We worked to ensure appropriate labour practices when developing temporary facilities in the Olympic/Paralympic Village.

(4) The Olympic/Paralympic Village district energy project

Following the Games, the Olympic/Paralympic Village will become a model for an advanced environmental city, aiming to achieve both self-reliance in the event of disaster and a pleasant and eco-friendly environment through the adoption of new technologies.

TMG completed its Olympic/Paralympic Village District Energy Development Plan in FY2016 and recruited private developers to implement the work in FY2017.

These companies are developing hydrogen station facilities, hydrogen pipelines and pure hydrogen fuel cells, and after the Games the developers plans to supply hydrogen to vehicles and pure hydrogen fuel cells in each district. Work on the hydrogen pipeline

commenced at the end of FY 2017.

During the Games, TMG will conduct a project to showcase a model pioneering the use of hydrogen energy and raise public interest. For details, see Section 4.1 "Climate Change" (*page 56*).

Residential blocks

During the Games, Tokyo 2020 plans to temporarily use residential blocks under development by private developers as part of an urban redevelopment project by TMG, to provide accommodation for athletes in the Olympic/Paralympic Village in Harumi, Chuo City, Tokyo. Following the Games, the residential blocks will be sold along with additional high-rise blocks scheduled for construction.

Thinking ahead to city planning after the Games, a range of environmentally friendly initiatives are being pursued, including actively planting trees, installing energy-saving systems and reusing rainwater. Thanks to these efforts, associated facilities earned certification under four environmental standards in November 2018: CASBEE-UD (Rank S), which makes a comprehensive evaluation of the quality of buildings, including energy savings and landscape considerations; LEED ND (Gold), which evaluates area development from the standpoint of energy savings and environmental friendliness; SITES, which evaluates sustainable city planning including such considerations as open spaces and green spaces; and ABINC Advance, which evaluates biodiversity conservation initiatives.

(1) Climate change considerations in designs

The thermal impact of buildings is reduced by using insulation in walls and roofs and installing balconies to shield windows from direct sunlight (districts 5-3, 5-4, 5-5 and 5-6).

(2) Resource saving and waste generation controls

Any construction waste generated is being reused wherever possible after separated and collected. Soil generated by construction work during excavation is being used for refilling and in embankments at some venues.

(3) Reuse and recycling

TMG is asking private developers engaged in construction work to cooperate with the proactive use of eco-friendly goods based on the TMG's Construction Recycling Guidelines (for Private Business).

(4) Effective use of water resources

Rainwater storage tanks (150m² capacity in each district) are being installed as disaster preparedness facilities based on the Chuo Ward Basic Town Planning Ordinance (districts 5-3, 5-4, 5-5 and 5-6).

(5) Soil

Soil contamination surveys is conducted in areas suspected of being contaminated given the land use history, to confirm no soil contamination. Appropriate measures are to be taken to prevent the spread of any soil contamination found during construction work for steadily moving forward with the development of facilities.

(6) Greening

A 40 per cent greening ratio has been secured in each district. In addition to ground-level greening covering approximately 36,700m² developed in town districts that include commercial buildings, approximately 840m² of rooftop greening is implemented in order to create green open spaces where everyone can relax by installing playground and health equipment. These open green spaces have been created to take advantage of their water-front location by considering harmony and continuation with existing parks and the surrounding sea.

(7) Natural environment and Biodiversity

New flora and fauna growing and habitat environments are created by planting trees, shrubs and ground cover in open spaces.

(8) Landscaping

A new landmark near the coast and a unified townscape have been designed by planning the building layout and design considering the entire coastal landscape formation.

(9) Accessibility

TMG designed the Olympic/Paralympic Village with the aim of exceeding the accessibility standards in the Tokyo 2020 Accessibility Guidelines formulated by the Tokyo 2020.

(10) Labour and fair business practices

TMG is implementing a number of occupational health and safety initiatives for workers at contractors and suppliers who work on the construction of the venues.

There are often multiple layers of contractors and subcontractors for construction companies which tends to create a working environment in which health and safety issues are overlooked. To overcome this, TMG has implemented risk assessments and health and safety training uniformly to all contractors and subcontractors in cooperation with management and labour. TMG has created a safe and secure workplace that motivates workers by thoroughly managing health, providing toilets and changing rooms for female workers, and reducing long working hours.

Case Study Sustainability in the Olympic/Paralympic Village

1. Efficient facility development using permanent facilities

Tokyo 2020 adopted a thorough approach to sustainability when designing and constructing facilities. We used building frames for accommodation facilities in the Olympic/Paralympic Village that will be retained and used in permanent residences to be sold or leased by a private developer after the Games. Tokyo 2020 undertook interior construction work to prepare the buildings for the Games and promoted the 3Rs (Reduce, Reuse, Recycle) for additional facilities.

Other temporary facilities include the Olympic/Paralympic Main Dining and the Village Plaza. We will use existing facilities as far as possible in addition to the development of temporary buildings.

2. Adoption of recyclable cardboard fixtures

Tokyo 2020 made efficient use of resources by using fixtures made from recycled cardboard (approximately for 10,000 doors, etc.) in the partition walls of rooms in the accommodation facilities in the Olympic/Paralympic Village.

Case Study Health and safety measures in Games facilities works

As part of the Tokyo 2020 Games facilities works, Japan Ministry of Health, Labour and Welfare is hosting the Council of Safety and Health of Construction for Tokyo 2020 Olympics and Paralympics Games from 25 January 2016 to embed a culture of preventing work-related accidents by promoting safer and user friendlier working environments.

The council functions as a valuable place for relevant government offices, contractor organisations and labour unions to collaborate closely to improve health and safety measures to combat construction work risks at Games facilities from each of their standpoints.

The council has been held seven times. During councils participants report on and share details of measures being taken at each construction site to prevent work-related accidents and manage health, and the incidence of any accidents.

https://www.mhlw.go.jp/stf/shingi/other-roudou_324808.html (Japanese)

Tsukiji Transportation Depot under construction (as of February 2020)

Transportation depots

At the Tokyo 2020 Games, a number of transportation depots and vehicle waiting areas are being developed to provide transportation services to athletes and staff.

The transportation depots will include canteens and rest areas as necessary, in addition to having space to park vehicles and facilities to manage driver attendance.

When planning, TMG and Tokyo 2020 focused on developing land TMG owns and strove to reduce development costs and the impact on the environment by using, wherever possible, its stock of TMG-owned car parks and existing facilities. With regard to transportation depots and vehicle waiting areas developed on TMG-owned land, once TMG finishes pavements and other levelling work, Tokyo 2020 will develop and maintain management facilities for the Games and shall remove such facilities and restore the land after the Games.

As with the construction of venue overlays, we actively engaged in sustainability initiatives during these developments. Every effort was made to reduce the scale of facilities and procurement needs by carefully examining the number of staff and parking areas at the design stage. We also promoted renting or lease of prefabricated units, tents and security fences than purchasing during the development stage, and strove to find ways to reuse items after the Games when purchasing materials and equipment was unavoidable.

Main transportation depots

(Tsukiji Transportation Depot)

- ○ Function: Parking, operation and management of buses and vehicles (fleet) for athletes and staff, driver attendance management, vehicle maintenance, refuelling and washing of buses
- ○ Location: 5-2-1 Tsukiji, Chuo City, Tokyo and other locations
- ○ Area: 15.3ha

(Wakasu Transportation Depot)

- ○ Function: Parking, operation and management of buses for media, driver attendance management, vehicle maintenance, refuelling and washing of buses
- ○ Location: 1-1-9 Wakasu, Koto City, Tokyo and other locations
- ○ Area: 7.1ha

Case Study　Sustainability at the Tsukiji Transportation Depot

After the former Tsukiji market buildings were dismantled, raising, paving and other levelling work was necessary to develop the Tsukiji Transportation Depot. Therefore, concrete blocks from the dismantled buildings were crushed on-site and used as recycled crushed stones in embankment materials.

When sourcing bus washing machines, Tokyo 2020 did its utmost by purchasing and reusing second-hand facilities from private bus operators.

Second-hand car wash equipment

6

Preparations for Games Operations

6. Preparations for Games Operations

Transport services and travel demand management

(1) Transport services

As a rule, athletes and other people involved in the Olympic and Paralympic Games Tokyo 2020 will be transported by bus or car. The routes to be taken by these vehicles have been set taking into account the impact on activities in the city.

Spectators are expected to make full use of Tokyo's highly reliable, high-density public transport system, including the rail network. Routes between competition venues and stations likely to be used by spectators during the Games are designated as spectator transit routes. Shuttle buses will also operate to some of the venues from nearby stations.

(2) Travel Demand Management (TDM)

TDM is a strategy to reduce road traffic congestion by encouraging people to use cars efficiently or use public transport instead of cars, and manage transportation demand including the rail network and other public transport systems.

In August 2018, Tokyo 2020 Organising Committee, the Tokyo Metropolitan Government and the Government of Japan launched 2020 TDM Promotion Project to promote efforts to reduce traffic congestion during the Tokyo 2020 Games. This project encourages companies and industry associations to prepare to avoid congestion during the Games, such as allowing employees to commute at staggered times or work from home, or changing the timings of logistics deliveries.

We have also been providing reference information to help companies plan TDM measures, such as maps showing the impact of the Games on transport.

Volunteers

A total of over 120,000 Games volunteers and city volunteers will help to deliver the Tokyo 2020 Games.

Games volunteers had been recruited* by Tokyo 2020 to act as the face of the Games, directly assisting with running the Games by providing spectator services, events operational support and media support at competition venues, the Olympic/Paralympic Village and other facilities used for the Games.

* See "c. For Games volunteers" (*page 123*) for details of recruitment of Games volunteers.

City volunteers had been recruited by the host city, Tokyo Metropolitan Government, and other local governments hosting competition venues. They will act as the face of the host areas, welcoming spectators from Japan and abroad by providing help and advice at airports, major stations and tourist attractions.

These Games volunteers and city volunteers have been given the nicknames "Field Cast*" and "City Cast" respectively. These names were voted for by the volunteer candidates themselves. The word "Cast" expresses the desire for each volunteer to play a vital role in making the Games a success.

* The name Field Cast refers to the Games staff including Tokyo 2020 Organising Committee members and contractors as well as Games volunteers.

Uniforms

The Tokyo 2020 Games uniforms* will be worn by a total of over 120,000 Games staff and city volunteers. These uniforms were designed to be comfortable for people of all ages, genders and nationalities, taking sustainability, diversity and summer heat into consideration.

* Uniforms are mentioned on the following pages: "Climate Change" (*page 63*), "Resource Management" (*page 79*), "Human Rights" (*page 126*) and "Torch Relay" (*page 215*).

Uniform for Games staff (called Field Cast)

Uniform for city volunteers (called City Cast)

(1) Sustainability

The uniforms are made of materials containing recycled polyester and plant-based materials. Some of the items are supplied in environmentally-friendly packaging, such as materials that absorb CO_2 when incinerated.

(2) Diversity

The uniforms have a unisex design and are available in a range of sizes, making them suitable for Games staff and city volunteers of all ages, genders and nationalities. The polo shirts feature snap fasteners for easy dressing.

(3) Heat-related measures

The uniforms have undergone a series of prototype testing under the same conditions as the Tokyo 2020 Games. The materials and construction are absorbent, quick-drying and breathable, to keep staff and volunteers comfortable in the hot and humid conditions of the Japanese summer.

The uniform designs for the Games staff (nickname: Field Cast) and city volunteers (nickname: City Cast) use the same Games colour (indigo blue) to create a sense of unity. For the first time in the history of the Games, the uniform design incorporates both the Olympic and Paralympic logos.

Ticket sales

(1) Ticket sales strategy

A total of around 10.1 million tickets (target figure from the Candidature File) are being sold for the Olympic and Paralympic Games Tokyo 2020. The ticket sales strategy, pricing and ticket types have been determined through discussions with different stakeholders such as ticketing and marketing experts, related government offices and sports organisations. We have held promotional events as well as a campaign encouraging people to sign up for the TOKYO 2020 ID, which is required to purchase tickets from the official website.

(2) Different types of tickets

In addition to general tickets, we have set a wide range of prices and various seating types to enable a diverse range of people to watch the Games at the venues regardless of age or impairment.

a. TOKYO 2020 Group Tickets

Group tickets were sold to enable families or groups with children, senior citizens or people with impairments* to view events at the venues. The price was set at JPY 2,020, with the figure taken from the year 2020, for events such as the Opening and Closing Ceremonies and qualifying sessions.

* Families or groups with one or more children aged 12 and under, senior citizens aged 60 and over or persons with impairments (including wheelchair users).

b. Tickets for wheelchair users and companions

Tickets for wheelchair users and companions, in seats with improved access and visibility, were made available for all competition sessions including the Opening and Closing Ceremonies.

c. Tickets for schools programme

Special tickets will be available through a programme for schools, providing opportunities for the next generation to watch the Olympic and Paralympic Games at the venues. A total of over one million tickets will be available to students of elementary schools, junior and senior high schools and special needs schools all over Japan.

School group spectators at previous Games

(3) Ticket sales performance

Tickets for the Olympic Games have been available since spring 2019, while tickets for the Paralympic Games have been available since summer 2019. Some 3.22 million tickets have already been sold (as of July 2019).

Tickets will continue to be available on the Official Ticket Website and will be sold at Official Ticket Box Offices in Tokyo and near the competition venues.

This section contains statements that assume that the Tokyo 2020 Games will be held in 2020.

Torch Relay

(1) Torch Relay overview

The concept of the Tokyo 2020 Olympic Torch Relay is "Hope Lights Our Way". The Olympic flame will travel around all 47 prefectures of Japan.

The concept of the Tokyo 2020 Paralympic Torch Relay is "Share Your Light". It will take place during the transition period between the Olympic Games and the Paralympic Games Opening Ceremony, in order to carry over the momentum and excitement of the Olympics to the Paralympics.

Olympic torch

(2) Torch Relay Convoy

The vehicles used in the Torch Relay Convoy that will travel around Japan will be hybrid electric vehicles wherever possible, to reduce CO_2 emissions.

(3) Torches

The torches for the Tokyo 2020 Torch Relay include recycled aluminium construction waste from temporary housing built in the aftermath of the 2011 earthquake and tsunami in Japan (recycled aluminium content: approximately 30 per cent). Certain segments of the Tokyo 2020 Olympic Torch Relay in Fukushima, Aichi, and Tokyo will also use torches fueled by hydrogen.

The weight and grip of the torches have been designed to be easy for diverse torchbearers to hold. A transparent raised marker on the handle will help visually impaired torchbearers identify the front of the torch (the side showing the emblem).

Olympic torchbearer uniform

(4) Torchbearer uniforms

The torchbearer uniforms for the Olympic and Paralympic Torch Relays both have a unisex design.

The Olympic torchbearers' uniform uses material from recycled plastic bottles.

Paralympic torchbearer uniform

(5) Torchbearers

a. Olympic torchbearers

As we aim for an open and inclusive touch relay, torchbearers will be selected from a wide range of the general public to represent a balance in terms of nationality, ability, gender and age.

Olympic torchbearers were recruited by the four Olympic Torch Relay Presenting Partners and Prefecture Task Forces, and we received 535,717 applications in total for approximately 10,000 torchbearers.

b. Paralympic torchbearers

As we hope for an inclusive touch relay, torchbearers will be selected from a wide range of the general public. As a rule, Paralympic torchbearers will run in teams of three people who have not met before to encourage them to accept and respect differences of each other in nationality, ability, gender and age.

Opening ceremony and closing ceremony

Tokyo 2020 Organising Committee is currently working to prepare for the Olympic and Paralympic opening and closing ceremonies. In December 2017, we adopted the basic policy for the ceremonies, providing the broad outlines of the vision that Japan and Tokyo will present to the world.

The basic policy is composed of eight concepts that take into account the perspective of sustainability: peace, coexistence, reconstruction, future, Japan and Tokyo, athletes, involvement and excitement.

From the Olympic opening ceremony to the Paralympic closing ceremony, we are approaching the four ceremonies to be held as a cohesive, four-part whole, and are studying how we can maintain the uniqueness of each event as we give them an overriding sense of consistency and continuity.

The Olympic and Paralympic cauldron will be installed in Olympic Stadium for use during the Opening and Closing Ceremonies, which will use hydrogen to fuel the flame of the cauldron for the first time in the history of the Games.

Food and beverage services

Tokyo 2020 formulated and publicised the Basic Strategy for Food and Beverage Services in March 2018. The aim of the services is to provide food and beverages to support participating athletes maintain their condition and deliver their best performance. To this end, we will engage in the following initiatives relating to Japanese food industry in the run up to the Games, while also propelling further development of each initiative after the Games.

1. Improve the capacity of large-scale food and beverage services from the stage of production and distribution. This is done by considering all factors concerning food and beverage service provision, including food hygiene, nutrition and sustainability during the Games.
2. Take series of well-considered measures to prevent food poisoning since the Tokyo 2020 Games will be held in midsummer. Also promote other advanced measures such as making the Games' food safety and hygiene standards cover international standards.
3. In terms of sustainability, encourage providers to obtain international certification systems and other equivalent measures to enhance the credibility already established within the process of food provision from production through consumption. Also, promote environmental measures to control food waste.
4. Leverage the Tokyo 2020 Games as an opportunity for Japanese people to rediscover and disseminate our own appealing food culture. We will keep in mind the diverse food cultures around the world and seek to provide hospitality with Japanese food in a way that is acceptable to people from countries other than Japan.

Furthermore, as an attempt to encourage the public to get involved in making the Tokyo 2020 Games truly special, we invited people to suggest ideas for Japanese dishes served to athletes as part of the casual dining menu in the Olympic/Paralympic Village. The campaign, which ran from August to September 2019, attracted many entries. We will announce the winning menus on the Tokyo 2020 official website later.

Look of the Games

Tokyo 2020 will create a comprehensive Look of the Games programme (i.e. a one consistent and cohesive visual presentation of the Games in venues and in the host city and other cities in Japan hosting events of the Games).

As part of the process, we prepared in August 2018 core graphics, a design base for the Look of the Games at venues and at the host city, which serve to differentiate the Tokyo 2020 Games from other world events, representing the distinctive features of the Games. It also serves to convey the message of the Games and represent the culture and people of the host city.

We are currently in a process of planning how to implement the programme in venues. This includes addressing sustainability issues such as choice of materials for the decorations under Look of the Games programme that can be reused, repurposed or recycled after the Games.

7

Handing Down the Legacy

7. Handing Down the Legacy

The legacy of the Tokyo 2020 Games will consist of long-term tangible and intangible assets and benefits derived from hosting the Olympic and Paralympic Games in Tokyo. This legacy goes beyond the sphere of the Olympic and Paralympic Movements to include impacts on people's lives through sports and indeed on an array of different spheres of activity, including residents' lives, society, cities, and the economy. In a word, our legacy embodies the Tokyo 2020 Games Vision.

This legacy is inseparable from sustainability. Delivering the Tokyo 2020 Games in a sustainable manner will require processes and mechanisms, such as plans and policies, designed to achieve that goal. There are also operational techniques for handing down our legacy to future generations. Taking sustainability seriously helps us maximise the benefits of our legacy, which is made possible precisely by the robust and sustainable foundation on which the Games is delivered.

The Tokyo Metropolitan Government (TMG) announced its bid for the 2020 Olympic and Paralympic Games in July 2011, and Tokyo was chosen as the host city in September 2013. Since the announcement of that bid, there have been significant changes in how Japan and the rest of the world approach sustainability.

The London 2012 Games included sustainability initiatives in its vision and adopted the theme "One Planet Living" to guide its efforts to ensure sustainability through initiatives such as reducing greenhouse gas emissions, delivering zero waste to landfill Games, and implementing sustainable procurement by making sustainability one of the core considerations in every aspect of the Games, from construction and other preparations to operations.

In December 2014, the IOC adopted Olympic Agenda 2020, which made sustainability an even more important part of the Olympic Games by addressing the IOC's sustainability initiatives with "Recommendation 4: Include sustainability in all aspects of the Olympic Games" and "Recommendation 5: Include sustainability within the Olympic Movement's daily operations."

Then in September 2015, the United Nations General Assembly adopted the 2030 Agenda for Sustainable Development, which outlines 17 Sustainable Development Goals (SDGs) and 169 targets. These goals and targets comprise an integrated and indivisible whole that harmonises the three aspects of sustainable development: the environment, society and economy. Together, they cover a broad range of topics, including poverty, hunger, well-being, education, gender, water, energy, labour, infrastructure, inequality, cities, consumption and production, climate change, the oceans, biodiversity, peace and fairness, and global partnership.

It was against this backdrop of changes in the international approach to sustainability that the Tokyo Organising Committee of the Olympic and Paralympic Games (Tokyo 2020) formulated the Sustainability Plan, coming together to pursue sustainability initiatives at the Tokyo 2020 Games. At the same time, we developed the Sustainable Sourcing Code to introduce not only environmental, but also human rights, labour and other considerations

into the procurement process. The expectation is that private companies and public sectors will refer to the Code and eventually make the concept of sustainable sourcing widespread even after the Tokyo 2020 Games.

Tokyo 2020 Organising Committee > Sustainability Plan:

https://tokyo2020.org/en/games/sustainability/sus-plan/

Tokyo 2020 Organising Committee > Sustainable Sourcing Code:

https://tokyo2020.org/en/games/sustainability/sus-code/

In addition, Tokyo 2020 formulated its Action & Legacy Plan in July 2016 to implement the Tokyo 2020 Games Vision of "Sport has the power to change the world and our future." The plan defines five core areas—Sport and Health, Urban Planning and Sustainability, Culture and Education, Economy and Technology, and Recovery, Nationwide Benefits and Global Communication—in which to pursue actions to implement our legacy for the future through partnerships with a diverse range of stakeholders. To produce this legacy, a host of actions are being undertaken in the run-up to the Games.

Tokyo 2020 Organising Committee > Action & Legacy Plan:

https://tokyo2020.org/en/games/legacy/

These actions are being conducted under the framework of the Tokyo 2020 Nationwide Participation Programme, which was launched in autumn 2016 and scheduled to expand in the run-up to the Games. We expect the initiatives under the Programme to be carried out by a variety of stakeholders and handed down as legacy of the Games.

Tokyo 2020 Nationwide Participation Programme (as of January 2020)

Number of authorised groups	2,352
Number of registered actions	approx. 143,000
Number of action participants	approx. 98,760,000

One example is the "Tokyo 2020 Medal Project: Towards an Innovative Future for All", which sought to manufacture the gold, silver, and bronze medals that will be given to athletes from used mobile phones and small appliances. The project had the potential to be a legacy by encouraging Japanese citizens to get involved and take action to build a sustainable society, and by raising awareness in Japan and around the world on the importance of a circular economy. After the project ended, Tokyo 2020 is still spreading the word on the significance and achievements of this initiative.

As a legacy of this project, Japan Ministry of the Environment launched the After Medals Project in April 2019 in collaboration with local governments and authorised recycling businesses for small consumer electronics. The new project carries on the work of collecting and recycling devices and other small consumer electronics all over Japan, which was initiated for the Tokyo 2020 Games, by providing support to local governments who collect these electronic devices and holding recycling promotion events.

We aim to make a positive impact in many fields not only in Tokyo, but also throughout Japan, in Asia and around the world. Making the Tokyo 2020 Games a success and accomplishing this goal will require undertaking a great number of actions in a variety of fields not only from the Tokyo 2020 but also from a variety of stakeholders, including the Government of Japan, the TMG and other local public entitles, sports organisations such as the Japanese Olympic Committee (JOC) and the Japanese Paralympic Committee (JPC), and economic groups and other types of organisations, united in the spirit of "All Japan".

For more information about Action & Legacy initiatives for the Tokyo 2020 Games, see the Action & Legacy page of the Tokyo 2020's website.

Tokyo 2020 Organising Committee > Action & Legacy:

https://tokyo2020.org/en/games/legacy/

We will evaluate and report on the impact of the Games through the Sustainability Report and through new initiatives designed to assess the legacy of the Games (under the Legacy Reporting Framework). We also plan to summarise the legacy as the result embodied by these actions in the form of a future Legacy Report.

Appendices

GRI Content Index (also, List of Material Topics) (reference for 1.3 "About the Reports")

This report has been prepared in accordance with the GRI Standards: Core option.

The table below lists all the GRI disclosures of the GRI Standards: Core option as well as the material topics identified by Tokyo 2020 and indicates where information can be found in the present report or in other publicly available information sources.

GRI Standard	Disclosure	Page number(s) and/or URL(s); Reason of omission
GRI 101: GRI Foundation 2016		
General Disclosures: Core option		
GRI 102: General Disclosures 2016	102-1: Name of the organization	Page 13
	102-2: Activities, brands, products, and services	Tokyo 2020 Olympic and Paralympic Games Sustainability Plan Version 2, pages 6-11; Tokyo 2020 Games Foundation Plan, pages 1-29; https://tokyo2020.org/en/games/plan/
	102-3: Location of headquarters	Pages 13, 238
	102-4: Location of operations	Pages 13, 238
	102-5: Ownership and legal form	Page 13
	102-6: Markets served	Not applicable (GRI disclosures for this topic are not relevant to Tokyo 2020's activities)
	102-7: Scale of the organization	Employees: Pages 26-30 Operations: Page 238 Budgets: https://tokyo2020.org/en/news/notice/20181221-02.html https://tokyo2020.org/en/games/budgets/ Products/services: https://tokyo2020.org/en/games/
	102-8: Information on employees and other workers	Pages 26-30, 241-242
	102-9: Supply chain	Pages 167-183; https://tokyo2020.org/en/organisingcommittee/procurement/
	102-10: Significant changes to the organization and its supply chain	Not applicable (GRI disclosures for this topic are not relevant to Tokyo 2020's activities)
	102-11: Precautionary Principle or approach	Pages 264-275
	102-12: External initiatives	Page 237
	102-13: Membership of associations	Page 237
	102-14: Statement from senior decision-maker	Pages 7-9
	102-16: Values, principles, standards, and norms of behavior	Tokyo 2020 Games Foundation Plan, pages 1-15

GRI Standard	Disclosure	Page number(s) and/or URL(s); Reason of omission
GRI 102: General Disclosures 2016	102-18: Governance structure	Tokyo 2020: https://tokyo2020.org/en/organising-committee/structure/ Sustainability: https://tokyo2020.org/jp/games/sustainability/sus-group/discussion/ (in Japanese)
	102-40: List of stakeholder group	Page 236
	102-41: Collective bargaining agreements	Page 242
	102-42: Identifying and selecting stakeholders	Pages 17-19, 236
	102-43: Approach to stakeholder engagement	Pages 17-19, 34-35
	102-44: Key topics and concerns raised	Minutes of Tokyo 2020's commissions (partially): https://tokyo2020.org/jp/organising-committee/structure/ (in Japanese) Minutes of Tokyo 2020's discussion groups and working groups on sustainability: https://tokyo2020.org/jp/games/sustainability/sus-group/ (in Japanese) Status of the reports received in the grievance mechanism for the Sustainable Sourcing Code, response to stakeholder opinions: Pages 177-178, 181-182, 253-255; https://tokyo2020.org/en/games/sustainability/sus-code
	102-45: Entities included in the consolidated financial statements	Not applicable (GRI disclosures for this topic are not relevant to Tokyo 2020's activities)
	102-46: Defining report content and topic Boundaries	Pages 15-24
	102-47: List of material topics	Pages 223-234
	102-48: Restatements of information	Pages 15-17
	102-49: Changes in reporting	Not applicable (no significant changes)
	102-50: Reporting period	Pages 15-17
	102-51: Date of most recent report	Pages 15-17
	102-52: Reporting cycle	Pages 15-17
	102-53: Contact point for questions regarding the report	Page 6
	102-54: Claims of reporting in accordance with the GRI Standards	Page 16
	102-55: GRI content index	Pages 223-234
	102-56: External assurance	Page 15

GRI Standard	Disclosure	Page number(s) and/or URL(s); Reason of omission
Material topics		
Economic Performance		
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundaries	https://tokyo2020.org/en/games/budgets/
	103-2: The management approach and its components	https://tokyo2020.org/en/games/budgets/
	103-3: Evaluation of the management approach	https://tokyo2020.org/en/games/budgets/
GRI 201: Economic Performance 2016	201-1: Direct economic value generated and distributed	https://tokyo2020.org/en/games/budgets/
	201-2: Financial implications and other risks and opportunities due to climate change	Not applicable (GRI disclosures for this topic are not relevant to Tokyo 2020's activities)
	201-4: Financial assistance received from government	https://tokyo2020.org/en/games/budgets/
Market Presence		
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundaries	Pages 20-24, 223-234
	103-2: The management approach and its components	Pages 20-24, 31-36, 223-234
	103-3: Evaluation of the management approach	Pages 20-24, 31-36, 223-234
GRI 202: Market Presence 2016	202-1: Ratios of standard entry level wage by gender compared to local minimum wage	Not applicable (GRI disclosures for this topic are not relevant to Tokyo 2020's activities)
	202-2: Proportion of senior management hired from the local community	Not applicable (GRI disclosures for this topic are not relevant to Tokyo 2020's activities)
Indirect Economic Impacts / Legacy		
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundaries	Pages 20-24, 218-221
	103-2: The management approach and its components	Pages 20-24, 31-36, 218-221
	103-3: Evaluation of the management approach	Pages 20-24, 31-36, 218-221
GRI 203: Indirect Economic Impacts 2016	203-1: Infrastructure investments and services supported	Pages 184-210, 218-221
	203-2: Significant indirect economic impacts	Pages 184-210, 218-221

GRI Standard	Disclosure	Page number(s) and/or URL(s); Reason of omission
	Maximising Olympic legacy	Pages 218-221
	Location and credentials of venues	Pages 184-210; Tokyo 2020 Olympic and Paralympic Games Sustainability Plan Version 2, pages 101-133
	Location and credentials of accommodation	Pages 205-209
	Venue development	Pages 184-210
	Innovation	Pages 218-221
Procurement Practices		
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundaries	Pages 24, 167-183
	103-2: The management approach and its components	Pages 31-36, 167-183
	103-3: Evaluation of the management approach	Pages 31-36, 167-183
GRI 204: Procurement Practices 2016	204-1: Proportion of spending on local suppliers	Information unavailable (not yet compiled)
	Sustainable sourcing	Pages 167-183
Anti-corruption		
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundaries	Pages 23, 115, 118-120
	103-2: The management approach and its components	Pages 31-36, 115-120, 141-142
	103-3: Evaluation of the management approach	Pages 31-36, 115-120, 141-142
GRI 205: Anti-corruption 2016	205-1: Operations assessed for risks related to corruption	Not applicable (Tokyo 2020 is a public interest incorporated foundation that is required a highly refined sense of ethics throughout its operations. Tokyo 2020 staffs are deemed as public officers)
	205-2: Communication and training about anti-corruption policies and procedures	Pages 141-143
	205-3: Confirmed incidents of corruption and actions taken	Not applicable (no reported cases)
Anti-competitive Behavior		
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundaries	Pages 23, 115, 118-120
	103-2: The management approach and its components	Pages 31-36, 118-120, 141-142

GRI Standard	Disclosure	Page number(s) and/or URL(s); Reason of omission
GRI 103: Management Approach 2016	103-3: Evaluation of the management approach	Pages 31-36, 118-120, 141-142
GRI 206: Anti-competitive Behavior 2016	206-1: Legal actions for anticompetitive behavior, anti-trust, and monopoly practices	Not applicable (no reported cases)
Resource utilization / Efficient use of materials		
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundaries	Pages 22, 69-86
	103-2: The management approach and its components	Pages 31-36, 69-86, 245-251
	103-3: Evaluation of the management approach	Pages 31-36, 69-86, 245-251
GRI 301: Materials 2016	301-1: Materials used by weight or volume	Information unavailable (available after the Games)
	301-2: Recycled input materials used	Information unavailable (available after the Games)
	301-3: Reclaimed products and their packaging materials	Information unavailable (available after the Games)
	Reduction of the edible part of food waste	Page 72
	Reduction of packaging materials	Page 72
	Reuse and recycling	Pages 72-86
Energy		
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundaries	Pages 22, 38-68
	103-2: The management approach and its components	Pages 31-36, 38-68, 243-244
	103-3: Evaluation of the management approach	Pages 31-36, 38-68, 243-244
GRI 302: Energy 2016	302-1: Energy consumption within the organization	Information unavailable (information of energy procured by Tokyo 2020 is available after the Games)
	302-2: Energy consumption outside of the organization	Information unavailable (Tokyo 2020 does not procure such energy)
	302-3: Energy intensity	Information unavailable (available after the Games)
	302-4: Reduction of energy consumption	Pages 38-68, 184-210, 243-244

GRI Standard	Disclosure	Page number(s) and/or URL(s); Reason of omission
GRI 302: Energy 2016	302-5: Reduction in energy requirements of products and services	Pages 167-183, 243-244
	Transport with low environmental load	Pages 57-60, 212
Water		
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundaries	Pages 23, 87-113, 167-183, 184-210, 264-275
	103-2: The management approach and its components	Pages 31-36, 87-113, 167-183, 184-210, 264-275
	103-3: Evaluation of the management approach	Pages 31-36, 87-113, 167-183, 184-210, 264-275
GRI 303: Water 2016	303-1: Water withdrawal by source	Not applicable (GRI disclosures for this topic are not relevant to Tokyo 2020's activities)
	303-2: Water sources significantly affected by withdrawal of water	Not applicable (GRI disclosures for this topic are not relevant to Tokyo 2020's activities)
	303-3: Water recycled and reused	Page 263
	Water circulation in the city	Pages 99-101
Biodiversity / Animal Welfare		
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundaries	Pages 23, 87-113, 167-183, 184-210, 264-275
	103-2: The management approach and its components	Pages 31-36, 87-113, 167-183, 184-210, 264-275
	103-3: Evaluation of the management approach	Pages 31-36, 87-113, 167-183, 184-210, 264-275
GRI 304: Biodiversity 2016	304-1: Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Pages 89-91, 94, 96-101
	304-2: Significant impacts of activities, products, and services on biodiversity	Pages 20-24, 38-68, 87-113, 167-183, 184-210, 264-275
	304-3: Habitats protected or restored	Pages 86-113, 184-210, 264-275
	304-4: IUCN Red List species and national conservation list species with habitats in areas affected by operations	Pages 264-275

GRI Standard	Disclosure	Page number(s) and/or URL(s); Reason of omission
	Greening	Pages 89-91, 94, 96-101, 262-263
	Resource consumption to conserve biodiversity	Pages 70-86, 167-183
	Animal welfare	Information unavailable (information is not of adequate quality to report)
Emissions / Climate Change		
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundaries	Pages 22, 38-68
	103-2: The management approach and its components	Pages 31-36, 38-68
	103-3: Evaluation of the management approach	Pages 31-36, 38-68
GRI 305: Emissions 2016	305-1: Direct (Scope 1) GHG emissions	Pages 38-68, 243-244
	305-2: Energy indirect (Scope 2) GHG emissions	Pages 38-68, 243-244
	305-3: Other indirect (Scope 3) GHG emissions	Pages 38-68, 243-244
	305-4: GHG emissions intensity	Pages 38-68, 243-244
	305-5: Reduction of GHG emissions	Pages 38-68, 243-244
	305-6: Emissions of ozone-depleting substances (ODS)	Not applicable (GRI disclosures for this topic are not relevant to Tokyo 2020's activities)
	305-7: Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	Information unavailable (available after the Games through environmental assessment)
	Carbon offset	Pages 65-68
	CO_2 reduction by citizens	Page 67
	Heat management	Pages 67, 102-113
Effluents and Waste		
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundaries	Pages 22, 87-113, 167-183, 184-210, 264-275
	103-2: The management approach and its components	Pages 31-36, 87-113, 167-183, 184-210, 264-275
	103-3: Evaluation of the management approach	Pages 31-36, 87-113, 167-183, 184-210, 264-275

GRI Standard	Disclosure	Page number(s) and/or URL(s); Reason of omission
GRI 306: Effluents and Waste 2016	306-1: Water discharge by quality and destination	Information unavailable (available after the Games)
	306-2: Waste by type and disposal method	Information unavailable (available after the Games)
	306-3: Significant spills	Information unavailable (available after the Games)
	306-4: Transport of hazardous waste	Not applicable (GRI disclosures for this topic are not relevant to Tokyo 2020's activities)
	306-5: Water bodies affected by water discharges and/or runoff	Pages 87-113, 167-183, 184-210, 264-275
Environmental Compliance		
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundaries	Pages 20-24, 38-113, 167-183, 184-210, 264-275
	103-2: The management approach and its components	Pages 31-36, 38-113, 167-183, 184-210, 264-275
	103-3: Evaluation of the management approach	Pages 31-36, 38-113, 167-183, 184-210, 264-275
GRI 307: Environmental Compliance 2016	307-1: Non-compliance with environmental laws and regulations	Not applicable (no reported cases)
Supplier Environmental Assessment		
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundaries	Pages 20-24, 167-183, 264-275
	103-2: The management approach and its components	Pages 31-36, 167-183, 264-275
	103-3: Evaluation of the management approach	Pages 31-36, 167-183, 264-275
GRI 308: Supplier Environmental Assessment 2016	308-1: New suppliers that were screened using environmental criteria	Pages 167-183
	308-2: Negative environmental impacts in the supply chain and actions taken	Pages 167-183
Employment		
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundaries	Pages 23, 114-143
	103-2: The management approach and its components	Pages 31-36, 114-143
	103-3: Evaluation of the management approach	Pages 31-36, 114-143

GRI Standard	Disclosure	Page number(s) and/or URL(s); Reason of omission
GRI 401: Employment 2016	401-1: New employee hires and employee turnover	Pages 26-27, 241-242
	401-2: Benefits provided to full-time employees that are not provided to temporary or part-time employees	Not applicable (Tokyo 2020's staff breakdown has characteristics that differ from other, more standard organizations). Refer to pages 26-27 (staff breakdown).
	401-3: Parental leave	Pages 139-143
	Diverse personnel	Pages 115-130, 139-143, 241-242
Occupational Health and Safety		
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundaries	Pages 23, 114-143, 167-183, 184-210
	103-2: The management approach and its components	Pages 31-36, 114-143, 167-183, 184-210
	103-3: Evaluation of the management approach	Pages 31-36, 114-143, 167-183, 184-210
GRI 403: Occupational Health and Safety 2016	403-1: Workers representation in formal joint management-worker health and safety committees	Page 242
	403-2: Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	Not applicable/not reported (GRI disclosures for this topic are not relevant to Tokyo 2020's activities)
	403-3: Workers with high incidence or high risk of diseases related to their occupation	Not applicable (GRI disclosures for this topic are not relevant to Tokyo 2020's activities)
	403-4: Health and safety topics covered in formal agreements with trade unions	Page 242
	Working and activity environment	Pages 139-143
	Occupational health and safety in facility works	Pages 190-210
Training and Education		
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundaries	Pages 20-24, 114-143, 144-166
	103-2: The management approach and its components	Pages 31-36, 114-143, 144-166
	103-3: Evaluation of the management approach	Pages 31-36, 114-143, 144-166

GRI Standard	Disclosure	Page number(s) and/or URL(s); Reason of omission
GRI 404: Training and Education 2016	404-1: Average hours of training per year per employee	Information unavailable (not yet compiled due to Tokyo 2020's characteristics that differ from other, more standard organizations)
	404-2: Programs for upgrading employee skills and transition assistance programs	Pages 27, 120-125, 144-166
	404-3: Percentage of employees receiving regular performance and career development reviews	Pages 27, 241-242
Diversity and Equal Opportunity / Accessibility / Consideration for cultural and religious issues		
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundaries	Pages 20-24, 114-143, 144-166
	103-2: The management approach and its components	Pages 31-36, 114-143, 144-166
	103-3: Evaluation of the management approach	Pages 31-36, 114-143, 144-166
GRI 405: Diversity and Equal Opportunity 2016	405-1: Diversity of governance bodies and employees	Pages 241-242
	405-2: Ratio of basic salary and remuneration of women to men	Not applicable (no institutional gender bias against opportunity) / Information unavailable (Tokyo 2020's staff breakdown has characteristics that differ from other, more standard organizations)
	D&I policy and programmes	Pages 120-130, 209-217
	Accessibility	Pages 131-135
	Diverse personnel	Pages 120-130
	Consideration for cultural issues	Pages 120-130
	Consideration for religious issues	Pages 120-130
	Ticketing	Pages 134, 214
Human rights / Non-discrimination / Freedom of media, expression and assembly / Workers' right / Grievance mechanism		
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundaries	Pages 20-24, 114-143, 167-183
	103-2: The management approach and its components	Pages 31-36, 114-143, 167-183
	103-3: Evaluation of the management approach	Pages 31-36, 114-143, 167-183
GRI 406: Non-discrimination 2016	406-1: Incidents of discrimination and corrective actions taken	Page 242

GRI Standard	Disclosure	Page number(s) and/or URL(s); Reason of omission
	Freedom of media, expression and assembly	Pages 135-136
	Workers' right	Pages 136-138
	Grievance mechanism	Pages 142-143, 167-183
Child Labor		
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundaries	Pages 20-24, 114-143, 167-183
	103-2: The management approach and its components	Pages 31-36, 114-143, 167-183
	103-3: Evaluation of the management approach	Pages 31-36, 114-143, 167-183
GRI 408: Child Labor 2016	408-1: Operations and suppliers at significant risk for incidents of child labor	Pages 167-183
Forced or Compulsory Labor		
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundaries	Pages 20-24, 114-143, 167-183
	103-2: The management approach and its components	Pages 31-36, 114-143, 167-183
	103-3: Evaluation of the management approach	Pages 31-36, 114-143, 167-183
GRI 409: Forced or Compulsory Labor 2016	409-1: Operations and suppliers at significant risk for incidents of forced or compulsory labor	Pages 167-183
Security Practices		
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundaries	Pages 20-24, 114-143
	103-2: The management approach and its components	Pages 31-36, 114-143
	103-3: Evaluation of the management approach	Pages 31-36, 114-143
GRI 410: Security Practices 2016	410-1: Security personnel trained in human rights policies or procedures	Not applicable (No security personnel during the reporting period)
Transport and logistics		
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundaries	Pages 20-24, 38-68, 209-210, 212

GRI Standard	Disclosure	Page number(s) and/or URL(s); Reason of omission
GRI 103: Management Approach 2016	103-2: The management approach and its components	Pages 21-22, 38-68, 209-210, 212
	103-3: Evaluation of the management approach	Pages 21-22, 38-68, 209-210, 212
	Transport and logistics	Pages 38-68, 209-210, 212
Consumer practices / Product liability / Safe and hygienic food and beverage		
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundaries	Tokyo 2020 Games Foundation Plan
	103-2: The management approach and its components	Tokyo 2020 Games Foundation Plan
	103-3: Evaluation of the management approach	Tokyo 2020 Games Foundation Plan
	Consumer practices	https://tokyo2020.org/en/organising-committee/marketing/ https://tokyo2020.org/jp/organising-committee/marketing/licensing/ (in Japanese)
	Product liability	https://tokyo2020.org/en/organising-committee/marketing/ https://tokyo2020.org/jp/organising-committee/marketing/licensing/ (in Japanese)
	Safe and hygienic food and beverage	Page 216; https://tokyo2020.org/en/games/food/
Communication / Involvement and cooperation		
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundaries	Pages 20-24, 144-166
	103-2: The management approach and its components	Pages 31-36, 144-166
	103-3: Evaluation of the management approach	Pages 31-36, 144-166
	Communication	Pages 144-166
	Involvement and cooperation	Pages 144-166

United Nations Global Compact Content Index (reference for 1.3 "About the Reports")

Tokyo 2020 participated in the United Nations Global Compact (UNGC) in July 2018. This index shows relevant pages of this report on Tokyo 2020 sustainability actions in line with the UNGC Principles.

GC Principles			Sustainability Pre-Games Report
Human Rights	Principle 1	Businesses should support and respect the protection of internationally proclaimed human rights.	・4.4 (pages 114-143) ・4.6 (pages 167-183)
	Principle 2	Businesses should make sure that they are not complicit in human rights abuses.	・4.4 (pages 114-143) ・4.6 (pages 167-183)
Labour	Principle 3	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	・4.4:Securing workers' rights (pages 136-138) ・4.6 (pages 167-183)
	Principle 4	Businesses should uphold the elimination of all forms of forced and compulsory labour.	・4.4:Securing workers' rights (pages 136-138) ・4.6 (pages 167-183)
	Principle 5	Businesses should uphold the effective abolition of child labour.	・4.4:Securing workers' rights (pages 136-138) ・4.6 (pages 167-183)
	Principle 6	Businesses should uphold the elimination of discrimination in respect of employment and occupation.	・4.4:Diversity and inclusion (D&I) (pages 120-130), Securing workers' rights (pages 136-138), Good labour practices (pages 139-141) ・4.6 (pages 167-183)
Environment	Principle 7	Businesses should support a precautionary approach to environmental challenges.	・4.1 (pages 38-68) ・4.2 (pages 69-86) ・4.3 (pages 87-113) ・4.6 (pages 167-183) ・5 (pages 184-210) ・6 (pages 211-217)
	Principle 8	Businesses should undertake initiatives to promote greater environmental responsibility.	・3.2 (pages 31-36) ・4.1 (pages 38-68) ・4.2 (pages 69-86) ・4.3 (pages 87-113) ・4.6 (pages 167-183) ・5 (pages 184-210) ・6 (pages 211-217)
	Principle 9	Businesses should encourage the development and diffusion of environmentally friendly technologies.	・4.1 (pages 38-68) ・4.2 (pages 69-86) ・4.3 (pages 87-113) ・4.6 (pages 167-183) ・5 (pages 184-210) ・6 (pages 211-217)
Anti-Corruption	Principle 10	Businesses should work against corruption in all its forms, including extortion and bribery.	・4.4:Ensuring fair business practices (page 141) ・4.6 (pages 167-183)

List of Stakeholder Groups (reference for 1.3 "About the Reports")

International Federations (IFs)
Olympic & Paralympic Families and Dignitaries
Workforce
Sponsors
Olympic Broadcasting Services (OBS) and Rights Holding Broadcasters (RHBs)
Press
Suppliers and Licensees
Athletes, National Olympic Committees (NOCs) and National Paralympic Committees (NPCs)
Spectators
National government (including Japan Sport Council (JSC))
Local governments (including Tokyo Metropolitan Government (TMG) and Related local municipalities)
Regulatory Bodies
Local communities
Non-profitable organisations and non-governmental organisations
Experts
Venue Owners (excluding TMG, JSC, related local municipalities)

External Initiatives / Membership of Associations (reference for 1.2 "The Organising Committee and Other Relevant Organisations")

International/ Japan	External initiatives	Date of subscription	URL
International	Centre for Sport and Human Rights	26 June 2018	https://www.sporthumanrights.org/
	United Nations Global Compact	5 July 2018	https://www.unglobalcompact.org/
	United Nations Climate Change "Sports for Climate Action Framework"	3 December 2018	https://unfccc.int/climate-action/sectoral-engagement/sports-forclimate-action
Japan	Tokyo 2020 Games Joint Declaration on Elimination of Boryokudan (gang)	29 March 2016	http://www.keishicho.metro.tokyo.jp/kurashi/anzen/tsuiho/haijyosengen.html (in Japanese) https://tokyo2020.org/jp/news/notice/20160329-01.html (in Japanese)
	Global Compact Network Japan	5 July 2018	http://www.ungcjn.org/gcjn/index.html (in Japanese)

Offices (reference for 1.2 "The Organising Committee and Other Relevant Organisations")

Period	Location of principal office	Location of other offices	Number of office locations
January 2014 -	Nishi-Shinjuku, Shinjuku-ku, Tokyo (c/o Tokyo Metropolitan Government Office)		1
June 2014 -		Nishi-Shinjuku, Shinjuku-ku, Tokyo	2
April 2015 -	Toranomon, Minato-ku, Tokyo	Nishi-Shinjuku, Shinjuku-ku, Tokyo (c/o TMG Office)	2
July 2016 -		Nishi-Shinjuku, Shinjuku-ku, Tokyo (c/o TMG Office) Nishi-Shinjuku, Shinjuku-ku, Tokyo Akasaka, Minato-ku, Tokyo	4
March 2018 -		Nishi-Shinjuku, Shinjuku-ku, Tokyo (c/o TMG Office) Nishi-Shinjuku, Shinjuku-ku, Tokyo Akasaka, Minato-ku, Tokyo Harumi, Chuo-ku, Tokyo	5
April 2019 -	Harumi, Chuo-ku, Tokyo * Most office function of Tokyo 2020 was integrated into Harumi.	Nishi-Shinjuku, Shinjuku-ku, Tokyo (c/o TMG Office) * Toranomon Office partially remained until the end of 2019.	2

List of Functional Areas (FAs) (reference for 3.1 "Tokyo 2020: Organisational Structures")

Functional Area (FA) List		
	English	Abbreviation
1	Accommodation	ACM
2	Accreditation	ACR
3	Arrivals & Departures	AND
4	Brand Protection	BRP
5	Brand, Identity & Look of the Games	BIL
6	Broadcast Services	BRS
7	Business Development	BUS
8	Ceremonies	CER
9	City Activities & Live Sites	LIV
10	City Operations	CTY
11	Cleaning & Waste	CNW
12	Communications (including Digital Media and Publications)	COM
13	Communications, Coordination & Command/Control	CCC
14	Culture	CUL
15	Doping Control	DOP
16	Education	EDU
17	Energy	NRG
18	Event Services	EVS
19	Finance	FIN
20	Food & Beverage	FNB
21	Government Relations	GOV
22	IF Services (included under Sport)	INS
23	Information & Knowledge Management	IKM
24	Language Services	LAN
25	Legacy	LGY
26	Legal	LGL
27	Licensing	LIC
28	Logistics	LOG
29	Marketing Partner Services	MPS
30	Medical Services	MED
31	NOC & NPC Services	NCS

Functional Area (FA) List		
	English	Abbreviation
32	Olympic & Paralympic Family Services (including Dignitary Programme and Protocol)	OFS, PFS, DIP, PRT
33	Operational Readiness	OPR
34	Paralympic Games Integration	PGI
35	People Management	PEM
36	Planning & Coordination	PNC
37	Press Operations	PRS
38	Procurement (including Rate Card)	PRC, RTC
39	Risk Management	RSK
40	Security	SEC
41	Signage	SIG
42	Spectator Experience	SPX
43	Sport	SPT
44	Sustainability	SUS
45	Technology	TEC
46	Test Events Management	TEM
47	Ticketing	TKT
48	Torch Relay	OTR
49	Transport	TRA
50	Venue Management	VEM
51	Venues & Infrastructure (including Venue Development and General Infrastructure)	VNI
52	Villages Management	VIL

Employment & Diversity (reference for 3.1 "Tokyo 2020: Organisational Structures")

Data and information on employment and diversity presented in the table below are summarised as of 1 January 2020.

(1) Employees per employment contract (secondment, direct employment), secondment organisation

Secondment	Government of Japan	70	2%
	Tokyo Metropolitan Government	995	30.2%
	Regional/local governments	509	15.5%
	Private entities	835	25%
Direct employment		882	26.8%
Total		**3,291**	**100%**

(2) Employees per gender, age group, employment contract

	Secondment (Government of Japan, Tokyo Metropolitan Government, regional/local governments, private entities)			Direct employment (Executive Board Members, direct employment, temporary staff)			Total		
	Men	Women	Sub total	Men	Women	Sub total	Men Total	Women Total	Total
Under 30	191	101	292	29	62	91	220	163	383
30 - 49	1,209	366	1,575	168	249	417	1,377	615	1,992
50 - 59	329	62	391	69	49	118	398	111	509
60 and over	54	5	59	78	11	89	132	16	148
Unknown	64	28	92	29	138	167	93	166	259
Total	1,847	562	2,409	373	509	882	2,220	1,071	3,291

(3) Employees per gender, age group, position level

	Special position officers			Management level directors (Executive Director, Senior Director, Director)			Special position officers and management level directors		
	Men	Women	Sub total	Men	Women	Sub total	Men Total	Women Total	Total
Under 30	0	0	0	1	1	2	1	1	2
30 - 49	0	0	0	350	72	422	350	72	422
50 - 59	2	0	2	271	44	315	273	44	317
60 and over	13	0	13	76	8	84	89	8	97
Unknown	0	0	0	55	13	68	55	13	68
Total	15	0	15	753	138	891	768	138	906

(4) Employees covered by collective bargaining agreements

	Number of employees	Ratio to total employees (3,291 persons)	
Employees covered by "36 Employee-Employer Agreement" on overtime work: non-management level employees	2,385	72.5%	Assigned representatives of employees sign the agreement.
On Salary and remuneration: direct contract employees	514	15.6%	No workers' union in Tokyo 2020.

(5) Ethnicity

Diverse staffs from variety of region/country are working in Tokyo 2020.

(6) Disability

Tokyo 2020 satisfies the 2.2% legal rate of employment for the disabled.

(7) Occupational safety and health committee

Tokyo 2020 had formed an occupational safety and health committee in each office area with a membership consisting of representatives of employees and managers from all organisations in that area* before most office function of Tokyo 2020 was integrated into Harumi. The committees meet monthly (by law).

* Formerly: Minato-ku area, Shinjuku-ku area, and Chuo-ku area. Currently: integrated into Chuo-ku area.

(8) Review of performance and career development

Tokyo 2020 has put in place a programme that each subordinate and his/her supervisor undergo together a personal interview to review performance and career development at the beginning, in the middle, and at the end of each fiscal year.

(9) Incidents of discrimination and corrective actions taken

We have a procedure for the management of situations involving conflict and/or harassment. In the event of a persistent conflict situation or if the employee wishes to have access to an external solution, recourse to a third party is possible.

Tokyo 2020:

No incidents (2019)

Other Games-related organisations*:

*An incident in other organisations involved in the Tokyo 2020 Games is not in the scope of our responsibility of management, but we disclose the information here since it should be related to the preparation and operation of the Games, and draw our stakeholders' attention including medias.

One incident of workplace harassment occurred at a contractor company was reported about a contractor staff engaged in the preparation and operation of the Games. The contractor company investigated the incident, and took disciplinary action in December 2019 as well as publicly reported it. The staff has resigned from the jobs for the Games.

Furniture, Fixtures and Equipment with High Energy Performance (reference for 4.1 "Climate Change")

As of 31 December 2019

Item (size)	Standard	Number of planned units
CFC-free, direct cool refrigerators (45L)	Energy-saving label*1: Three stars	542
Refrigerators (138L)	Energy-saving label: Five stars	1,881
Refrigerators (168L)	Energy-saving label: Five stars	848
Refrigerators (248L)	Energy-saving label: Five stars	28
Microwaves	Level of energy-saving standard achieved*2: 102%	1,085

*1 A label that indicates the relative energy-saving performance of appliances by the number of stars. This label also shows the level of energy-saving standard achieved as well as a yearly electric rate anticipated

*2 A percentage that shows the energy-saving performance of a product relative to that of the most energy-efficient product (top runner) in the market

Other Equipment with High Energy Efficiency (reference for 4.1 "Climate Change")

As of 31 January 2020

Item	Standard	Number of units
Laptops	International ENERGY STAR Program*1	Approx. 7,800
Multifunction machines	International ENERGY STAR Program	Approx. 250

*1 An international energy-saving standard for office equipment. The top 25 per cent of products with outstanding energy-saving performance in power consumption and other factors when in operation, sleep mode or off are considered to be in compliance.

Equipment Using Refrigerants (reference for 4.1 "Climate Change")

As of 31 December 2019

Item (size)	Number of planned units	Refrigerant	Global Warming Potential (GWP)
CFC-free, direct cool refrigerators (45L)	542	R600a	(3)
Refrigerators (168L)	1,881	R600a	(3)
Refrigerators (168L)	848	R600a	(3)
Refrigerators (248L)	28	R600a	(3)
HVACs	Approx. 15,000	R32	(675)
Air cooling cube ice makers (Stack-on type) Capacity: 240kg of cube ice	21	R404A	(3920)
Prefabricated walk-in cooler (24.5m^2, 30.7m^2 x 2)	3	R410a	(2090)

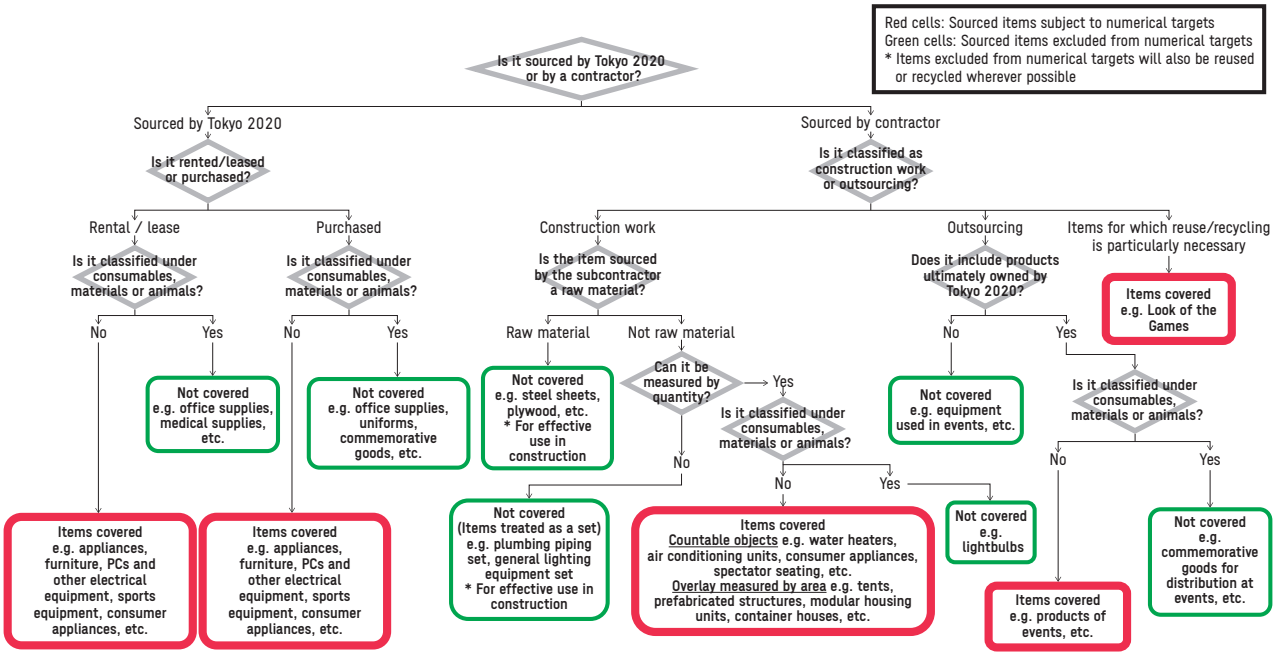
Target of Resource Management (reference for 4.2 "Resource Management")

		Target	
		Input	Output
For people and society	Reduce	1. Reduce edible part of food waste 2. Reduce use of packaging and containers 3. Reduce production of new items by utilising rentals and leases for procurement	
	Reuse	3. Reuse procured items: Utilise rentals and leases, reuse or recycle items after the Games	
	Recycle	4. Use recycled materials 5. Use recycled metal for medals of the Games	6. Reuse or recycle waste generated from operations of the Games 7. Recycle food waste 8. Reuse or recycle construction waste
For the environment		9. Use renewable resources in a sustainable manner (e.g. timber)	10. Reduce waste to landfill and CO_2 emission from waste

Procured Items Subject to Targets for Reuse/Recycling (reference for 4.2 "Resource Management")

This flowchart was used to determine whether each item should be subject to numerical targets for reuse/recycling.

◯**Criteria to determine whether sourced items are subject to numerical targets**



Example of Types of Waste and Ways to Treat Waste (reference for 4.2 "Material Management")

* As of December 2019

Following is the standard example of types of waste. It should be applied after taking into account the specific condition and the estimated waste volume of each venue.

Waste generated at:	Type of waste	Recycling/ disposal
Spectator area	Other plastics	Recycle
	Plastic bottles	
	Paper containers, paper cups	
	Leftover drink	Proper disposal
	Leftover food, tissues, disposable chopsticks, etc.	
Stalls for spectators (kitchen)	Other plastics	Recycle
	Cans, glass bottles	
	Food waste	
	Cardboards, wrapping papers	
	Tissues, disposable chopsticks, etc.	Proper disposal
	Waste cooking oil	
Work force room, first aid room	Other plastics	Recycle
	Plastic bottles	
	Paper containers, paper cups	
	Cans, glass bottles	
	Office papers (3-tier case)/ shredder	
	Newspapers, magazines (3-tier case)	
	Cardboards	
	Tissues, disposable chopsticks, etc.	Proper disposal
	Metal, waste glass	
	Batteries	
	Infectious waste	
Work force resting room, dining	Other plastics	Recycle
	Plastic bottles	
	Paper containers, paper cups	
	Lunch box containers	
	Cans, glass bottles	
	Cardboards	
	Leftover food	
	Leftover drink	Proper disposal
	Tissues, disposable chopsticks, etc.	
	Metal, waste glass	

Waste generated at:	Type of waste	Recycling/ disposal
Press room	Other plastics	Recycle
	Plastic bottles	
	Paper containers, paper cups	
	Cans, glass bottles	
	Food waste	
	Office papers (3-tier case)/ shredder	
	Newspapers, magazines (3-tier case)	
	Cardboards	
	Tissues, disposable chopsticks, etc.	Proper disposal
	Metal, waste glass (cables, etc. rendered useless)	
	Batteries	
Olympic/ Paralympic Village (dining/ cleaning up after meals)	Other plastics	Recycle
	Plastic bottles	
	Paper containers, paper cups	
	Cans, glass bottles	
	Leftover food	
	Leftover drink	Proper disposal
	Tissues, disposable chopsticks, etc.	
Olympic/ Paralympic Village (dining/ kitchen)	Other plastics	Recycle
	Food waste	
	Cardboards, wrapping papers	
	Tissues, disposable chopsticks, etc.	Proper disposal
	Waste cooking oil	
	Metal, waste glass	
Olympic/ Paralympic Village accommodation *Waste other than infectious waste will be sorted by cleaning staff when they collect the waste.	Other plastics	Recycle
	Plastic bottles	
	Paper containers, paper cups	
	Cans, glass bottles	
	Office papers	
	Newspapers, magazines	
	Leftover food, tissues, disposable chopsticks, etc.	Proper disposal
	Metal, waste glass	
	Batteries	
	Infectious waste	

Waste generated at:	Type of waste	Recycling/ disposal
IBC/MPC *For waste that is not categorised in any of the type listed in the right-hand column, discuss with Tokyo 2020 and decide whether to recycle or dispose of the waste properly.	Glass bottles	Recycle
	Cans	
	Plastic bottles	
	Cardboards	
	Office papers (3-tier case)/shredder	
	Newspapers, magazines (3-tier case)	
	Food waste	
	Paper containers, paper cups	
	Other plastics	
	Lunch box containers	
	Batteries	
	Tissues, disposable chopsticks, etc.	Proper disposal
	Metal, waste glass, cables	
	Infectious waste	

The Estimated Amount of Operational Waste (reference for 4.2 "Material Management")

* As of 1 December 2019

Scope: 43 competition venues, Olympic/Paralympic Village and IBC/MPC

Period: 24 June – 6 September 2020 (Approx. 1 month before and after the Games based on the Games delivery plan before the Games was postponed)

This section contains statements that assume that the Tokyo 2020 Games will be held in 2020.

Estimated amount of waste by venue and type of waste (total throughout the Games)

	Venue	Location	Glass bottles	Cans	Plastic bottles	Cardboards	Newspapers, brochures, office papers	Food waste	Paper containers	Other plastics	Lunch box containers	Combustibles	Non-combustibles	Total	Total recycled	Recycling rate
1	Olympic Stadium	Tokyo	609	24,672	191,162	161,840	30,033	34,727	49,943	62,487	7,393	192,153	3,767	758,786	562,866	74.2%
2	Tokyo Metropolitan Gymnasium	Tokyo	366	3,608	23,227	26,453	6,158	8,577	7,478	12,139	2,681	37,420	1,268	129,375	90,687	70.1%
3	Yoyogi National Stadium	Tokyo	132	5,758	30,515	38,986	7,707	11,332	12,006	15,673	3,156	44,563	805	170,633	125,265	73.4%
4	Nippon Budokan	Tokyo	103	2,880	19,574	22,017	6,864	9,620	6,423	10,075	3,328	27,074	570	108,528	80,884	74.5%
5	Sapporo Odori Park	Outside Tokyo	12	235	7,852	3,630	2,646	4,160	878	2,428	1,756	4,625	91	28,313	23,597	83.3%
6	Tokyo International Forum	Tokyo	132	1,723	12,067	13,142	4,007	15,221	3,730	6,243	0	17,465	451	74,181	56,265	75.8%
7	Kokugikan Arena	Tokyo	105	1,836	12,002	13,700	3,875	13,630	3,953	6,195	0	17,560	399	73,255	55,296	75.5%
8	Equestrian Park	Tokyo	314	1,975	30,147	16,286	5,157	7,231	4,268	8,485	2,589	25,571	1,004	103,027	76,452	74.2%
9	Musashino Forest Sport Plaza	Tokyo (Tama)	73	2,540	21,362	19,504	7,028	7,866	5,581	8,863	2,681	25,024	453	100,975	75,498	74.8%
10	Tokyo Stadium	Tokyo (Tama)	40	4,332	38,811	30,992	7,273	11,939	9,533	13,056	3,869	33,787	533	154,165	119,845	77.7%
11	Musashinonomori Park	Tokyo (Tama)	6	85	2,931	1,354	837	0	345	916	0	1,557	32	8,063	6,474	80.3%
12	Ariake Arena	Tokyo	306	9,433	47,593	62,834	9,924	19,048	20,233	24,558	3,455	68,428	1,603	267,415	197,384	73.8%
13	Ariake Gymnastics Centre	Tokyo	162	4,095	25,968	30,172	10,241	10,758	8,652	13,384	3,497	39,420	713	147,062	106,929	72.7%
14	Ariake Urban Sports Park	Tokyo	32	591	9,507	5,098	2,353	3,181	1,385	2,649	1,238	6,602	85	32,721	26,034	79.6%
15	Ariake Tennis Park	Tokyo	138	3,327	52,043	25,445	8,277	11,063	7,321	11,710	3,830	32,046	618	155,818	123,154	79.0%
16	Odaiba Marine Park	Tokyo	26	583	11,660	5,864	3,825	4,515	1,465	3,405	1,823	8,285	99	41,550	33,166	79.8%
17	Shiokaze Park	Tokyo	152	4,247	48,540	29,256	5,969	8,536	8,882	12,061	2,421	34,940	759	155,763	120,064	77.1%
18	Aomi Urban Sports Park	Tokyo	70	2,637	32,989	19,291	5,139	7,728	5,755	8,418	2,608	22,509	432	107,576	84,635	78.7%
19	Oi Hockey Stadium	Tokyo	112	3,798	32,435	26,190	5,266	8,598	8,020	10,907	2,600	30,217	655	128,798	97,926	76.0%
20	Sea Forest Cross-Country Course	Tokyo	4	244	6,778	3,207	1,920	3,583	843	2,045	1,516	3,538	60	23,738	20,140	84.8%
21	Sea Forest Waterway	Tokyo	241	2,681	38,705	21,453	8,474	8,810	5,732	10,511	3,064	31,944	814	132,429	99,671	75.3%
22	Kasai Canoe Slalom Centre	Tokyo	24	593	11,156	5,307	2,513	3,937	1,436	2,844	1,462	6,584	94	35,950	29,272	81.4%
23	Yumenoshima Park Archery Field	Tokyo	68	1,756	25,030	13,985	5,268	6,782	3,961	6,716	2,437	17,935	364	84,302	66,003	78.3%
24	Tokyo Aquatics Centre	Tokyo	450	7,657	44,305	53,608	15,372	14,001	15,355	22,886	3,830	73,679	1,619	252,762	177,464	70.2%
25	Tatsumi Water Polo Centre	Tokyo	172	1,793	12,529	13,747	5,586	4,364	3,631	6,504	1,381	21,666	550	71,923	49,707	69.1%
26	Makuhari Messe Hall A	Outside Tokyo	110	3,515	32,134	26,703	5,649	27,316	8,379	17,911	0	28,371	587	150,675	103,806	68.9%
27	Makuhari Messe Hall B	Outside Tokyo	91	2,551	15,684	18,467	4,432	18,345	5,531	12,433	0	21,752	479	99,765	65,101	65.3%
28	Makuhari Messe Hall C	Outside Tokyo	62	1,272	6,861	8,618	1,621	5,298	2,621	5,838	0	10,633	281	43,105	26,353	61.1%
29	Tsurigasaki Surfing Beach	Outside Tokyo	32	944	21,144	10,424	5,049	0	2,912	11,214	0	21,408	195	73,322	40,505	55.2%
30	Saitama Super Arena	Outside Tokyo	335	9,284	45,271	60,492	8,807	0	18,772	43,447	0	84,373	1,659	272,440	142,961	52.5%
31	Asaka Shooting Range	Outside Tokyo	83	865	12,085	7,753	4,185	0	1,577	7,061	0	16,717	230	50,556	26,548	52.5%
32	Kasumigaseki Country Club	Outside Tokyo	32	1,994	27,047	15,349	5,214	0	4,500	12,858	0	25,457	305	92,756	54,136	58.4%
33	Enoshima Yacht Harbour	Outside Tokyo	44	583	10,831	5,529	3,147	0	1,395	5,265	0	12,028	229	39,051	21,529	55.1%
34	Izu Velodrome	Outside Tokyo	47	621	6,737	6,078	3,834	0	1,496	4,094	0	21,419	149	44,475	18,813	42.3%
35	Izu MTB Course	Outside Tokyo	10	545	12,534	6,207	3,172	0	460	6,626	0	14,007	129	43,690	22,928	52.5%
36	Fuji International Speedway	Outside Tokyo	28	1,411	13,926	10,785	2,748	0	3,260	7,211	0	24,330	212	63,911	32,158	50.3%
37	Fukushima Azuma Baseball Stadium	Outside Tokyo	11	864	11,037	7,621	2,895	0	2,236	7,296	0	13,683	136	45,779	24,664	53.9%
38	Yokohama Baseball Stadium	Outside Tokyo	62	6,857	51,944	44,447	5,882	11,302	14,250	32,431	0	46,616	788	214,579	134,744	62.8%
39	Sapporo Dome	Outside Tokyo	5	2,095	20,430	15,714	3,743	0	4,874	13,267	0	23,789	275	84,192	46,861	55.7%
40	Miyagi Stadium	Outside Tokyo	6	2,484	24,205	18,676	4,323	0	5,807	15,722	0	28,080	313	99,616	55,501	55.7%
41	Ibaraki Kashima Stadium	Outside Tokyo	8	3,057	26,654	21,482	4,287	0	6,744	16,991	0	30,508	381	110,112	62,232	56.5%
42	Saitama Stadium	Outside Tokyo	8	4,831	41,298	33,595	5,831	0	10,707	26,415	0	46,443	560	169,688	96,270	56.7%
43	International Stadium Yokohama	Outside Tokyo	88	5,511	48,255	38,898	6,835	15,161	12,239	30,848	0	40,214	671	198,720	126,987	63.9%
44	Olympic/Paralympic Village accommodation	Tokyo	2,526	5,052	26,277	0	0	0	0	20,208	0	65,676	15,156	134,895	54,063	40.1%
45	Olympic/Paralympic Village dining	Tokyo	5,052	15,483	76,137	58,572	19,182	309,042	133,326	111,963	0	97,620	4,506	830,883	728,757	87.7%
46	Olympic/Paralympic Village multi-faith centre	Tokyo	255	8,558	43,394	34,339	16,212	141,551	47,183	59,551	0	58,191	918	410,152	351,043	85.6%
47	Olympic/Paralympic Village NOC/NPC	Tokyo	347	722	3,711	4,288	722	0	0	3,569	0	8,564	570	22,493	13,359	59.4%
48	Olympic/Paralympic Village 4-chome	Tokyo	839	1,651	8,644	9,963	1,651	0	0	8,305	0	19,931	1,332	52,316	31,053	59.4%
49	IBC/MPC	Tokyo	855	1,093	38,365	19,736	64,999	53,216	5,587	13,088	5,293	16,472	1,875	220,579	202,232	91.7%
Total			14,785	174,922	1,413,493	1,147,097	356,132	820,438	490,665	778,770	67,908	1,600,874	49,774	6,914,858	4,984,854	72.1%
			Glass bottles	Cans	Plastic bottles	Cardboards	Newspapers, brochures, office papers	Food waste	Paper containers	Other plastics	Lunch box containers	Combustibles	Non-combustibles	Total	Total recycled	Recycling rate

Competition venue, Olympic/Paralympic Village

	Category	Location	Glass bottles	Cans	Plastic bottles	Cardboards	Newspapers, brochures, office papers	Food waste	Paper containers	Other plastics	Lunch box containers	Combustibles	Non-combustibles	Total	Total recycled	Recycling rate
1	Competition venue	–	4,911	142,363	1,216,965	1,020,199	253,366	316,629	304,569	562,086	62,615	1,334,420	25,417	5,243,540	3,606,775	68.8%
2	Olympic/Paralympic Village	–	9,019	31,466	158,163	107,162	37,767	450,593	180,509	203,596	0	249,982	22,482	1,450,739	1,178,275	81.2%

Venues in Tokyo

	Area	Location	Glass bottles	Cans	Plastic bottles	Cardboards	Newspapers, brochures, office papers	Food waste	Paper containers	Other plastics	Lunch box containers	Combustibles	Non-combustibles	Total	Total recycled	Recycling rate
(1)	23 cities	–	13,592	118,446	914,460	734,779	256,694	719,051	366,568	476,579	59,602	1,026,053	41,086	4,726,910	3,659,771	77.4%
(2)	Tama area	–	119	6,957	63,104	51,850	15,138	19,805	15,459	22,835	6,550	60,368	1,018	263,203	201,817	76.7%
	Venues in Tokyo	–	13,711	125,403	977,564	786,629	271,832	738,856	382,027	499,414	66,152	1,086,421	42,104	4,990,113	3,861,588	77.4%

Venues outside Tokyo

	Area	Location	Glass bottles	Cans	Plastic bottles	Cardboards	Newspapers, brochures, office papers	Food waste	Paper containers	Other plastics	Lunch box containers	Combustibles	Non-combustibles	Total	Total recycled	Recycling rate
1	Venues in other prefectures	–	1,074	49,519	435,929	360,468	84,300	81,582	108,638	279,356	1,756	514,453	7,670	1,924,745	1,125,694	58.5%

Waste Intensity of Operational Waste (reference for 4.2 "Material Management")

* As of 1 December, 2019
* Waste volume per day (Note: Regarding the competition venues, the data of spectators and athletes indicates waste volume per session.)

Competition venue

Waste intensity (g/person)	Spectators	Athletes	OF/PF	Media	WF	Remarks
Glass bottles	0	10	10	0	0	Assumed no provision to spectators, media & WF
Cans	10	4	4	4	4	Average weight: 17g/can; assumed 1 out of every 2 spectators & 1 out of every 5 non-spectators will consume the item
Plastic bottles - gymnasiums	39	104	78	78	78	Following is applied to the estimated number of bottles consumed: weight of 500ml bottle = 24.3g; estimated leftover drink = 1.7g e.g. 2 bottles per spectator - gymnasiums; 5 bottles per athlete - stadiums
Plastic bottles - stadiums	65	130	91	104	104	
Plastic bottles - outdoors/ parks	91	156	104	130	130	
Cardboards	60	60	60	60	60	Packaging materials used for items provided to stakeholders
Wastepaper (newspapers, brochures, office papers)	3	6	10	150	30	Weight of brochures are estimated as follows: 3g for spectators; tenfold for WF; fivefold of WF for media
Food waste	7.5	225	160	160	80	Estimated as follows: 20% of 1 meal weighing 400g for WF; 75% of 1 meal weighing 300g for athletes; the estimated amount of food waste at stalls for spectators
Paper containers*	20	27.5	20	27.5	17	Following is applied to the estimated number of purchasers: 15g for paper cups; 25g for paper plates
Other plastics	40	60	40	40	40	Assumption is based on our survey findings: 40g per person; includes jelly drinks for athletes
Lunch box containers	0	0	0	0	34	Assumed meal will be serviced only to WF, 1 meal per day
Combustibles	60	50	50	50	50	Assumed that spectators will mix food waste with combustibles
Non-combustibles	1	26	1	1	1	Assumed athletes will use spray cans
Total - gymnasiums	240.5	572.5	433	570.5	394	
Total - stadiums	266.5	598.5	446.0	596.5	420.0	
Total - outdoors	293	625	459	623	446	

*OF: Olympic family, PF: Paralympic family, WF: Work force

*Paper containers: if provided to customers.

Olympic/Paralympic Village (dining)

Waste intensity (g/person)	Athletes	OF/PF	Media	WF	Remarks
Glass bottles	10	0	0	0	Same waste intensity as competition venue
Cans	16.3	0	0	15.4	17g/can; assumed 1 out of every 4 athletes & 1 out of every 5 WF will consume the item. Also includes seasoning cans used in kitchen (12g)
Plastic bottles	78	0	0	78	Assumed 3 bottles will be consumed per person
Cardboards	60	0	0	60	Same waste intensity as competition venue
Wastepapers (newspapers, brochures, office papers)	10	0	0	30	Same waste intensity as competition venue for WF; figure for athletes is set as one-third the WF
Food waste	360	0	0	270	Waste volume per day for athletes is based on actual data; WF is estimated at approximately 70% of athletes
Paper containers	180	0	0	90	Assumed 1 paper cup and 3 paper plates will be used per meal; athletes are assumed to consume 2 meals per day
Other plastics	120	0	0	109	Plastic cutlery, seasoning containers and packaging materials are taken into account
Combustibles	100	0	0	100	Assumed twice the waste intensity of competition venue (50g)
Non-combustibles	8	0	0	1	Assumption for athletes is based on our survey (accommodation facilities); same waste intensity as competition venue for WF
Total	942.3	0.0	0.0	753.4	

Olympic/Paralympic Village (accommodation)

Waste intensity (g/person)	Athletes	OF/PF	Media	WF	Remarks
Glass bottles	5	0	0	0	Estimated as half the amount of competition venue
Cans	10.0	0	0	0	Used the waste intensity of spectators in competition venue
Plastic bottles	52	0	0	0	Assumed 2 bottles will be consumed per person
Cardboards	0	0	0	0	-
Wastepapers (newspapers, brochures, office papers)	0	0	0	0	Assumed this item will be mixed into combustibles
Food waste	0	0	0	0	Assumed this item will be mixed into combustibles
Paper containers	0	0	0	0	Assumed this item will be mixed into combustibles
Other plastics	40	0	0	0	Used the waste intensity of spectators in competition venue
Combustibles	130	0	0	0	Assumed food waste will be mixed within
Non-combustibles	30	0	0	0	Used the average of competition venue & Olympic/Paralympic Village dining
Total	267.0	0.0	0.0	0.0	

Olympic/Paralympic Village (others)

Waste intensity (g/person)	Total				Remarks
Glass bottles	5				Estimated as half the amount of competition venue
Cans	10.0				Used the waste intensity of spectators in competition venue
Plastic bottles	52				Assumed 2 bottles will be consumed per person
Cardboards	60				Same waste intensity as competition venue
Wastepapers (newspapers, brochures, office papers)	10				Same waste intensity as Olympic/Paralympic Village dining
Food waste	0				Assumed this item will be mixed into combustibles
Paper containers	0				Assumed this item will be mixed into combustibles
Other plastics	50				Used the waste intensity for Olympic/Paralympic Village accommodation as reference
Combustibles	120				Assumed food waste will be mixed within
Non-combustibles	8				Estimated as one-third the amount of Olympic/Paralympic Village accommodation
Total	315.0				

[IBC/MPC]

Waste intensity (g/person)	Athletes	OF/PF	Media	WF	Remarks
Glass bottles	0	0	5	0	Assumed the item will be provided only to the media
Cans	3.4	3.4	3.4	3.4	17g/can; assumed 1 out of every 5 people will consume the item
PET bottles	26	13	130	104	Assumed 4 bottles will be consumed per person for media & WF; 1 bottle for athletes
Cardboards	60	60	60	60	Used the waste intensity of competition venue
Wastepapers (newspapers, brochures, office papers)	10	10	355	30	Media: office papers 120g + newspaper 200g + magazines & brochures 35g
Food waste	0	0	240	80	Same amount as competition venue for WF; media is estimated as threefold of WF
Paper containers	17	17	17	17	Used the waste intensity of WF in competition venue
Plastics	20	20	40	40	Same amount as competition venue for media & WF; half the amount for athletes & OF/PF
Lunch box containers	0	0	0	34	Assumed meal will be serviced only to WF, 1 meal per day
Combustibles	50	50	50	50	Used the waste intensity for competition venue
Non-combustibles	1	1	10	1	Used the waste intensity for competition venue (spray cans used by athletes are not taken into account); increased the amount for media
Total	187.4	174.4	910.4	419.4	

*All waste intensity show waste volume per day.

Initiatives to Stabilise Water Quality at Odaiba Marine Park (reference for 4.3 "Natural Environment and Biodiversity")

Case Study Water quality and temperature study

Conducted by: the TMG's Bureau of Olympic and Paralympic Games Tokyo 2020 Preparation, Tokyo 2020

Dates: 24 July – 9 August and 25 August – 6 September 2018 (total of 27 days)
* Observations were not made on some days due to typhoon and other weather events.

Location: Odaiba Marine Park (6 locations)

Description: The Tokyo Metropolitan Government and Tokyo 2020 conducted a survey to measure water quality [the number of E. coli, the number of fecal coliform bacteria, the number of enterococci, the pH, COD (chemical oxygen demand), transparency and oil slick] and the water temperature in the area where competitions would actually be held.

Results: With regard to water quality standards, the coliform bacteria count exceeded the standards for respective sports on 12 of the 27 days due to a typhoon that struck the area directly. Water temperature readings from all locations did not exceed the applicable criteria on any days (maximum 30.0°C and average 27.6°C versus a standard of under 31.0°C).

Case Study Underwater screen test

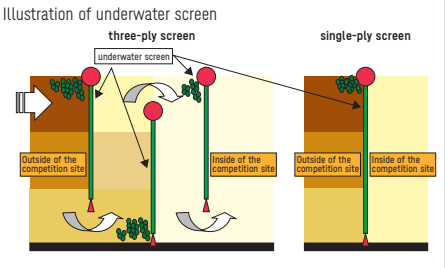
Conducted by: the TMG's Bureau of Olympic and Paralympic Games Tokyo 2020 Preparation, Bureau of Port and Harbour

Dates: 24 July – 9 August and 25 – 31 August 2018 (total of 22 days)
* Observations were not made on some days due to typhoon and other weather events.

Location: Odaiba Marine Park

Description: The TMG conducted trials to verify the effectiveness of underwater screens in preventing the inflow of coliform bacteria and other contaminants (implemented as part of water quality improvement at Tokyo Port). Specifically, three-ply screens and single-ply screens were placed, and their effectiveness in preventing inflow of contaminants was verified by measuring the number of E. coli, the number of fecal coliform bacteria, the number of enterococci, the pH, COD (chemical oxygen demand), transparency, oil slick and water temperature.

Results: The trial indicated that the three-ply screens were effective at preventing the inflow of coliform bacteria, with all water quality indicators inside the partitioned area falling below the predetermined threshold for the duration of the study (22 days). However, indicators of pH, COD, the number of enterococci and transparency exceeded water quality threshold (on some days not affected by the typhoon).
In addition, a sustained period of record-setting heat caused the temperature of water inside the screens to exceed that of water outside the screens by an average of 1°C (maximum of 3.8°C).



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Underwater screen test

Receiving/Processing Reports on Non-compliance with the Sourcing Code

(reference for 4.6 "Sustainable Sourcing")

As of 31 January 2020

No.	Date of reception	Contents of the report	Status
1	2 April 2018	The informant is asking for implementation of joint investigation with trade union representation on an occupational accident that occurred at a construction site.	Upon examination of the report, Tokyo 2020 found that the reported case didn't relate to construction work ordered by Tokyo 2020. Tokyo 2020 decided not to proceed with the process of the grievance mechanism as this report doesn't fall under its scope. Tokyo 2020 explained the informant on the recurrence prevention measures that had been taken at the construction site.
2	2 April 2018	It is claimed that a worker who participated in trade union activities was enforced to retire unfairly at a wood processing plant in Malaysia that manufactures plywood.	Upon examination of the report, Tokyo 2020 found that the reported case didn't relate to wood products used in the construction work ordered by Tokyo 2020, and that the reported case was pending in court in Malaysia. Tokyo 2020 decided not to proceed with the process of the grievance mechanism as this report doesn't fall under its scope.
3	16 October 2018	It is claimed there is a case that could be against "4 (3) ii. Ban on discrimination and harassment" of the Sourcing Code.	Upon examination of the report, Tokyo 2020 found that the reported case didn't relate to products or services procured by Tokyo 2020, or licensed products. Tokyo 2020 decided not to proceed with the process of the grievance mechanism as this report doesn't fall under its scope. Tokyo 2020 introduced to the informant an available contact set by another organisation, and also encouraged the organisation to appropriately deal with a report they would receive.
4	22 November 2018	It is claimed that timber which does not conform to Sustainable Sourcing Code for Timber may be used at a construction site of another organisation, and that Tokyo 2020 does not fulfill the responsibility to make this organisation respect with the Code.	Upon examination of the report, Tokyo 2020 found that the reported case didn't relate to wood products used in the construction work ordered by Tokyo 2020. Tokyo 2020 decided not to proceed with the process of the grievance mechanism as this report doesn't fall under its scope. Tokyo 2020, in collaboration with relevant organisations, confirmed that a certain log supplier alleged is not included in the actual supply chain of the timber used for the Games construction projects, and provided the information to the informant to the extent possible.

No.	Date of reception	Contents of the report	Status
5	22 November 2018	It is claimed that timber which does not conform to Sustainable Sourcing Code for Timber may be used at a construction site of another organisation, and that Tokyo 2020 does not fulfill the responsibility to make this organisation respect with the Code.	Upon examination of the report, Tokyo 2020 found that the reported case didn't relate to wood products used in the construction work ordered by Tokyo 2020. Tokyo 2020 decided not to proceed with the process of the grievance mechanism as this report doesn't fall under its scope. Tokyo 2020, in collaboration with relevant organisations, confirmed that a certain log supplier alleged is not included in the actual supply chain of the timber used for the Games construction projects, and provided the information to the informant to the extent possible.
6	26 March 2019	It is claimed that advertisement of products by a private company should be improved as it's considered misleading.	Upon examination of the report, Tokyo 2020 found that the reported case didn't relate to products or services procured by Tokyo 2020, or licensed products. Tokyo 2020 decided not to proceed with the process of the grievance mechanism as this report doesn't fall under its scope.
7	3 April 2019	It is claimed that complaints about a product procured by a local government have not been adequately treated by the manufacturing company.	Upon examination of the report, Tokyo 2020 found that the reported case didn't relate to products or services procured by Tokyo 2020, or licensed products. Tokyo 2020 decided not to proceed with the process of the grievance mechanism as this reported case doesn't fall under its scope.
8	5 June 2019	It is claimed that workers' rights are violated at a factory in Thailand that is a subsidiary of an electrical equipment manufacturing company, through illegal lock-out of labour union members and other inappropriate behaviours.	Tokyo 2020 confirmed that electrical equipment manufactured by the factory in question had not been procured, and found that the reported case was pending in court in Thailand. Tokyo 2020 decided not to proceed with the process of the grievance mechanism as this report doesn't fall under its scope. Tokyo 2020 had a meeting with the parent company of the factory and got explanation that the factory has been taking necessary actions. Tokyo 2020 shared this information with the informant.
9	26 August 2019	It is claimed that a private security company's employee were enforced to retire from the company.	Upon examination of the report, Tokyo 2020 found that the reported case didn't relate to products or services procured by Tokyo 2020, or licensed products. Tokyo 2020 decided not to proceed with the process of the grievance mechanism as this report doesn't fall under its scope.

No.	Date of reception	Contents of the report	Status
10	18 October 2019	The report is about the site of construction project Tokyo 2020 is responsible for, and includes claims as follows; - workers are working long hours in a harsh condition under hot weather - protective equipment for heat stroke prevention is not sufficiently provided - there are not uniform rules nor supervisory systems to ensure occupational safety environment, based on the ILO Convention.	Tokyo 2020 decided this report falls under the scope of the grievance mechanism, and is proceeding with the process on it. Tokyo 2020 has established Advisory Panel, and is preparing to listen to the informant and the construction company reported.
11	18 October 2019	The report is about the site of construction project Tokyo 2020 is responsible for, and includes claims as follows; - workers are working long hours in a harsh condition under hot weather - protective equipment for heat stroke prevention is not sufficiently provided - there are not uniform rules nor supervisory systems to ensure occupational safety environment, based on the ILO Convention.	Tokyo 2020 decided this report does not fall under the scope of the grievance mechanism as the contract was made prior to the development of the Sustainable Sourcing Code. Tokyo 2020 introduced to the informant that "Basic Policy on Safety and Health Measures" has been established by the Tokyo Olympic and Paralympic Games Facility Construction Safety and Health Measures Council, and that the implementation status of the Policy has also been shared in the Council. In addition, considering the importance of occupational safety and health, Tokyo 2020 shared the contents of the report to the construction company reported, and is inquiring of the company their initiatives on safety and labour management at the construction project.

*Status of the reports received in the grievance mechanism are available on the Tokyo 2020 website (https://tokyo2020.org/en/games/sustainability/status-of-the-reports), and also will be compiled in the Post-Games Sustainability Report.

Monitoring on Timber Sourcing (reference for 4.6 "Sustainable Sourcing")

(Overview)

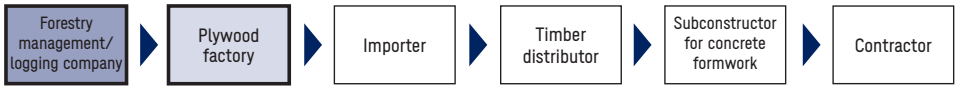
Tokyo 2020 Organising Committee and Tokyo Metropolitan Government (TMG) conducted field surveys at the logging and processing stages for concrete formwork plywood sourced from Malaysia and Indonesia. We confirmed that companies concerned are tackling areas such as conformance to legal processes, planned forestry management, conserving ecosystems and respecting the rights of local communities. Some issues were observed with regard to occupational safety and waste disposal, but the companies involved are taking action to improve on these areas.

(Purpose and method of survey)

Tokyo 2020 monitors suppliers' compliance with the Sustainable Sourcing Code, based on the risk involved. Monitoring is part of the process of operating the Sourcing Code, and Tokyo 2020 is responsible for planning and implementing this monitoring, including selecting sites to monitor and securing the budget required.

Concrete formwork plywood was selected as the target of this survey for two reasons: (1) procurement is already in progress and (2) there is high social interest on timber sourcing. Since the monitoring survey was conducted jointly with TMG, we looked at concrete formwork plywood sourced from Malaysia and Indonesia, which are used in construction work ordered by Tokyo 2020 and TMG. We visited the forests where the timber is sourced and the factories where it is processed into plywood. Plywood sourced from Malaysia is being used in the construction of the Ariake Gymnastic Centre, Tokyo Aquatics Centre, Sea Forest Waterway and Kasai Canoe Slalom Centre, while plywood sourced from Indonesia is being used in the construction of the Ariake Arena. The survey was conducted by a consulting company commissioned by Tokyo 2020.

Supply chain of concrete formwork



There are multiple logging sites in both Malaysia and Indonesia. Survey sites were selected after establishing whether they overlap with indigenous people's residential areas and protected areas. The survey involved checking documentation, observing how logging operations were managed and interviewing related parties, with reference to the requirements of the Tokyo 2020 Sustainable Sourcing Code for Timber: (1) Legality, (2) Planned management, (3) Conservation of ecosystems, (4) Consideration of rights of local people and (5) Occupational safety.

At the plywood factories, in addition to the traceability of raw timber, we focused on pollution prevention, waste disposal, labour management and occupational health & safety measures, based on the environmental and labour standards set out in the Sourcing Code. The survey involved checking documentation, observing how the factories were managed and interviewing related parties. We conducted interviews with as many different stakeholders as possible, including target companies, government agencies, local communities, research institutions, local NGOs, certification organisations and local workers.

Survey results in Malaysia

(Logging sites)

In the area surveyed, timber is produced by selective logging in concessions within the natural forest. This site is certified under the Malaysian Timber Certification Scheme (MTCS), a certification scheme for sustainable forestry management endorsed by the Programme for the Endorsement of Forest Certification (PEFC). Our survey confirmed that all legally required procedures are being implemented.

In the forest surveyed, concessions are divided into 25 sections, and logged in a 25-year cycle. A specialist surveyor investigates which trees are to be harvested, which should be harvested in the future, and which should be protected (protected species, mother trees, fruit trees, nesting trees, etc.) and this information is entered in a database along with information on locations of rivers and work paths. The sustainable annual amount of harvestable resources is also calculated based on forest resource assessment and monitoring of permanent plots, and trees are harvested within this range. Furthermore, to reduce environmental impact, temporary work paths are kept to a minimum and a winch is used to collect timber, in an effort to prevent soil runoff and slope collapse. Companies are also working with local universities on research activities including observing endangered species and ecology in sustainable forestry management.

We also confirmed that the logging company has a good relationship with local people. A community representative committee (CRC) has been established, made up of representative from each of the 55 communities in the forest and surrounding area, to bring together opinions and concerns from the communities. At the council, the companies, CRC and governmental bodies have opportunities to discuss the management of the forest and requests from the community. According to the head of the CRC and people in the community we visited, they have formed a good relationship with the logging company, and there have been no disputes about land use in this forest.

The site was well managed, including formulating occupational health and safety policies and safety management plans, preparing procedure manuals, storing accident records and providing training. The workers at the logging site and the adjacent maintenance workshop were wearing protective equipment properly.

Survey of trees to be logged

Timber collection using a winch

(Plywood factory)

We confirmed the proper management of traceability of raw timber at the plywood factory. This factory, located in Sarawak State, is certified to the ISO 14001 standard for environmental management. Waste water, exhaust air, chemicals and industrial waste are measured and monitored based on an environmental management plan.

The operational policies at this factory reflect the ILO's Core Labour Standards. The majority of workers are Indonesian. In addition to providing workers with free accommodation, the company covers the cost of employment procedures and labour insurance. The factory operates on a system of two 11-hour shifts (including a one-hour break).

The passports of the Indonesian workers are kept at the factory for safekeeping, with written consent from the workers themselves, and we confirmed that passports are returned promptly to workers upon their request. Such storage of passports deemed allowable with reference to the guidelines issued by the Malaysian Employers Federation[*1] and RSPO[*2] certification standards. However, because retaining workers' passports may restrict their freedom of movement and could be linked to forced labour, Tokyo 2020 and TMG proposed to the factory that they should check with workers whether they are dissatisfied or inconvenienced by their passports being kept. The factory managers asked the Indonesian workers for their opinions, but none of them expressed inconvenience or dissatisfaction with the current situation.

This factory has formulated policies and plans relating to occupational health and safety, prepares procedure manuals, stores accident records and provides training. However, we observed some instances of inadequate use of protective equipment and dangerous work during machine maintenance. We confirmed that the factory is already taking the necessary action to address these issues, including checking that workers are wearing protective equipment using a checklist, and formulating new work procedures for fixing machine malfunctions.

*1 Practical Guidelines for Employers on the Recruitment, Placement, Employment and Repatriation of Foreign Workers in Malaysia: http://www.mef.org.my/Attachments/MEFReport_PGERPERFWM.pdf

*2 Roundtable on Sustainable Palm Oil: https://www.rspo.org/principles-and-criteria-review

Ventilation hoods over a coating line

Accommodation for workers

Survey results in Indonesia

(Logging sites)

In the area surveyed, timber is produced by selective logging in concessions in an industrial plantation. It has been certified as Pengelolaan Hutan Produksi Lestari (PHPL), an Indonesian certification of sustainable production and forest maintenance, under the SVLK system*. The forestry management company can demonstrate valid permits and government-approved forestry management plans for their timber production.

* Sistem Verifikasi Legalitas Kayu: System certifying the legality and sustainability of Indonesian timber, complying with EU Timber Regulation

The company manages the forest based on medium- to long-term plans. To conserve the ecosystem, part of the concession area is designated as a conservation area, where the company takes measures such as formulating related procedures, assigning forest protection teams and preventing forest fires. There are issues such as conservation areas being illegally used for farming by neighbouring communities and some species not being covered by the procedures for protecting wildlife. The company is taking action to address these issues, including discussions with local communities and reviewing the procedures relating to wildlife.

Part of the concession area overlaps with customary land. The company has made efforts to form good relationships with the surrounding communities and indigenous people, by establishing procedures to respect the rights of local communities as well as implementing CSR and regional development programmes in line with the culture of the indigenous people. When residents point out that an area is customary land, the management of the company continuously has discussions with the indigenous people with support from the local government, and takes action such as providing unused land in the concession to neighbouring farmers as temporary farmland.

To ensure the health and safety of workers, the company has documentation relating to occupational health and safety procedures, provides workers with protective equipment and records details of initiatives. However, we observed workers failing to wear protective equipment on site, and insufficient supplies of clean water at the workers' camp. The company said they will

discuss these issues with the related contractors and make improvements. At the work site, we also observed issues like hazardous waste such as waste oil being stored inappropriately by contractors. The company is considering ways to improve this situation, such as by clarifying the appropriate management of hazardous substances in its contracts with contractors and establishing stricter rules for cleaning and leakage prevention at the work site.

Planted trees in a concession

(Plywood factory)

The logged timber is reported to the authorities via an online system to ensure traceability. Experts at the plywood factory check the legality of timber from log suppliers.

In our investigation at the plywood factory, we observed some instances of inappropriate disposal of hazardous waste (such as sending chemical containers to landfill). To address this issue, the factory is installing storage facilities for the temporary storage of hazardous waste.

The plywood company has internal policies to protect workers' rights based on Indonesian labour laws. We did not observe any issues such as forced labour, child labour, discrimination in the workplace or long working hours, and the workers did not express any dissatisfaction. However, there is a high occurrence of accidents at the factory and some may be attributed to failure to wear protective equipment and poor management. The company is therefore considering bringing in regulations to penalise failure to wear protective equipment.

Construction of Olympic Stadium (reference for 5. "Venue Development")

Reuse and recycling

Regarding construction work, Japan Sport Council (JSC) worked to procure environmentally friendly materials and limit the use of environmentally harmful materials in accordance with Japan Ministry of Education, Culture, Sports, Science and Technology's Policy on Promoting the Procurement of Environmentally Friendly Materials based on the Act on Promotion of Procurement of Eco-Friendly Goods and Services. The following are examples of environmentally friendly materials used:

Material	Quantity
Recycled crushed stone (Recycled crusher run, recycled mechanically stabilised crushed stone)	Approx. 4,700m^3
Ready-mixed concrete (blast furnace)	Approx. 76,400m^3
Ceramic tiles manufactured using recycled materials	Approx. 7,400m^2
Vinyl flooring manufactured using recycled materials	Approx. 13,500m^2

Note: Material requirements are based on Japan's Policy on Promoting the Procurement of Environmentally Friendly Materials (February 2017).

Construction of Permanent Venues (TMG) (reference for 5. "Venue Development")

(1) Installation of renewable energy

TMG is promoting installation of renewable energy based on the Energy Basic Plan, Tokyo Specifications of Energy Saving and Renewable Energy and other guidelines and is installing the solar photovoltaic system, solar thermal system and geothermal heating/ cooling system in the following venues.

Venue	Solar PV system (installed capacity)	Solar thermal system (installed capacity)	Geothermal heating/ cooling system (installed capacity)
Ariake Arena	200kW	100kW	550kW
Ariake Tennis Park Clubhouse and indoor courts	50kW	65kW	—
Oi Hockey Stadium (First pitch) (Second pitch)	 5kW 3kW	—	—
Sea Forest Waterway	30kW	—	—
Tokyo Aquatics Centre	100kW	100kW	600kW
Musashino Forest Sport Plaza	102.58kW	197kW	373kW
Total	490.58kW	462kW	1,523kW

Note: Capacities for Musashino Forest Sport Plaza show actual performance value. Figures for the other venues are planned values at the design stage and are subject to change.

(2) Reuse and recycling

Regarding construction work, TMG worked to procure environmentally friendly materials and limit the use of environmentally harmful materials in accordance with the Policy for Procurement of Eco-Friendly Goods and Services of the Tokyo Metropolitan Government (Public Works) and the Resource Circulation and Disposal Plan of the Tokyo Metropolitan Government. The following are examples of environmentally friendly materials used:

Material	Venue and quantity
Recycled crushed stone (Recycled crusher run, recycled mechanically stabilised crushed stone)	Ariake Arena: Approx. 7,600 tonnes Sea Forest Waterway: Approx. 25,600 tonnes Kasai Canoe Slalom Centre Approx. 9,000 tonnes Yumenoshima Park Archery Field (embankment): Approx. 9,600 tonnes Tokyo Aquatics Centre: Approx. 117,500 tonnes Musashino Forest Sport Plaza: Approx. 3,400 tonnes
Concrete manufactured using recycled aggregate	Ariake Arena: Approx. 800m^3 Sea Forest Waterway: Approx. 2,900m^3 Tokyo Aquatics Centre: Approx. 1,300m^3 Musashino Forest Sport Plaza: Approx. 150m^3 *Using Class L recycled aggregate.
Recycled steel such as electric furnace steel	Ariake Arena (Deformed bar): Approx. 4,800 tonnes (Steel beam): Approx. 500 tonnes Tokyo Aquatics Centre (Deformed bar): Approx. 4,500 tonnes (Steel beam): Approx. 4,000 tonnes Musashino Forest Sport Plaza (Deformed bar): Approx. 9,600 tonnes (Steel beam): Approx. 240 tonnes
Ceramic tile manufactured using recycled materials	Musashino Forest Sport Plaza: Approx. 82,000m^2
Vinyl flooring manufactured using recycled materials	Musashino Forest Sport Plaza: Approx. 7,500m^2
Number of secondary concrete products manufactured using eco-cement	Musashino Forest Sport Plaza: 10,792

Note: Material requirements are based on Japan's Policy on Promoting the Procurement of Environmentally Friendly Materials (February 2017) and the Policy for Procurement of Eco-Friendly Goods and Services of the Tokyo Metropolitan Government (Public Works). Quantities for Musashino Forest Sport Plaza and the Yumenoshima Park Archery Field (embankment) are actual figures. Figures for the other venues are planned values at the design stage and are subject to change.

(3) Aquatic environment

Venues such as Ariake Arena and Tokyo Aquatics Centre uses water effectively by utilising rainwater and recycled water for non-potable service water needs, based on the Tokyo Metropolitan Government's Outline of Promotion of Water Utilisation. Kasai Canoe Slalom Centre plans to use only potable water, but will make effective use of this valuable resource, for example by using a water filtration system to recycle stored water for competition courses.

Venue	Service water use
Ariake Arena	Approx. 95m³/day
Ariake Tennis Park Clubhouse and indoor courts Show Court 1	Approx. 33m³/day
Oi Hockey Stadium	Approx. 5m³/day
Sea Forest Waterway	Approx. 4.7m³/day
Tokyo Aquatics Centre	Approx. 38m³/day
Musashino Forest Sport Plaza	Approx. 108m³/day

Note: Figures for Musashino Forest Sport Plaza are based on planned service water use. Figures for the other venues are planned values at the design stage and are subject to change.

(4) Landscape greening and biodiversity

TMG works to retain existing trees wherever possible and to minimise the impact on trees, for example by transplanting them within the venues when they must be removed. Green spaces are being created, over and above the standards required for each venue.

Venue	Green space area
Ariake Arena	6,506.37m²
Ariake Tennis Park	44,659.87m²
Oi Hockey Stadium	62,231.65m²
Sea Forest Waterway	426.86m²
Kasai Canoe Slalom Centre	9,965m²
Tokyo Aquatics Centre	84,174m²
Musashino Forest Sport Plaza	12,217.71m²

Note: The green space area for Musashino Forest Sport Plaza reflects the Tokyo Metropolitan Government's Green Building Programme. Figures for other venues are planned values at the design stage and are subject to change.

Temporary Venues (Tokyo 2020) (reference for 5. "Venue Development")

(1) Reuse and recycling

Regarding construction work, Tokyo 2020 worked to procure environmentally friendly materials and limit the use of environmentally harmful materials in accordance with the Policy for Procurement of Eco-Friendly Goods and Services of the Tokyo Metropolitan Government (Public Works) and the Resource Circulation and Disposal Plan of the Tokyo Metropolitan Government.

Material	Venue and quantity
Recycled crushed stone (Recycled crusher run, recycled mechanically stabilised crushed stone)	Ariake Gymnastics Centre: Approx. 41,460 tonnes
Recycled steel such as electric furnace steel	Ariake Gymnastics Centre: Approx. 3,907 tonnes
Number of secondary concrete products manufactured using eco-cement	Ariake Gymnastics Centre: 7,126

Note: Material requirements are based on Japan's Policy on Promoting the Procurement of Environmentally Friendly Materials (February 2017) and the Policy for Procurement of Eco-Friendly Goods and Services of the Tokyo Metropolitan Government (Public Works).

(2) Aquatic environment

Based on the Outline of Promotion of Water Utilisation of the Tokyo Metropolitan Government, Ariake Gymnastics Centre plans to use water effectively by utilising recycled water to cover part of service water needs.

Venue	Service water use
Ariake Gymnastics Centre	18.50m^3/day (after the Games)

Note: This is an estimate based on planned water usage, and is subject to change.

(3) Landscape greening and biodiversity

Regarding construction work, we will work to retain existing trees wherever possible and to minimise the impact on trees, for example by transplanting them within the venues when they must be removed. Green spaces will be created, over and above the standards required for each venue.

Venue	Green space area
Ariake Gymnastics Centre	7,658.85m^2

Note: This is the planned value at the design stage, and is subject to change.

Environmental Impact Assessment (reference for 5. "Venue Development")

(1) Conducting the Tokyo 2020 Olympic and Paralympic Environmental Impact Assessment

The Tokyo Metropolitan Government (TMG) is carrying out the Tokyo 2020 Olympic and Paralympic Environmental Impact Assessment ("the Olympic/Paralympic EIA") with the objective of improving Tokyo's sustainability through the Games, while also aiming to avoid, minimise, and compensate for potential Games-related environmental impacts by using assessment to check the measures to lower impacts in conformance with the TMG Environmental Impact Assessment Ordinance. The Olympic/Paralympic EIA is a voluntary assessment targeting programmes that are not required by laws or TMG ordinances, and will also play a role in showing the world how TMG is using the Games to lay the foundations for its future as a sustainable city.

To start, following the initial environmental assessment during the bidding phase, in June 2016 the TMG Bureau of the Environment compiled the Guidelines for the Tokyo 2020 Olympic and Paralympic Environmental Impact Assessment. These guidelines set forth the basic approach and procedures for voluntary assessment, which TMG uses to conduct implementation-stage environmental assessments and follow-up studies from the start of venue construction to the delivery of the Games. This initiative is significant in that it goes beyond environmental factors to assess social and economic factors as well in an effort to ascertain the impact of the delivery of the Games in the broadest sense (*see page 266* for a list of environmental impact assessment factors).

The Olympic/Paralympic EIA covers competition venues and other facilities, outdoor events held outside venue sites, and the overall Games Plan to forecast and assess impacts before, during, and after the Games. TMG has adopted a forward-thinking approach for the assessment process that considers both positive and negative impacts to help ensure the Games will contribute to environmental and regional development, as well as to avoid, minimise, and compensate for negative aspects of the Games' environmental impacts.

To construct competition venues and other facilities, TMG began by preparing draft assessment reports for the Olympic Stadium (under the former Plan), Musashino Forest Sport Plaza, and the Olympic/Paralympic Village, which were published in March 2015. TMG has since compiled assessment reports for all permanent facilities and entered the follow-up stage. At each stage of the construction process, a group of outside experts forming the Tokyo 2020 Olympic and Paralympic Environmental Impact Assessment Committee has held objective and detailed discussions from a specialist standpoint, with the results then applied in the field to help orchestrate smooth preparations for the Games (*see page 266* for a list of Assessment Committee dates and *page 267* for the status of assessment documents).

Competition venue construction has progressed while checking the measures to lower environmental impacts, and in March 2017 construction of Musashino Forest Sports Plaza was completed without incidents. TMG issued a pre-Games follow-up report in August 2018, and the facility opened in November 2017. The facility is helping create new economic activities in the region by holding large events, as well as advancing sport in the Tama area by hosting athletic tournaments and regional sporting events, such as the All-Japan Figure Skating Championships held in December 2017.

The structure features an environmentally friendly design that optimises energy use, which has resulted in an energy reduction rate (ERR) of 52.37 per cent. It is also equipped with renewable energy systems, including solar photovoltaic, solar thermal or geothermal equipment, and utilises passive energy design.

Construction work on temporary venues and overlays is proceeding, and TMG studies all environmental impact aspects in the construction of each venue, taking into account factors such as construction plans and size, based on its experience conducting assessments at competition venues and other facilities. In the case that all environmental and other impacts relating to a venue's construction are low, TMG will compile a summary report of the project outlining the underlying reasons and details of the project, submit it to the Assessment Committee, and publish it (*see page 274* for information about the publication of project summary reports).

Regarding outdoor events held outside venue sites and the overall Games Plan, in fiscal 2018 TMG reported to the Assessment Committee its progress in compiling assessment reports, and published draft assessment reports in September 2019. These will be followed by final assessment reports.

Moving forward, with the goal of developing Tokyo through sport, TMG will utilise the knowledge and experience gained through the Olympic/Paralympic EIA to further revitalise sport and transform the city into an environmental leader that achieves sustainable growth.

Items for evaluating environmental impact

Level 1	Level 2	Level 3
Environmental aspects	Pollution	Air & water quality and soil
	Biodiversity	Organisms' growth and habitats, water circulation, biological ecosystems and greenery
	Nuisances	Noise, vibration and shade
	Landscape & cultural heritage	Landscapes, places for nature-friendly activities, pedestrian-friendly spaces and historical & cultural sites
	Resources & waste	Water use, waste and eco-materials
	Climate	Greenhouse gases and energy
Social & economic aspects	Land use	Land use, community severance and migration
	Social activities	Sport and cultural activities
	Engagement	Volunteering, communities and environmental awareness
	Health & safety	Safety, sanitation, firefighting and disaster risk reduction
	Transportation	Traffic congestion, accessibility of public transportation and traffic safety
	Economy	Economic impact, employment and business profitability

Source: Tokyo 2020 Olympic and Paralympic Games Guidelines for Environmental Assessment (for the Games operational phase and follow-up reviews), Bureau of the Environment, Tokyo Metropolitan Government, June 2016

Tokyo 2020 Olympic and Paralympic Games Environmental Assessment Committee meetings

Fiscal year	Dates		
FY2019	○20 Jan. 2020	○11 Dec. 2019	○6 Dec. 2019
	○22 Nov. 2019	○12 Nov. 2019	○25 Oct. 2019
	○4 Oct. 2019	○3 Sep. 2019	○28 Jun. 2019
	○31 May 2019		
FY2018	○15 Mar. 2019	○23 Jan. 2019	○25 Dec. 2018
	○15 Oct. 2018	○13 Jul. 2018	○25 May 2018
FY2017	○20 Feb. 2018	○16 Feb. 2018	○22 Dec. 2017
	○29 Sep. 2017	○26 Jul. 2017	○21 Jul. 2017
	○14 Jul. 2017	○26 May 2017	○22 May 2017
FY2016	○29 Mar. 2017	○24 Feb. 2017	○25 Jan. 2017
	○25 Nov. 2016	○17 Nov. 2016	○30 Sep. 2016
	○1 Sep. 2016	○30 Aug. 2016	○8 Jul. 2016
	○23 June 2016	○17 June 2016	○16 May 2016
	○13 May 2016	○27 Apr. 2016	
FY2015	○23 Mar. 2016	○29 Feb. 2016	○20 Jan. 2016
	○26 Oct. 2015	○5 Oct. 2015	○22 Jun. 2015
	○12 Jun. 2015		
FY2014	○25 Mar. 2015	○28 May 2014	○16 May 2014
FY2013	○27 Mar. 2014	○24 Dec. 2013	

Status of environmental assessment documents (Japanese)

Venue	Date of publication					
	Operational-phase assessments				Follow-up surveys	
	Survey plan	Assessment draft	Comments & responses	Assessment document	Plan	Report
Olympic Stadium	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/chousakeikaku/index.html Mar. 2014	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukashoan_olympicstadium/index.html Jun. 2016	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/ikenkenkaisho_olympicstadium/index.html Aug. 2016	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukasho_olympicstadium/index.html Oct. 2016	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/followupkeikaku_olympicstadium/index.html Oct. 2016	
Nippon Budokan	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/chousakeikaku/index.html Mar. 2014	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukashoan_nipponbudokan/index.html Dec. 2017	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/ikenkenkaisho_nipponbudoukan/index.html Feb. 2018	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukasho_nipponbudokan/index.html Apr. 2018	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/followupkeikaku_nipponbudokan/index.html Apr. 2018	

Venue	Date of publication					
	Operational-phase assessments				Follow-up surveys	
	Survey plan	Assessment draft	Comments & responses	Assessment document	Plan	Report
Equestrian Park	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/chousakeikaku_bajikouen/index.html Jun. 2016	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukashoan_bajikouen/index.html Sep. 2016	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/ikenkenkaisho_bajikouen/index.html Nov. 2016	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukasho_bajikouen/index.html Dec. 2016	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/followupkeikaku_bajikouen/index.html Dec. 2016	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/followupkeikaku_bajikouen1/index.html Apr. 2018 https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/followupkeikaku_bajikouen2/index.html Mar. 2019
Equestrian Park (Part 2)		https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukashoan_bajikouen2/index.html May 2017	—	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukasho_bajikouen2/index.html Aug. 2017	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/followupkeikaku_bajikouen2/index.html Aug. 2017	
Equestrian Park (temporary facilities)		https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukashoan_bajikouen_k/index.html May 2018	—	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukasho_bajikouen_k/index.html Sep. 2018	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/followupkeikaku_bajikouen_k/index.html Sep. 2018	

Venue	Date of publication					
	Operational-phase assessments				Follow-up surveys	
	Survey plan	Assessment draft	Comments & responses	Assessment document	Plan	Report
Musashino Forest Sport Plaza	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/chousakeikaku/index.html H26.3 Mar. 2014	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukashoan_olympicstadium-musamori-senshumura/index.html H27.3 Mar. 2015	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/ikenkenkaisho_olympicstadium-musamori/index.html H27.6 Jun. 2015	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukasho_musamori/index.html H27.8 Aug. 2015	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/followupkeikaku_musamori/index.html H27.10 Oct. 2015	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/followuphoukoku_musamori1/index.html H29.8 Aug. 2017
Ariake Arena	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/chousakeikaku/index.html Mar. 2014	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukashoan_ariakearena/index.html Feb. 2016	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/ikenkenkaisho_ariakearena/index.html Apr. 2016	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukasho_ariakearena/index.html Jan. 2017	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/followupkeikaku_ariakearena/index.html Jan. 2017	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/followuphoukoku_ariakearena1/index.html Dec. 2017
Ariake Gymnastics Centre	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/chousakeikaku/index.html Mar. 2014	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukashoan_ariaketaisou/index.html Feb. 2017	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/ikenkenkaisho_ariaketaisou/index.html May 2017	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukasho_ariaketaisou/index.html Aug. 2017	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/followupkeikaku_ariaketaisou/index.html Aug. 2017	

Venue	Date of publication					
	Operational-phase assessments				Follow-up surveys	
	Survey plan	Assessment draft	Comments & responses	Assessment document	Plan	Report
Ariake Urban Sports Park	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/chousakeikaku/index.html Mar. 2014	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukashoan_ariakeurban/index.html Jan. 2019	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/ikenkenkaisho_ariakeurban/index.html Mar. 2019	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukasho_ariakeurban/index.html Apr. 2019	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/followuphoukoku_ariakeurban/index.html Apr. 2019	
Ariake Tennis Park	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/chousakeikaku/index.html Mar. 2014	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukashoan_ariaketennis/index.html Apr. 2017	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/ikenkenkaisho_ariaketennis/index.html Jun. 2017	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukasho_ariaketennis/index.html Oct. 2017	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/followupkeikaku_ariaketennis/index.html Oct. 2017	
Odaiba Marine Park	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/chousakeikaku/index.html Mar. 2014	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukashoan_odaiba/index.html Sep. 2019		https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukasho_odaiba/index.html Jan.2019	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/followupkeikaku_odaiba/index.html Jan.2019	
Oi Hockey Stadium	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/chousakeikaku/index.html Mar. 2014	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukashoan_ooihockey/index.html Apr. 2017	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/ikenkenkaisho_ooihockey/index.html Jun. 2017	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukasho_ooihockey/index.html Jan. 2018	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/followupkeikaku_ooihockey/index.html Jan. 2018	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/followuphoukoku_ooihockey/index.html Nov.2019

Venue	Date of publication					
	Operational-phase assessments				Follow-up surveys	
	Survey plan	Assessment draft	Comments & responses	Assessment document	Plan	Report
Sea Forest Cross-Country Course	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/chousakeikaku/index.html Mar. 2014	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukashoan_umimoricross/index.html Dec. 2016	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/ikenkenkaisho_umimoricross/index.html Feb. 2017	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukasho_umimoricross/index.html Mar. 2017	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/followupkeikaku_umimoricross/index.html Mar. 2017	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/followuphoukoku_umimoricross/index.html Jun. 2019
Sea Forest Waterway	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/chousakeikaku/index.html Mar. 2014	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukashoan_umimoriboat/index.html Feb. 2016	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/ikenkenkaisho_umimoriboat/index.html Apr. 2016	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukasho_umimoriboat/index.html Jul. 2016	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/followupkeikaku_umimoriboat/index.html Jul. 2016	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/followuphoukoku_umimoriboat1/index.html Aug. 2019 https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/hosokusiryou_umimoriboat1/index.html Oct. 2019 (Noise and vibration)

Venue	Date of publication					
	Operational-phase assessments				Follow-up surveys	
	Survey plan	Assessment draft	Comments & responses	Assessment document	Plan	Report
Kasai Canoe Slalom Centre	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/chousakeikaku/index.html Mar. 2014	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukashoan_canoe-slalom/index.html Mar. 2017	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/ikenkenkaisho_canoe-slalom/index.html May 2017	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukasho_canoe-slalom/index.html Jun. 2017	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/followupkeikaku_canoe-slalom/index.html Jun. 2017	
Yumenoshima Park Archery Field	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/chousakeikaku/index.html Mar. 2014	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukashoan_archery/index.html Jan. 2016	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/ikenkenkaisho_archery/index.html Mar. 2016	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukasho_archery/index.html Jul. 2016	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/followupkeikaku_archery/index.html Jul. 2016	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/followuphoukoku_archery/index.html Jun. 2019 https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/seigohyou_archery/index.html Oct. 2019 (Corrigenda)
Tokyo Aquatics Centre	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/chousakeikaku/index.html Mar. 2014	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukashoan_aqua/index.html Feb. 2016	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/ikenkenkaisho_aqua/index.html Apr. 2016	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukasho_aqua/index.html Oct. 2016	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/followupkeikaku_aqua/index.html Oct. 2016	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/followuphoukoku_aqua1/index.html Dec. 2017

Venue	Date of publication					
	Operational-phase assessments				Follow-up surveys	
	Survey plan	Assessment draft	Comments & responses	Assessment document	Plan	Report
Olympic/Paralympic Village	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/chousakeikaku/index.html Mar. 2014	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukashoan_olympicstadium-musamori-senshumura/index.html Mar. 2015	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/ikenkenkaisho_senshumura/index.html Jul. 2015	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukasho_senshumura/index.html Dec. 2015	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/followupkeikaku_senshumura/index.html Apr. 2016	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/followuphoukoku_senshumura1/index.html Apr. 2019 https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/minaoshi_senshumura/index.html Dec. 2018 (Reconsideration of prediction and evaluation)
IBC/MPC Tokyo International Exhibition Centre (Tokyo Big Sight)	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/chousakeikaku/index.html Mar. 2014	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukashoan_ibc-mpc/index.html Jul. 2018	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/ikenkenkaisho_ibc-mpc/index.html Sep. 2018	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/hyoukasho_ibc-mpc/index.html Dec. 2018	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/followupkeikaku_ibc-mpc/index.html Dec. 2018	
Overall plan of the operation of the Games	http://www.2020games.metro.tokyo.jp/taikaijyunbi/torikumi/facility/kankyou/chousakeikaku/index.html Mar. 2014	https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/facility/kankyou/zentaikyougi/index.html Sep. 2019				

Status of project outline reports

Date of publication	Venue
13 Jul. 2018	◯ Izu Velodrome ◯ Izu MTB Course
15 Mar. 2019	◯ Olympic Stadium ◯ Aomi Urban Sports Park ◯ Oi Hockey Stadium ◯ Sea Forest Cross-Country Course ◯ Sea Forest Waterway ◯ Kasai Canoe Slalom Centre ◯ Yumenoshima Park Archery Field ◯ Tokyo Aquatics Centre ◯ Tatsumi Water Polo Centre ◯ Tsurigasaki Surfing Beach ◯ Asaka Shooting Range
1 Jul. 2019	◯ Shiokaze Park
25 Oct. 2019	◯ Olympic Stadium ◯ Nippon Budokan ◯ Enoshima Yacht Harbour ◯ Fukushima Azuma Baseball Stadium ◯ Saitama Stadium

20 Jan. 2020	◯ Tokyo Metropolitan Gymnasium ◯ Yoyogi National Stadium ◯ Tokyo International Forum ◯ Kokugikan Arena ◯ Musashino Forest Sport Plaza ◯ Tokyo Stadium ◯ Musashinonomori Park ◯ Ariake Arena ◯ Ariake Gymnastics Centre ◯ Ariake Tennis Park ◯ Makuhari Messe Hall A, B, and C ◯ Saitama Super Arena ◯ Kasumigaseki Country Club ◯ Fuji International Speedway ◯ Yokohama Baseball Stadium ◯ Sapporo Dome ◯ Miyagi Stadium ◯ Ibaraki Kashima Stadium ◯ International Stadium Yokohama

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