



# DRIVING SUSTAINABLE GROWTH



## AT A GLANCE FY2020

### SAFETY AND SECURITY REMAIN OUR PRIORITY, ALWAYS

**29%**

Reduction in Serious Injury Case Rate to 0.16 per 200,000 hours worked



**11,500+**

Key safety controls verified through the Major Hazard Management program

**ZERO FATALITIES**

For three consecutive years

### WE ARE DELIVERING INNOVATIVE SOLUTIONS FOR OUR CUSTOMERS

**21%**

Increase in Net Promoter Score

**1,000+**

WebGen™ blasts with first adopter customers



**FOUR AWARDS**

For design and improvements to industry for our FRAGTrack™ automated rock-sizing measurement technology

### WE ARE WORKING TOWARDS A DECARBONISED FUTURE



**40%**

New target to reduce operational Scope 1 and Scope 2 emissions by at least 40% by FY2030, from FY2019 levels<sup>7</sup>



**9%**

Reduction in Scope 1 and Scope 2 greenhouse gas emissions

**PROGRESSED IMPLEMENTATION OF OUR TCFD<sup>8</sup> ROADMAP**

### WE ARE BUILDING A DIVERSE, INCLUSIVE AND INSPIRED TEAM



**25%**

Women in senior leadership<sup>1</sup>, achieving our 2020 target

**EIGHT POINT**

Improvement in employee health score since 2018

**48%**

Ethnic and cultural diversity in senior leadership aligned to our revenue profile

**FOUR AWARDS**

For design and improvements to industry for our FRAGTrack™ automated rock-sizing measurement technology

### ENVIRONMENT

**ZERO SIGNIFICANT ENVIRONMENTAL INCIDENTS**



### WE HAVE DELIVERED A STRONG FINANCIAL PERFORMANCE IN A CHALLENGING GLOBAL ENVIRONMENT

**AN VOLUMES<sup>2</sup>**  
**3.83Mt**  
(down 4% on the pc<sup>3</sup>)

Demonstrating resilience in a challenging year

**UNDERLYING EBIT<sup>5</sup>**  
**\$605M**  
(down 9% on the pc<sup>3</sup>)

A strong first half result followed by a focus on controllable factors to mitigate COVID-19 impacts in the second half

**GEARING<sup>4</sup>**  
**36.4%**  
(up 1.5 points on the pc<sup>3</sup>)

Within debt covenant and target range

**DIVIDEND**  
**33.0cps**  
**45% payout ratio<sup>6</sup>**

### WE ARE DRIVING SOCIAL IMPACT FOR COMMUNITIES

Global community investment and COVID-19 support package to support the most vulnerable in the community



**\$3.2M**

Distributed to communities globally

## CONTENTS

<b>I Our Approach</b>	<b>IFC</b>
At a Glance FY2020	<b>02</b>
A Message from our Chairman & CEO	<b>03</b>
Who We Are	<b>04</b>
Where We Operate	<b>06</b>
Our Stakeholders	<b>08</b>
The Issues that Matter	<b>10</b>
A Year of Challenges	<b>11</b>
Our Sustainability Approach	<b>12</b>
Our Sustainability Scorecard	<b>12</b>
<b>II Safe and Responsible Business</b>	
Operating with Integrity and Respect for All	<b>15</b>
Safety, Health and Security as a Priority, Always	<b>22</b>
Ethical and Responsible Supply Chains	<b>28</b>
<b>III Climate Resilient Economic Growth</b>	
Transitioning to a Low-Carbon Economy	<b>31</b>
Stewarding Natural Resources	<b>46</b>
Sustainable Commercial Solutions	<b>52</b>
<b>IV Empowering Social Progress</b>	
Diverse, Inclusive Culture and Inspired Workforce	<b>57</b>
Safe, Resilient and Thriving Communities	<b>61</b>
<b>About this Report</b>	<b>70</b>
<b>Assurance Statement</b>	<b>71</b>

<sup>1</sup> Includes those acting in positions (less than 3 per cent).  
<sup>2</sup> Includes ammonium nitrate (AN) prill and solution as well as emulsion products including bulk emulsion and packaged emulsion, excluding Exsa volumes of 98 thousand tonnes.  
<sup>3</sup> Prior corresponding period.  
<sup>4</sup> Net debt/(net debt + equity), where net debt excludes lease liabilities, as disclosed within Note 3 to the financial statements.  
<sup>5</sup> Equivalent to profit/(loss) before financing costs and income tax, as disclosed in Note 1(b) to the financial statements, before individually significant items.  
<sup>6</sup> Dividend amount/net profit after tax, before individually significant items.  
<sup>7</sup> Applies to existing operations. Base year emissions will be recalculated consistent with emissions accounting protocols if structural changes occur such as acquisitions or divestments.  
<sup>8</sup> Task Force on Climate-related Financial Disclosures.

# A MESSAGE FROM OUR CHAIRMAN & CEO



**We are proud to present our FY2020 Sustainability Report which details how our teams across the business continue to make Orica a safe and responsible organisation. The report highlights how we are using innovation and our technology to deliver solutions to complex social and environmental challenges while supporting our people in an incredibly disruptive year.**

2020 has been a particularly challenging year. While the global COVID-19 pandemic disrupted our operations, people and communities in every country where we operate, we maintained our focus on our number one priority – ensuring our people return home safely every day.

We are pleased to report that, once again, we had no fatalities, while our Serious Injury Case Rate declined by 29 per cent over the year. This is the lowest level achieved in the past four years.

In recognition of the strain on physical and mental wellbeing caused by the pandemic and the lockdown of society, we also provided online support seminars and programs for our teams around the world.

We have made good progress to reduce our impact on the environment, having met or exceeded several targets. Our operational Scope 1 and Scope 2 greenhouse gas (GHG) emissions are nine per cent lower than last year, and we have reduced our total waste disposed by 12 per cent. Potable water use increased slightly this year due to disruptions to recycled water at Kooragang Island, our most water intensive site. We are committed to increasing our use of recycled water, as reflected in our FY2021 targets.

In addition to improving our own environmental performance, we are also working with our customers to support their efforts. We do this by supplying solutions that enable them to work more safely and efficiently. For example, our products such as WebGen™ and GroundProbe's monitoring systems are delivering step-change improvements in safety by keeping people out of harm's way, while BlastIQ™ and FRAGTrack™

are helping our customers achieve better blast and fragmentation outcomes. As we continue to make advances in automation, digitisation, wireless technology and data analysis, we expect these products will help deliver sustainable business growth and environmental and social benefits for Orica and our customers.

**We understand the benefits of a truly inclusive and diverse workforce. Ethnic and cultural diversity remain strong across the Group and we achieved our target to have one-quarter female representation among our senior leaders. We have renewed our focus in this area with a refreshed strategy and new targets.**

We published our fifth Modern Slavery Statement which, for the first time, addresses Modern Slavery requirements in both the United Kingdom and Australia. This year, we established a multi-function working group, tasked with developing and implementing our Modern Slavery approach. We have identified areas of risk, not just in our own operations, but also throughout our supply chain, with our Human Rights at Work Policy also applying to all third parties we deal with. The team has a number of focus areas for the coming financial year, and we will continue to report on our progress.

In FY2020, we evolved our approach to community engagement and investment towards more strategic support for the local communities in which we operate

and, where possible, leveraging our existing technology and capabilities. The power of this approach has been demonstrated through our community response to the COVID-19 pandemic. We also significantly increased our community spend this year to \$3.2 million. This includes providing vital support to communities affected by natural disasters – most notably the catastrophic bushfires in Australia and the destructive volcano eruption in the Philippines.

Looking ahead, we are focused on accelerating our decarbonisation. We have set new climate change targets which will now be a key consideration in our decision making. To underpin this commitment, we have strengthened the links between relevant executive remuneration and climate change performance.

We thank our more than 13,000 employees and contractors for their hard work, resilience and creativity working through what has been a uniquely challenging year. Together, we will build on the learnings of this year, and advance our efforts to meet the expectations of all our stakeholders ensuring we make Orica a better business.

**Malcolm Broomhead**  
Chairman

**Alberto Calderon**  
Managing Director and CEO

# WHO WE ARE

**Every day, all around the world, our people help mobilise the vital resources that are essential to progress.**

We are a world leader in blasting and productivity solutions. From the production and reliable supply of explosives and initiation systems, to our suite of digital solutions and blasting services, we help extract and monitor resources safely, efficiently and responsibly. Our people – engineers, scientists, technologists, operators, business specialists and on-site crew – work together to support customers in open cut mines, underground operations, quarrying, construction, and oil and gas projects.

To drive sustainable business growth and deliver environmental and social benefits, we look for opportunities to make a positive impact. Our focus is on innovation and we continue to invest in new digital and automated technologies, offering safer solutions to our customers that increase productivity while managing social and environment impacts.

Fundamental to everything we do is the diversity and expertise of our people. We work as one team and are always guided by our values.

## OUR VALUES



**Safety is our priority. Always**

The most important thing is that we all return home, safely, every day.



**We respect and value all**

Our care for each other, our customers, communities and the environment builds trusted relationships.



**Together we succeed**

Collaboration makes us better, individually and collectively.



**We act with integrity**

We are open and honest, and we do what is right.



**We are committed to excellence**

We take accountability for our business and for delivering outstanding results.

# WHERE WE OPERATE

We are a diverse company, with operations across the globe. Our major manufacturing, office and customer supply operations where we have a significant workforce presence can be seen below. For a full list of our controlled entities, refer to our 2020 Annual Report.

## NORTH AMERICA

UNITED STATES



CANADA



MEXICO



## LATIN AMERICA

CHILE



COLOMBIA



BRAZIL



PERU



ENGLAND



## EUROPE, MIDDLE EAST & AFRICA

BULGARIA



KAZAKHSTAN



PORTUGAL



RUSSIA



SOUTH AFRICA



SWEDEN



UNITED ARAB EMIRATES



ZAMBIA



SINGAPORE



## AUSTRALIA PACIFIC & ASIA

AUSTRALIA



CHINA



INDIA



INDONESIA



THE PHILIPPINES



### Major Operations

- ★ Head Office
- ☆ Regional Head Office
- Ammonium Nitrate
- Initiating Systems/Packaged Explosives
- Customer Presence
- Sodium Cyanide
- ⚙️ Technical/Monitoring Centre

We also have a network of joint ventures, ammonium nitrate emulsion plants and bulk depots strategically located to serve our customers around the world.



# THE ISSUES THAT MATTER

We operate a complex, dynamic, global business with a broad range of stakeholders. More detail on our key stakeholder groups and our work to respond to their interests is provided in our 2020 Annual Report.

Every year we review and revise our materiality assessment to better understand and reflect the topics that are material to our business, proactively manage key sustainability risks and issues, and identify opportunities to create value for our stakeholders. The results of our assessment inform our strategic priorities, sustainability approach and reporting.

In FY2020, we conducted a new materiality assessment considering rising stakeholder expectations in a rapidly changing global context. We undertook primary research for the first time, offering key stakeholder groups, including employees at all levels, an opportunity to participate in a materiality survey. The outcomes of the survey supported the assessment of our most material sustainability topics.

Identification
<ul style="list-style-type: none"> <li>Review relevance of previous materiality assessments.</li> <li>Internal mechanisms (e.g. direct feedback, Group policy, material risks).</li> <li>External frameworks (e.g. Global Reporting Initiative).</li> <li>Global and market trends.</li> </ul>
▼
Prioritisation
<ul style="list-style-type: none"> <li>Assessment of topic importance, frequency of exposure.</li> <li>Prioritised themes identified for validation.</li> </ul>
▼
Validation
<ul style="list-style-type: none"> <li>Internal management review and validate themes.</li> <li>Input from senior leaders and Board Audit and Risk Committee.</li> </ul>
▼
Review
<ul style="list-style-type: none"> <li>Direct stakeholder feedback on report.</li> <li>Findings presented to functional business areas (e.g. Risk, Human Resources, Corporate Affairs).</li> </ul>

Detailed information on these topics, as well as how we are managing them, can be found throughout this report. For our material topics and their boundaries please see our GRI Index.

## RESPONDING TO A YEAR OF CHANGE

FY2020 has been a year of unprecedented change and disruption. This has been reflected in the results of our materiality assessment in which we identified new topics of importance to our stakeholders and placed greater emphasis and expectation on topics identified in previous assessments. This revealed:

- **Safety** is and continues to be our priority for our people, customers, those who work across our broader value chain, and in the communities in which we operate.
- Action on **climate change** remains critical to our business as economies continue to make progress in the transition towards a low-carbon future.
- Extreme weather events, and the resulting impacts on safety, health, wellbeing and environment, has put a spotlight on **disaster response and crisis management** and our preparedness to respond to challenges and support our customers and communities.
- Our sector is under increasing scrutiny on our approach to **engaging First Nations Peoples** and **protecting cultural heritage**, as well as **community engagement** more broadly, particularly in regional and remote locations.
- Our people are integral to our business. While focus continues to be on **employee health**, the inclusion of **wellbeing** reflects the increased strain on mental health due to the COVID-19 pandemic and acknowledges the impact of wellbeing on productivity and performance.

## MATERIALITY ASSESSMENT TOPICS



### SAFE AND RESPONSIBLE BUSINESS

- Safety
- Product safety and security
- Corporate governance
- Ethical business conduct
- Cyber security
- Supply chain sustainability
- Human rights
- Information transparency
- Tax transparency
- Executive remuneration



### EMPOWERING SOCIAL PROGRESS

- Employee health and wellbeing
- Talent attraction, retention and development
- Diversity and inclusion
- Community engagement
- Community investment
- Disaster response and crisis management
- Indigenous/First Peoples engagement



### CLIMATE RESILIENT ECONOMIC GROWTH

- Climate change
- Greenhouse gas emissions
- Environmental risk and compliance
- Resource efficiency
- Biodiversity
- Circular economy



### BUSINESS PERFORMANCE

- Economic performance
- Business resilience
- Technology investment and innovation
- Customer experience
- Sustainability as a driver of innovation
- Energy affordability

## ALIGNING WITH GLOBAL GOALS

We are committed to playing our part in achieving the United Nations Sustainable Development Goals (SDGs), a set of goals adopted by the United Nations Member States to support a better future for people and planet.

We seek to address the goals which are most relevant to our business and where we believe we can make the most impact. We have mapped out the SDGs that align with our sustainability approach, goals and activities throughout this report.



# A YEAR OF CHALLENGES

Throughout FY2020 we have faced unprecedented events that affected communities globally. The devastating impacts of COVID-19 continue to be felt around the world, and like many businesses, we continue to navigate these challenges and are working to support our people and communities where we operate.

It was also a year of natural disasters as bushfires devastated parts of Australia and the Taal volcano erupted in the Philippines. To support affected communities, we provided financial aid and on-ground support.

Following the explosion at Lebanon's Beirut Port in August 2020, we verified

key controls across our sites that store ammonium nitrate. No material gaps were identified, and we provided assurance to stakeholders that we continue to manage this risk.

Our industry continues to face issues surrounding cultural heritage management and First Nations/Indigenous engagement,

with an Australian Parliamentary Inquiry ongoing into the destruction of the Juukan Gorge caves in Western Australia. In response, we are reviewing our global approach to First Nations/Indigenous stakeholder engagement, with a focus on our governance structure and culture, policies, processes and practices.



## SAFETY AND WELLBEING OF OUR PEOPLE THROUGH THE PANDEMIC

As always, the safety and wellbeing of our people has been our number one priority throughout the pandemic. We moved quickly to bring our remote workers home wherever possible, enabled those who could work from home to do so, and introduced new working arrangements and hygiene protocols for teams in critical frontline and manufacturing roles.

As more teams began working from home, we increased our communications, including bespoke campaigns focused

on wellbeing, and colleagues were also encouraged to check in with each other, ensuring everyone felt supported and connected. Recognising the strain on physical and mental wellbeing, we also provided online support seminars and programs.

Before teams returned to their workplace, we introduced COVID-safe plans that went beyond minimum health requirements.



## SUPPORTING COMMUNITIES WHERE WE WORK

As the devastating impact of COVID-19 continues to be felt around the world, our people came together to support their local communities. Our community initiatives are providing much needed protective equipment and food supplies, support and funds to first response teams and those who are most vulnerable within the communities where we operate.

We also leveraged our skills and resources, lending manufacturing and digital expertise to produce hand sanitiser for community organisations and to digitise school programs for remote learning.

Throughout and following the Australian bushfires, we donated a total of \$1 million to support the fire-fighting effort and the ongoing bushfire recovery, \$200,000 of which matched dollar-for-dollar donations made by our employees to charities

involved in bushfire response, both short and long term. Following the Taal Volcano eruption in the Philippines, we matched employee donations, and contributed an additional corporate donation to the Philippines Red Cross. On the ground we launched an employee donation drive, collecting water, clothing, blankets and other essentials for those affected in the community.

# OUR SUSTAINABILITY APPROACH

By supporting the safe production of resources that lift standards of living and drive economic growth around the world, we are helping ignite opportunities for our customers, our people and our local communities.

We are in a unique position to leverage our expertise in technology and digital solutions to create safer and more responsible solutions for our customers and deliver positive economic, social and environmental contributions through our business activities.

## OUR SUSTAINABILITY FRAMEWORK

Our operating context has changed considerably over the last year. Stakeholder expectations for our business to meaningfully address and make progress

on key sustainability topics also continue to evolve.

To meet these changing expectations, in FY2020 we developed a sustainability framework to drive deeper sustainability engagement and outcomes across the company. This focuses on areas that matter most to Orica and our stakeholders where we have the expertise to make the biggest impact.

Our sustainability framework reflects our focus and ambitions covering nine topics under three key themes.

### Safe and responsible business

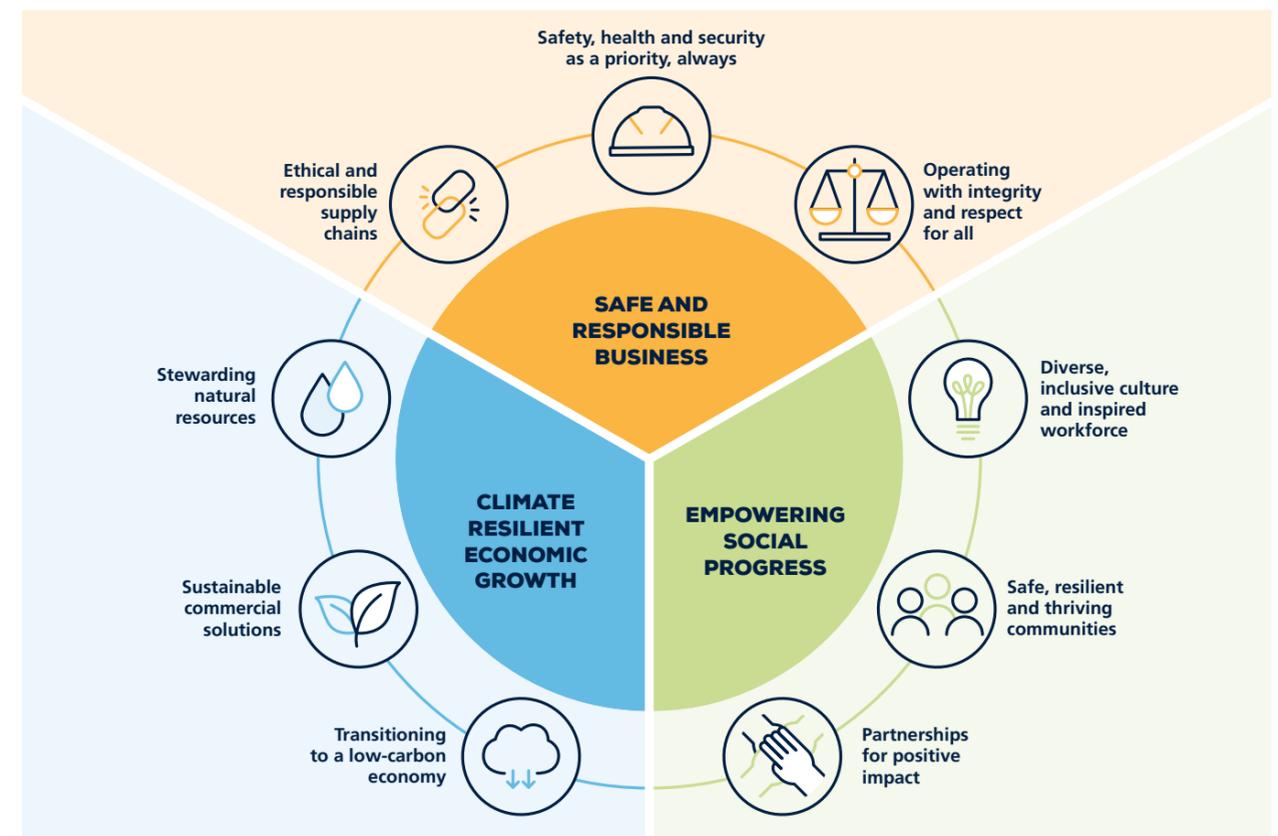
We pride ourselves on conducting our business safely and responsibly, from how we work with our suppliers and manufacture our products to how we deliver for our customers. We always aim to minimise negative impacts.

### Climate resilient economic growth

We have an important role to play in protecting the environment and addressing climate change by minimising our environmental footprint and delivering commercially beneficial solutions for our customers that enable them to minimise their environmental impact.

### Empowering social progress

We actively seek opportunities to collaborate and contribute to social progress, by building diversity, capability and leadership within our workforce and driving social and economic impact in the regions in which we operate.



# OUR SUSTAINABILITY SCORECARD

Safe and Responsible Business								
	Key performance Indicator	Unit of Measure	FY2020 Target	FY2020 Performance		FY2021 Target	Reference	
<b>Safety, Health and security as a priority, always</b> Our number one commitment is to protect the safety and health of our people and security of our products. We look for ways to enhance safety and security through improved process and smart technology creating safer environments for our customers, business partners, and those who live and work in our communities of operation.	<b>Workplace Safety</b>	Fatalities	Number	Zero fatalities	<b>Zero fatalities</b>	Continued focus and improvements in the Major Hazard Management (MHM) program contributed to a fatality free year.	<b>Zero Fatalities – Employees</b> <b>Zero Fatalities – Contractors</b>	Pg. 22-23
		Serious Injury Case Rate	Per 200,000 hrs worked	0.18	<b>0.16</b>	Targeted prevention programs rolled out through our MHM program contributed to the reduction in our Serious Injury Case Rate.	<b>0.14</b>	Pg. 23
		Serious Life Changing Injury Case Rate	Per 200,000 hrs worked	New metric for FY2021	<b>0.044</b>		<b>0.040</b>	Pg. 23
		All Worker Recordable Case Rate	Per 200,000 hrs worked	0.57	<b>0.66</b>	Our All Worker Recordable Case Rate was above target, however the injury severity significantly reduced.	<b>0.57</b>	Pg. 23
		High Potential Injury (HPI) ratio	Number of HPIs/ number of HPIs resulting in injury	New metric for FY2021	<b>19.6</b>	New metric for FY2021	<b>25.4</b>	Pg. 23
	<b>Product Security</b>	Product security incidents (≥ severity 3)	Number of events	0	<b>0</b>		<b>0</b>	Pg. 26
Climate Resilient Economic Growth								
	Key performance Indicator	Unit of Measure	FY2020 Target	FY2020 Performance		FY2021 Target	Reference	
<b>Transitioning to a low-carbon economy</b> We address the challenge of climate change through continuing to reduce our greenhouse gas emissions. We also work to future proof our business and maintain growth by managing and adapting to disruptions arising from physical and transition climate impacts.	Total greenhouse gas (GHG) emissions intensity (Scope 1, 2 and 3)	tCO <sub>2</sub> -e/t AN sold	1.8	<b>1.64</b>	We achieved a 6.5 per cent reduction in total greenhouse gas emissions intensity primarily through replacement and improved performance of selective catalyst abatement in our nitric acid plants.	<b>≤ 1.7 by FY2022</b>	Pg. 40	
	Reduction in total operational Scope 1 and Scope 2 GHG emissions	Percentage	N/A	<b>9.5</b>	We reduced Scope 1 and Scope 2 emissions by 9.5 per cent from FY2019 levels. Bontang, Indonesia recorded a 43 per cent reduction in net emissions and Kooragang Island Nitrates Plant, Australia achieved a 6.3 per cent reduction due to replacement and improved performance of selective catalyst abatement in our nitric acid plants.	<b>At least 40 per cent reduction from FY2019 levels by FY2030<sup>1</sup></b>	Pg. 40	
<b>Stewarding natural resources</b> We take account of our impacts on natural ecosystems and resources, actively improving our responsible and efficient management of land, water and energy.	Environmental events (≥ severity 3)	Number of events	0	<b>0</b>		<b>0</b>	Pg. 47	
	Loss of containment with water or soil impact (≥ severity 1)	Number of events	New metric for FY2021	<b>67</b>	New metric for FY2021	<b>65</b>	Pg. 46-47	
	Total waste disposed	kT	≥ 20.0 2 per cent reduction against FY2019 levels	<b>18.2</b>	We achieved a 12 per cent reduction on FY2019 performance, due to improved site awareness, waste management, and reduced production volumes due to COVID-19.	<b>≤ 19.0</b>	Pg. 48	
	Potable water consumption intensity at Orica's material consumption sites	kL/tonne	0.71	<b>0.77</b>	In Q4, external supply of recycled water was interrupted at Kooragang Island, our most water intensive site. Prior to this, we were on track to achieve target, with potable water intensity measuring 0.67 kL/tonne at the end of Q3.	<b>≤ 0.67</b>	Pg. 47	
Empowering Social Progress								
	Key performance Indicator	Unit of Measure	FY2020 Target	FY2020 Performance		FY2021 Target	Reference	
<b>Diverse, inclusive culture and inspired workforce</b> Our people are our greatest asset. We work to develop talented, capable individuals who are inspired to create and deliver innovative and sustainable outcomes in a culture that values diversity and inclusion.	<b>Our People</b>	Women in senior leadership <sup>2</sup>	Percentage	25	<b>25</b>	We continued to make progress on gender representation, achieving our target of 25 per cent women in senior leadership roles. This included those acting in positions (less than three per cent).	<b>35 per cent by end of 2024</b>	Pg. 57-58
		Retention of key people <sup>2</sup>	Percentage	>90	<b>94</b>		<b>&gt;90</b>	Pg. 57-58
		Ethnic and cultural diversity <sup>2</sup>	Percentage	Aligned to geographic revenue profile outside of Aus/NZ	<b>48</b>		<b>Aligned to geographic revenue profile outside of Aus/NZ</b>	Pg. 57-58
		Board gender diversity	Percentage	≥30	<b>37.5</b>		<b>≥30</b>	Pg. 57-58
<b>Safe, resilient and thriving communities</b> We build meaningful relationships with stakeholders in our community to make informed and impactful investments. Through our business activities, we deliver economic and social benefits, contributing to the development of long-term resilience in our communities of operation.	<b>Community Engagement</b>	Stakeholder and community engagement plans current	Percentage	New metric for FY2021	–	New metric for FY2021	<b>100</b>	Pg. 61
	<b>Community Investment</b>	Total community investment	A\$ million	No target set for FY2020. Historical baseline from FY2017-19 of 1.8 p.a.	<b>3.2</b>	This year, almost half of our community investment was directed to emergency services/disaster relief, including COVID-19 support, bushfire relief efforts in Australia, and Taal Volcano relief efforts in the Philippines.	<b>Invest ≥15 million by FY2025</b>	Pg. 63

<sup>1</sup> Applies to existing operations. Base year emissions will be recalculated consistent with emissions accounting protocols if structural changes occur such as acquisitions or divestments.

<sup>2</sup> FY2020 target defined as senior leaders at job bands A-C. FY2021 target defined as CEO-2 (includes the CEO, Executive Committee and their direct reports, excluding Executive Assistants).

# SAFE AND RESPONSIBLE BUSINESS

We pride ourselves on conducting our business safely and responsibly, from how we work with our suppliers and manufacture our products to how we deliver for our customers. We always aim to minimise negative environmental and social impacts.



## OPERATING WITH INTEGRITY AND RESPECT FOR ALL

Integrity and respect are core to how we operate. We strive to perform our work ethically and responsibly, ensuring compliance, minimising negative social and environmental impacts, and respecting and advancing human rights. Our governance structure, group policies, standards and processes provide guidance for upholding our values and we continuously look for ways to improve.



### FY2020 PERFORMANCE



**ETHICS AND COMPLIANCE STRATEGY REFRESHED**

**2020 MODERN SLAVERY STATEMENT DISCLOSED**

**\$114M PAID IN INCOME TAX**

## STRONG GOVERNANCE

### OUR APPROACH

Strong governance is fundamental to growing a resilient organisation and creating enduring value for our stakeholders. The way we operate is aligned with and supports good governance practices, with our tone set from the top.

Our Board of Directors is responsible for oversight, sound management and strategic direction, with specific duties set out in its Charter. Further detail on our governance framework is available on our website.

Five standing committees assist the Board in the effective discharge of their responsibilities: Audit and Risk Committee; Human Resources and Compensation Committee; Nominations Committee; Safety, Health, Environment, Community and Security Committee; and the Innovation and Technology Committee. Each committee operates under Terms of Reference approved by the Board.

At management level, the Executive Committee are our most senior executives. The Delegations of Authority framework sets out those matters reserved for the Board and those delegated to the CEO and other members of senior management.

Our operating model defines the parameters for our performance at Group level. Four regional management teams have accountability for end-to-end customer service delivery and on-the-ground operational and financial performance.

Supporting the four regions are a small number of Group functions which maintain functional excellence. Each function's role is articulated in a Group function mandate.

The functions are responsible for the Group strategy and policies, standards and procedures that govern Orica. These documents provide the foundation for the Group operating as one organisation across our global network, with common processes and systems. The operating model is designed to provide balance between empowering teams with the freedom to deliver on their accountabilities, while providing the framework to drive consistency and simplicity.

### PROGRESS IN FY2020

We recognise strong corporate governance is critical for all our stakeholders to promote their interests and deliver our business strategy in a sustainable way.

Our leaders are committed to ensuring we conduct our business ethically and to the highest standards of corporate governance. To align our approach with best practice corporate governance and regulatory developments, we periodically review and update our corporate governance documents and practices.

Further details of our corporate governance practices can be found in our 2020 Corporate Governance Statement.



**OPERATING WITH INTEGRITY AND RESPECT FOR ALL** (Continued)

**OUR CODE OF BUSINESS CONDUCT**



Our Code of Business Conduct (Code) applies to anyone who works for or on behalf of Orica and sets out our expectations for the way we work. This includes our values, compliance with relevant laws and regulations, requirements specific to Orica and additional company policies, standards and procedures.

All employees and contractors who are subject to the requirements of our Code must complete mandatory training on joining Orica and undertake refresher training every two years. This ensures they are equipped with the knowledge and tools they need to act ethically and responsibly.

**We encourage everyone to speak up and report behaviours or actions that do not reflect our Code. We are committed to ensuring everyone can raise concerns freely, without fear of reprisal or intimidation, and that any concerns are dealt with fairly, thoroughly, confidentially and in a timely manner.**

**RISK MANAGEMENT**

**OUR APPROACH**

Managing financial and non-financial risks is fundamental to informing our strategic direction and priorities and ensuring we continue to operate a safe, responsible and sustainable business.

Our Group Risk function is responsible for the design of our risk management framework, supporting its implementation and coordinating and aligning risk management activities across Orica. Our risk management framework is aligned to the International Organization for Standardization's Risk Management Guideline, 31000:2018 and facilitates the ongoing identification, assessment and communication of risks across our business.

Material strategic risks are reported to the Board and Board Audit and Risk Committee (BARC) bi-annually, with deep dives into specific material risks occurring quarterly by the relevant committee. This includes material strategic and operational risks that may affect our future financial performance including workplace safety, ethical conduct and climate change.

Our approach to managing the sustainability aspects of our business-wide strategic risks and our operational-level material sustainability risks are detailed in this report and our 2020 Annual Report.

**PROGRESS IN FY2020**

The risks we face have the potential to impact our business, brand and reputation, customer base, our people, assets, profitability, liquidity and the environment. Our assessment and response to key risks and opportunities during FY2020 included:

- **Operational explosion risk:** our Major Hazard Management control verification process provides us with assurance over the safe storage of ammonium nitrate (AN). Following the tragic explosion at Lebanon's Beirut Port on 4 August 2020, key control verifications were performed across all Orica sites that store AN. No material or significant findings were raised through the verification process.
- **Macroeconomic and climate change:** new macroeconomic scenarios were used to analyse commodity demand outlooks and inform an enterprise-wide assessment of climate risks and opportunities.
- **Political and regulatory:** global political and regulatory developments, including GHG emissions and climate change regulation, and evolving stakeholder expectations regarding our licence to operate, were evaluated. Response planning was presented as part of the Board's strategy and planning.
- **Human rights:** the effectiveness of our governance framework and processes in identifying and addressing human rights issues was reviewed. While there is more to do in this area, a range of improvement actions will be implemented in FY2021 covering governance, risk assessment and due diligence practices.

For more information on our risk management progress, refer to our 2020 Annual Report and 2020 Corporate Governance Statement.

**ETHICS AND COMPLIANCE**

**OUR APPROACH**

Our Ethics and Compliance program establishes clear requirements and controls to support compliance with key risks, including anti-corruption, trade sanctions and competition (anti-trust) laws.

Our management approach is based on our values, which guide the way we operate. Our Ethics and Compliance program has oversight from the BARC while our Chief Compliance Officer reports to the CEO and the BARC on topical ethics and compliance issues and trends.

At an operational level, regional ethics and compliance managers work closely with stakeholders within the business on individual matters as they arise. Employees can also access a multi-lingual online compliance tool which records incidents and provides notifications and controls approval workflows as required by our Ethics and Compliance Group Standard. Higher risk activities are subject to review and approval by the Ethics and Compliance team.

Specific ethics and compliance training is provided to employees using a risk-based approach. A range of resources, training, risk assessments and other controls are provided as part of our compliance framework reflecting global practice and regulator guidance.

**PROGRESS IN FY2020**

In FY2020, we undertook several activities as part of the Ethics and Compliance program.

- We assessed compliance with our Ethics and Compliance Group standard across a sample of 15 countries as part of the Group standards assurance program. Instances of partial or non-compliance with the standard were reviewed and action plans developed to address these.
- We continued the Monitoring and Assurance program established in FY2019, which involved assessing the effectiveness of our ethics and compliance controls in 10 high risk countries. The countries were identified by applying a risk-based approach that considers various external and internal criteria, including corruption ratings and commentary by regulators and organisations and an internal assessment of ethics and compliance risk.

Corrective and protective actions identified were implemented. A review of a further 10 high risk countries was conducted in FY2020. Identified actions will be implemented in FY2021.

- A new, dedicated trade sanctions role was established within the Ethics and Compliance team. The addition of a new resource will enable the team to better monitor compliance and improve controls to address this key risk.

**REFRESHING OUR ETHICS AND COMPLIANCE FRAMEWORK**

To assess the appropriateness and effectiveness of our Ethics and Compliance program we conducted an in-depth internal review, benchmarking against regulator guidance and global practice.

With a view to continuous improvement and an enhanced focus on material risks, we refreshed our already robust Ethics and Compliance program, developing a new framework and three-year strategy for FY2021-23.

Our refreshed strategy comprises six areas of focus within an iterative process, creating a feedback loop to ensure continuous improvement.

The key areas of focus are:

- establishing a strong culture of ethical behaviour by setting the **'tone at the top'**, led by our Board, Executive Committee and senior leadership teams
- ensuring the expectations of our people and business partners are clearly articulated and documented in current and fit-for-purpose **policies and procedures**
- ensuring our expectations are communicated and understood by our people and business partners through effective and regular **communication and training**
- providing robust **governance and oversight** to ensure ongoing effectiveness of the program
- undertaking comprehensive **risk assessment and due diligence** activities to ensure key risks are identified and managed

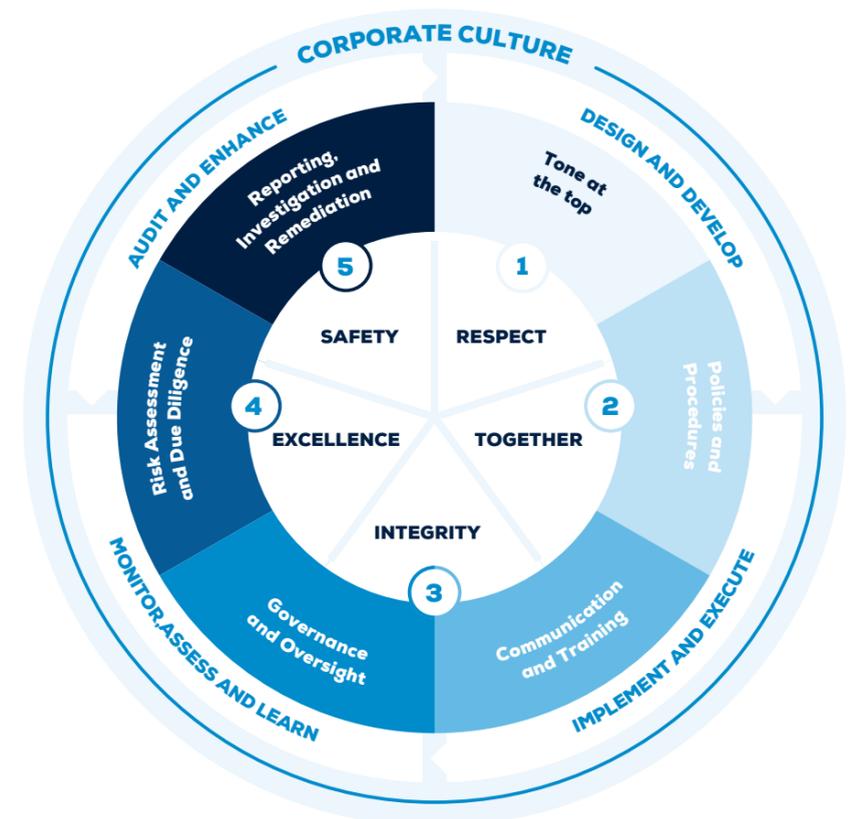
- maintaining pathways for **reporting, investigation and remediation** to ensure issues are identified and investigated swiftly, and remedy provided where required.

**PRIORITIES AND FOCUS FOR FY2021**

Based on our refreshed approach, key actions have been identified for each focus area:

- ongoing assessment of the effectiveness of our Ethics and Compliance program, enhancing controls where gaps are identified or as required to meet emerging risks and changing requirements
- expanding internal capabilities to enable greater assessment and benchmarking of our program
- conducting an internal audit of our compliance against our Ethics and Compliance Group Standard
- reviewing the systems and processes for managing gifts, benefits and donations
- enhancing ethics and compliance training and guidance in line with our new framework and evolving approach
- focusing on the 'tone at the middle', enabling us to create deeper awareness and understanding of the program, risks and controls across the organisation.

**Compliance Framework**



**OPERATING WITH INTEGRITY AND RESPECT FOR ALL** (Continued)



**REPORTING ISSUES AND GRIEVANCES**

Incidents or concerns involving a breach of our Code or work-related grievances can be reported by all stakeholders to an independent, confidential Speak-up service. Reports can be made at any time and in multiple languages using the hotline via the Speak-up service. Reporters have the option to remain anonymous.

Our Whistleblower Policy outlines our commitment to ensuring the identity of reporters remains confidential and they are not subject to detrimental conduct as a result of making a report. This provides protection for reporters and creates an environment where people feel safe and encouraged to report breaches of our Code, including unethical, illegal or improper behaviour. Those considering reporting can also discuss confidentiality and legal protections with our Whistleblower Protection Advisor.

In addition to the Speak-up service, individuals within Orica who are authorised (as outlined in our Whistleblower Policy) can also accept a report.

In FY2020, 75 per cent of all grievances raised were closed or resolved, with the remaining pending or under review.

Everyone is encouraged to speak up and report behaviours or actions that don't reflect our Code. We are committed to ensuring everyone can raise concerns freely, without fear of reprisal or intimidation, and that any concerns are dealt with fairly, thoroughly, confidentially and in a timely manner.

**HUMAN RIGHTS**

**OUR APPROACH**

Our approach to respecting human rights is aligned to internationally recognised human rights principles, including the United Nations Universal Declaration of Human Rights, the United Nations Guiding Principles on Business and Human Rights, and the International Labour Organisation's Declaration of Fundamental Principles and Rights at Work.

Our expectations of people within our business and our business partners are outlined in our Human Rights at Work Policy and our Code of Business Conduct. In summary, we:

- oppose any form of slavery, forced labour, human trafficking and child labour and are committed to taking action to reduce the risk of this occurring in our operations and supply chain
- are committed to looking after the health, safety and wellbeing of our employees, contractors and visitors, and ensuring our workplace is free from discrimination
- comply with all employment laws and obligations, and ensuring appropriate pay and working hours for our people
- promote freedom of association and the right to collective bargaining.

**PROGRESS IN FY2020**

To assess the effectiveness of our processes in identifying and addressing human rights issues, we conducted a high level review of our policies, risk assessment and due

diligence processes, and grievance and reporting mechanisms to benchmark our current approach to managing human rights and modern slavery risk. A range of improvement actions were identified and will be implemented in FY2021.

We continue to meet our obligations under the Modern Slavery Act 2015 (United Kingdom) and the Modern Slavery Act 2018 (Commonwealth) with the publication of our fifth Modern Slavery Statement which is available on our website.

**PRIORITIES AND FOCUS FOR FY2021**

Our human rights review identified several priority actions including:

- undertaking a detailed review of existing human rights policies and processes against global best practice
- maturing our modern slavery and human rights risk assessment and due diligence processes, including a review on our approach to ensuring the rights of Indigenous Peoples and management of cultural heritage
- undertaking a training needs analysis for our organisation and supply chain partners
- identifying opportunities to work collaboratively with peers, business partners and customers to address risks where possible and learn from best practice.

Further detail on our FY2021 actions to address modern slavery in our operations and supply chain can be found in our 2020 Modern Slavery Statement.

**TAX TRANSPARENCY REPORTING**

We believe enhanced tax transparency is a critical element of ethical business behaviour.

**TAX POLICY – OUR APPROACH TO TAX**

Our Tax Policy and approach to tax is published on our website, however, some important aspects of that policy are set out in this report.

As an Australian mining services company with global operations, we generate a substantial amount and variety of taxes across jurisdictions including income taxes, stamp duties, employment taxes and other taxes. We also collect and remit a number of taxes on trust including employment taxes and indirect taxes such as GST/VAT.

The taxes we pay and collect form a significant part of the economic contribution to the countries of operation.

**TAX STRATEGY AND GOVERNANCE**

Our tax strategy is reviewed by our Board of Directors annually, is aligned with the overall corporate strategy and supplements our Risk Management Policy.

Our Chief Financial Officer has oversight and responsibility for our tax risk management framework. Operational and governance responsibility for the execution of the Group's tax strategy rests with the Vice President Taxation, supported by a team of tax professionals. External tax expertise is used where required.

Our Vice President Taxation reports on tax matters bi-annually to the BARC.

Our approach to tax is applicable across the Orica Group and is reviewed and updated annually.

**COMPLIANCE**

We are committed to complying with all relevant revenue laws in a responsible manner, with all taxes properly due, accounted for and paid. A tax standard and relevant procedures are in place to ensure tax compliance obligations are managed.

Our in-house global tax team manages our tax affairs, supplemented with external compliance support where required.

**STRUCTURE**

We do not support the use of artificial structures established to avoid paying tax and have no commercial purpose. We will not enter into any tax avoidance activities.

**RELATIONSHIPS WITH TAX AUTHORITIES**

We aim for open, transparent and respectful relationships with the Australian Taxation Office and other tax authorities globally. We seek advance rulings from taxation authorities on transactions where appropriate.

**USE OF TAX HAVENS**

Tax havens are not used for tax planning purposes. Where we have operations in countries that are 'low tax' jurisdictions, there is genuine operational substance in these locations, or the entities are dormant.

Our overseas companies are subject to Australia's international tax rules (Controlled Foreign Corporation rules).

**TRANSPARENCY**

We support the ongoing global development of improved tax transparency to increase understanding of tax systems and build public trust.

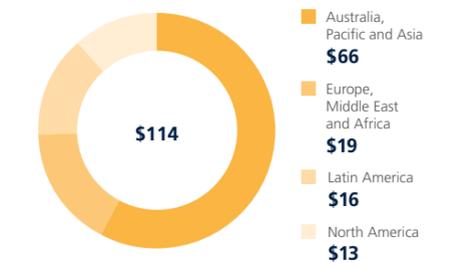
We have signed the Corporate Tax Transparency Code Register developed by the Board of Taxation in Australia and are committed to applying the principles and the details of the Code.

**TAX CONTRIBUTION SUMMARY**

In FY2020, we paid \$114 million (FY2019 \$107 million) globally in corporate income taxes and \$61 million (FY2019 \$60 million) globally in payroll taxes. We collected and remitted \$122 million (FY2019 \$109 million) globally in GST / VAT.

The charts show FY2020 corporate income tax paid in each region (including withholding tax and trade taxes), and an analysis of total tax paid by type.

**FY2020 global corporate tax and withholding tax on income by region (\$m)**



**FY2020 global tax paid by type (\$m)**



In FY2020, in Australia, we paid corporate income tax of \$33 million (FY2019 tax refund \$10 million comprising a tax refund on the resolution of a thin capitalisation dispute with the Australian Taxation Office of \$23 million and tax payments of \$13 million). We also paid \$16 million (FY2019 \$19 million) in payroll tax and \$1 million (FY2019 \$2 million) in fringe benefits tax. We collected and remitted \$50 million (FY2019 \$47 million) in GST and \$118 million (FY2019 \$106 million) in 'pay as you go' withholding taxes.

## OPERATING WITH INTEGRITY AND RESPECT FOR ALL (Continued)

### A reconciliation of accounting profit to income tax payable

	Consolidated FY2020 A\$M	Consolidated FY2019 A\$M
<b>Before individually material items:</b>		
Accounting profit/(loss) before tax	455.0	555.0
Prima facie income tax expense/(benefit) calculated at 30% on accounting profit	136.5	166.5
Material non-temporary differences		
variation in tax rates of foreign controlled entities	(12.6)	(23.4)
tax under provided in prior years	1.5	9.7
recognition of previously unbooked temporary differences	(16.6)	–
non creditable withholding taxes	12.3	10.2
non allowable interest deductions	21.9	14.6
non allowable share based payments	1.6	3.7
recognition of tax losses	(3.5)	(10.5)
sundry items	5.3	6.9
Income tax expense/(benefit) before individually material items	146.4	177.70
<b>Individually material items:</b>		
Individually material items before tax	(170.4)	(195.9)
Prima facie income tax expense/(benefit) calculated at 30% on individually material items	(51.1)	(58.8)
Material non-temporary differences		
variation in tax rates of foreign controlled entities	2.6	0.3
non allowable initiating systems optimisation expense	8.1	–
non allowable operating model restructuring expense	1.0	–
non taxable gain on formation China joint venture	–	(10.6)
Income tax expense/(benefit) on individually material items	(39.4)	(69.1)
Income tax expense/(benefit)	107.0	108.6
Material temporary differences		
deferred tax	7.0	(0.5)
Tax payments more/(less) than tax charges	0.4	22.5
Tax refunds on matters in dispute with tax authorities	–	(23.1)
Income tax paid per the statement of cash flows	114.4	107.5

### Effective tax rate for Australian and global operations

	Notes	Consolidated FY2020	Consolidated FY2019
<b>Before individually material items</b>			
Australia	1	39.7%	36.9%
Global operations (including Australia)		32.2%	32.0%

1 The tax rate is the percentage of income tax expense to accounting profit/loss before tax (before individually material items) adjusted to exclude exempt dividend income.



### INTERNATIONAL RELATED PARTY DEALINGS

We price our international related party dealings to reflect the substance in our operations in accordance with the 'arm's length principle' as defined in the Organisation for Economic Co-operation and Development (OECD) guidelines and in accordance with the laws in all the countries in which we operate.

We have transfer pricing procedures which govern the pricing of all international related party dealings. These procedures require all international related party dealings to be priced in accordance with the arm's length standard. We maintain contemporaneous records to support the pricing of our international related party dealings and benchmarks and document the outcomes of our material dealings on an annual basis.

The significant international related party dealings impacting our Australian taxable income in FY2019 is summarised as follows:

- The purchase of raw materials and finished products from related parties in Singapore and Indonesia including ammonia, ammonium nitrate, caustic
- The sale of raw materials and finished products (including bulk explosives, packaged explosives and initiating systems) to related parties in Peru, Singapore, Ghana, South Africa, Russia, Chile, Panama, Indonesia and Papua New Guinea.
- The provision and receipt of services from entities resident in Singapore, the United States, Germany, Canada, Chile, South Africa, Brazil, Indonesia and the United Kingdom. The nature of the services includes general management, information technology, sales and marketing, logistics and reimbursement of third party expenses.
- The use of intellectual property held by a related party in Singapore. The nature of the intellectual property includes technical knowhow related to the manufacture of Orica's products and the Orica name and trademarks.
- The provision of contract research and development activities for a related party in Singapore.

soda, gas, bulk explosives, initiating systems and other explosive materials.

Our treasury function, based in Melbourne which engages in financing transactions (predominantly providing loans and accepting deposits) with over 80 group companies (resident in more than 40 countries) at market interest rates. The significant loan balances are with related parties in Singapore, Indonesia, Germany, Russia, the United States, and the United Kingdom. We also have a subsidiary in Singapore which acts as the Group's captive insurer.

In addition, in FY2019 we entered into certain arrangements with related parties involving the transfer of shares, with the most significant transactions being with related parties in the United States, China and Argentina.

Refer to our website for publication of the country-by-country reporting for FY2019.

### Australian Tax Return Data

	Notes	FY2019 A\$M	FY2018 A\$M
Total income	1	2,174	2,534
Taxable income	2	202	61
@ Tax Rate	3	30%	30%
Tax liability		61	18
Offset reductions	4	(40)	(18)
Tax payable		21	–

1 Total Australian income (includes sales, dividends, interest income etc.) before all expenses (for example, interest, employee costs, depreciation etc.).

2 Taxable income after allowing for all deductible expenses and tax exempt income.

3 Australian Statutory tax rate.

4 Offset reductions of \$40 million (FY2018 \$18 million) relating to franking credits, foreign income tax and research and development.



# SAFETY, HEALTH AND SECURITY AS A PRIORITY, ALWAYS

Our commitment to the safety and health of our people and the security of our products and operations is our priority, always. By operating in accordance with legislation and regulations, our Group standards and policies, continuously improving our practices and leveraging smart technology, we are enabling safer environments for our people, customers, business partners, and those who live and work in our communities of operation.



## FY2020 PERFORMANCE



## WORKPLACE SAFETY

### OUR APPROACH

Our commitment to safety is embedded in our core values. Safety is our priority, always, and nothing is more important than keeping our people, customers and communities safe. We maintain a relentless focus on preventing injury and illness and always improving the way we manage health and safety risks across our business. This ensures that everyone returns home safely at the end of each day.

Our Safety, Health, Environment and Security Policy was updated in FY2020. It affirms our aspiration to avoid harm, empower our people to perform their tasks safely, and continuously improve our performance.

To guide our people we have a comprehensive set of Group standards and procedures which form our Safety, Health, Environment and Security (SHES) Management System (Management System). These documents specify the requirements and controls that must be in place to protect our people, customers, and communities.

Our CEO and Executive Committee are accountable for performance against SHES targets. The Orica Board Safety, Health, Environment, Community and Security (SHECS) Committee meets at least quarterly and undertakes site visits to review performance against targets, monitor implementation of SHECS initiatives and programs, and consider material risks and issues. The SHECS Committee is informed by our Safety, Health, Environment and Security Assurance program (Assurance program), which provides insights into compliance with the Management System, including applicable legal requirements.

### PROGRESS IN FY2020

#### Managing safety through COVID-19

The spread of COVID-19 continues to have a significant impact on the world. Like many organisations, we continue to adapt our working practices as the situation evolves to ensure the health and safety of our people, customers and communities.

Health and safety protocols, supporting COVID-19 controls, have been introduced to all our manufacturing sites and office locations. Wherever possible, we enabled those who could work from home to do so.

Our people working in critical frontline and manufacturing roles are keeping our operations running safely. Rotating rosters and stringent health and hygiene protocols are in place to protect them.

At the time of publication, all non-essential international and domestic travel has been deferred. Action response plans for sites and offices are in place for any employee, contractor or visitor who suspects they have been exposed to, or is confirmed positive for, COVID-19.

Where our plants are operating, our safety and health controls are in place to protect the health and wellbeing of our people. In some areas where our leaders were unable to travel, we introduced augmented reality technology to allow remote safety verifications and technical support.

### Safety performance

Preventing fatalities and serious injuries continues to be our key priority. In FY2020, for the third consecutive year, we recorded no fatalities. During the year, we undertook a detailed review of all serious injuries sustained in previous years, enabling us to better understand and prioritise actions to address causes of serious injuries. The subsequent rollout of targeted prevention programs, through our Major Hazard Management (MHM) program, resulted in a significant reduction in the number of serious injuries sustained and the severity. As a result, our Serious Injury Case Rate (SICR) reduced by 29 per cent since FY2019 to 0.16 serious injuries per 200,000 hours worked, achieving our FY2020 target of 0.18 serious injuries per 200,000 hours worked.

Our All Worker Recordable Case Rate (AWRCR) remains above target however injury severity was reduced as our primary focus has remained on serious injury and fatality prevention. At sites with high AWRCR rates, local interventions have been applied.

We continue to promote and enhance safety leadership behaviour within our workforce, with our leaders completing over 50,000 safety interactions, an increase of over 10 per cent from FY2019. These interactions are a practical way to live and demonstrate our values.

### Serious Injury Case Rate



### All Worker Recordable Case Rate



### WIRELESS DETONATORS SUPPORTING CUSTOMER SAFETY PERFORMANCE

Safety is at the heart of our innovation process. This year we continued to see our products contribute to enhanced safety outcomes at our customer operations.

In FY2020, Nexa Resources deployed our WebGen™ 100 wireless detonators at the Vazante zinc and lead mine in Brazil to overcome a common problem. Nexa was using the vertical retreat mining method at Vazante, a method that requires pillars of mineable ore to be left in place for the purpose of maintaining the stability of the rock mass. The mining of these pillars at the end of the operation is a challenging aspect of this method as it exposes workers to heavily damaged and backfilled areas of the mine.

Rather than require workers to re-enter the mine to load downholes, program detonators and fire the shot, the final pillar at Vazante was preloaded with 88 WebGen™ 100 wireless units before access to the adjacent areas was lost.

Once the ore from the block had been extracted and the pillar was no longer required to provide stability, the WebGen™ detonators were remotely initiated via ultra-low frequency signal after a 33-day sleep time.

**“The blast happened two levels below us, so we are 400m away above the shot. All encoded signals were sent through the rock with the safety protocols to fire the blast being followed.”**

**Mateus Ribeiro, Chief Mining Engineer, Nexa Resources**

This technique moved workers out of harm’s way. The process was completed with no misfires, adequate fragmentation and ultimately, an 88 per cent recovery of the pillar. The single blast event resulted in a net benefit of US\$1.59 million for Nexa Resources Vazante from the single blast event.

**SAFETY, HEALTH AND SECURITY AS A PRIORITY, ALWAYS** (Continued)



**RESPONSE TO TRAGEDY IN BEIRUT**

In August 2020, following the tragic explosion in Beirut, Lebanon, our Major Hazard Management (MHM) verification process was rapidly deployed to assess the long-established controls in place to prevent such an event occurring at Orica facilities.

As part of the process, over 400 verifications were completed globally in under a month. These detailed verifications looked at the key controls we require at all our operational sites to safely store ammonium nitrate (AN) including how we segregate incompatible or combustible materials from AN and control potential ignition sources from our product.

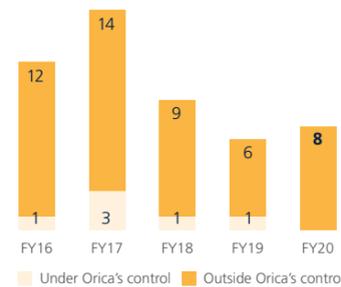
**While some opportunities for enhancing our safety and risk management controls were identified, robust key controls to manage safe storage of ammonium nitrate are in place and stakeholders can be assured this risk continues to be well managed by our business.**

**Transport and distribution safety**

In FY2020, Severity 2<sup>1</sup> transport and distribution incidents increased overall. These events were outside the Orica-controlled network, occurring with product shipped by third-party providers. No events occurred within the Orica-controlled network. We will continue to focus on addressing third-party transport and distribution risks in FY2021.

**Distribution incidents**

**Major Hazard Management program**



As part of our strategic focus on major hazards, we continue to further embed our MHM program within our operations. The program is designed to identify and manage major hazards to ensure our people return home safely at the end of each day. After a successful pilot, the program was rolled out globally in FY2020, with more than 11,500 verifications completed.

Our MHM program will be further embedded into standard business processes throughout FY2021, strengthening our approach to the management of both process and personal safety major hazards in our business.

**Management systems and reporting**

Considerable work was undertaken in FY2020 to refine and embed our Management System globally. Compliance guides have been developed for all group standards under our Management System to support assurance activities at regional levels. The guides are being leveraged to further embed our Management System requirements within our business.

Our Assurance Program helps verify that required standards controls are in place and operating effectively, best practices are identified and shared, and corrective actions are effectively implemented where risks and issues are identified. Despite COVID-19 affecting our ability to travel, all planned SHES assurance activities were completed, leveraging virtual auditing tools in some instances to conduct site assessments, regional assessments and corporate audits.

Building on work undertaken in FY2019 to refine metrics and develop reports to provide greater visibility of our performance, in FY2020 we developed and refined a monthly process safety metrics report in initiating systems/packaged explosives (IS/PE) manufacturing.

This will enable us to understand trends and identify actions related to process safety events.

**PRIORITIES AND FOCUS FOR FY2021**

- Implement a five-year SHES strategic plan, centred around key themes of leadership, innovation and risk management.
- Continue to implement the MHM program, including embedding the program into the way we work.
- Continue to focus on preventing fatalities and serious injuries, expanding our existing approach to contractors in addition to employees.
- Implement standardised contractor pre-qualification processes for contractors performing high-risk work.
- Pilot an innovative leadership program to position Orica at the forefront of safety leadership practice.

**HEALTH AND WELLBEING**

**OUR APPROACH**

We care about the health and wellbeing of our people and work continually to minimise the potential for adverse health impacts associated with the workplace. We set minimum standards for managing health and wellbeing through our Health Group Standard which is subject to continuous improvement through regular internal auditing and review to assess effectiveness.

COVID-19 continues to present health challenges, with several regions impacted by confirmed positive cases. In response to this new health risk, we focused on prevention and mitigation strategies through established operational protocols. Key controls for both operations and office environments were implemented using existing safety management tools, in addition to other hazard management controls, such as the implementation of physical distancing, moving to remote working where possible, increased cleaning and disinfection, and a focus on educating our people on personal hygiene practices. We continue to monitor these controls closely to ensure our people are protected.

**PROGRESS IN FY2020**

Despite the challenges in FY2020, we completed a number of actions to improve our approach and controls to managing health and with targeted initiatives to address specific risks in our regions.

- We developed health guidance material to support the requirements set out in our Health Group Standard to assist regions to achieve compliance.
- We developed a standardised methodology for Health Risk Assessments (HRA) to identify, assess and control our risk of material harmful agents, enabling us to establish health exposure risk profiles at each of our operations. Using this methodology, we commenced a qualitative HRA for our continuous manufacturing operations which will be completed in FY2021. An HRA for quarry services and surface coal was also completed.

- We reviewed and updated our internal Occupational Exposure Limits (OEL) and Biological Exposure Indices (BEI) for all identified harmful agents at our locations, in line with regulatory requirements, best practice and emerging scientific literature. Unless local regulations require a more stringent limit, OELs and BEIs have been standardised to enable better analysis and assessment for potential exposure in the future.
- We established Harmful Agents (chronic) as a major hazard and incorporated relevant key controls into our Major Hazards Management program to ensure ongoing and effective verification of controls.

At a regional level, our focus was on managing respiratory health risks, particularly Respirable Crystalline Silica (RCS) and Respirable Coal Dust (RCD). Within our Australia Pacific and Asia region, we commenced the RCS and RCD Assessment Initiative program. This aims to enhance the risk controls for RCS and RCD for our mining service teams by developing and implementing monitoring programs, assessing compliance with revised OELs, and reviewing the effectiveness of existing key controls.

As part of the program, we extended an existing control of mandatory pre-employment and periodic respiratory assessments (in place for workers in coal mining since FY2017), to include workers in the quarrying industry and at non-coal sites in Queensland, Australia. This type of mandatory health control for workers at high risk of exposure to respiratory hazards is demonstrated to be effective in detecting and preventing the progression of lung diseases.

During the year, a cobalt catalyst operator from Kooragang Island, Australia, was diagnosed with occupational asthma. Medical advice confirmed this was due either wholly, or in part, to exposure to cobalt while on site. The impacted worker has been provided with medical support, counselling and assistance, and continues to work at Orica on modified duties. In response to this incident, we undertook a full investigation, including identification and implementation of priority actions to control this risk, such as routine biological and health surveillance monitoring.

**500+ PARTICIPANTS**      **50+ SESSIONS**      **GLOBAL COMMUNITY**

**NAVIGATING WORRY AND ANXIETY THROUGH COVID-19**

COVID-19 and the associated lockdowns have created economic uncertainty, increased social isolation, health fears and mental health challenges. As part of our commitment to prioritising the health and wellbeing of our people, we introduced a six-week wellness program to support mental health. The program was developed in conjunction with a clinical psychologist and organisational development expert and aims to help our people effectively navigate worries and anxieties related to COVID-19.

Since inception, over 500 employees across our Asia Pacific and Latin American operations, as well as selected office-based employees, have taken advantage of the virtual sessions which are offered in English, Hindi, Tagalog, Bahasa and Spanish. The program has received overwhelming positive feedback allowing us to support and learn from each other and continue to be a strong and connected team.

<sup>1</sup> Incidents resulting in injury requiring medical treatment, or fatalities, or loss of security sensitive product, or significant financial impact.

## SAFETY, HEALTH AND SECURITY AS A PRIORITY, ALWAYS (Continued)

### PRIORITIES AND FOCUS FOR FY2021

Our focus is on controlling exposure to material harmful agents, managing fitness for work and building health systems and frameworks that allow us to enhance the physical and mental wellbeing of our people. In FY2021 we are:

- continuing to develop our Health Risk Assessment and Exposure Risk Profile templates and processes to support the methodology developed in FY2020
- completing the Continuous Manufacturing Exposure Risk Profile commenced in FY2020
- undertaking a risk assessment and management standard to address mine dust as part of our commitment to address chronic injury and illness
- continuing to design, configure and deploy an industrial hygiene module for the Enablon database to ensure the collection and retention of data is standardised
- reviewing pre-employment and periodic health surveillance requirements in our countries of operation to identify opportunities for standardising and improving risk management controls
- maintaining our focus on our mental wellbeing program which continues to be a priority during the COVID-19 pandemic.

## PRODUCT SECURITY

### OUR APPROACH

As a manufacturer of commercial explosives and blasting initiating systems, we take our responsibility and commitment to ensuring the security of our products very seriously. This year's tragic explosion at Lebanon's Beirut Port was a reminder of the serious risks associated with the unsafe storage of explosive product. Our approach to product security is sound. We ensure that those we partner with and sell to share our commitment to eliminating security risks across the lifecycle of our products and services. This includes ensuring our products are used for their intended purpose.

While our detailed approach to managing product security remains confidential, key elements include:

- customer screening and vetting
- site and transport security
- ongoing engagement and collaboration with national and international security agencies.

Annual self-assessments and Life Cycle Risk Assessments (LCRA) are performed as part of our responsible product stewardship practices and SHES management system requirements. LCRAs help ensure our products are used as intended, both safely and ethically, from order and shipment through to end-use and disposal. LCRAs are mandatory at the beginning of product development and maintained by accountable product and services managers.

Our Security Group Standard, which forms part of our SHES management system, details the requirements and controls that must be in place to ensure security of our product and protect our people, customers and communities.

Security key performance indicators and security events are tracked, measured and reported monthly to the Executive Committee and quarterly to the SHECS Committee.

### PROGRESS IN FY2020

#### Strengthening security governance

In FY2020, we continued to strengthen our governance and management of product security risks and updated our Security Group Standard.

High-risk sites conducted self-assessments, benchmarking and reviews against the updated standard, with improvement actions identified to be implemented in FY2021.

All security events categorised as Severity 2<sup>1</sup> or higher are tracked and reviewed quarterly by the SHECS Committee. A deep dive was conducted on these events during the year, with each event investigated and regulatory and security agencies involved where required. Action closeouts were also tracked. The tracking and analysis of security events has enabled us to focus on enhancing controls in high risk activities and locations.

In FY2021, standardised guidance for regional teams on conducting security event investigations will be developed and implemented.

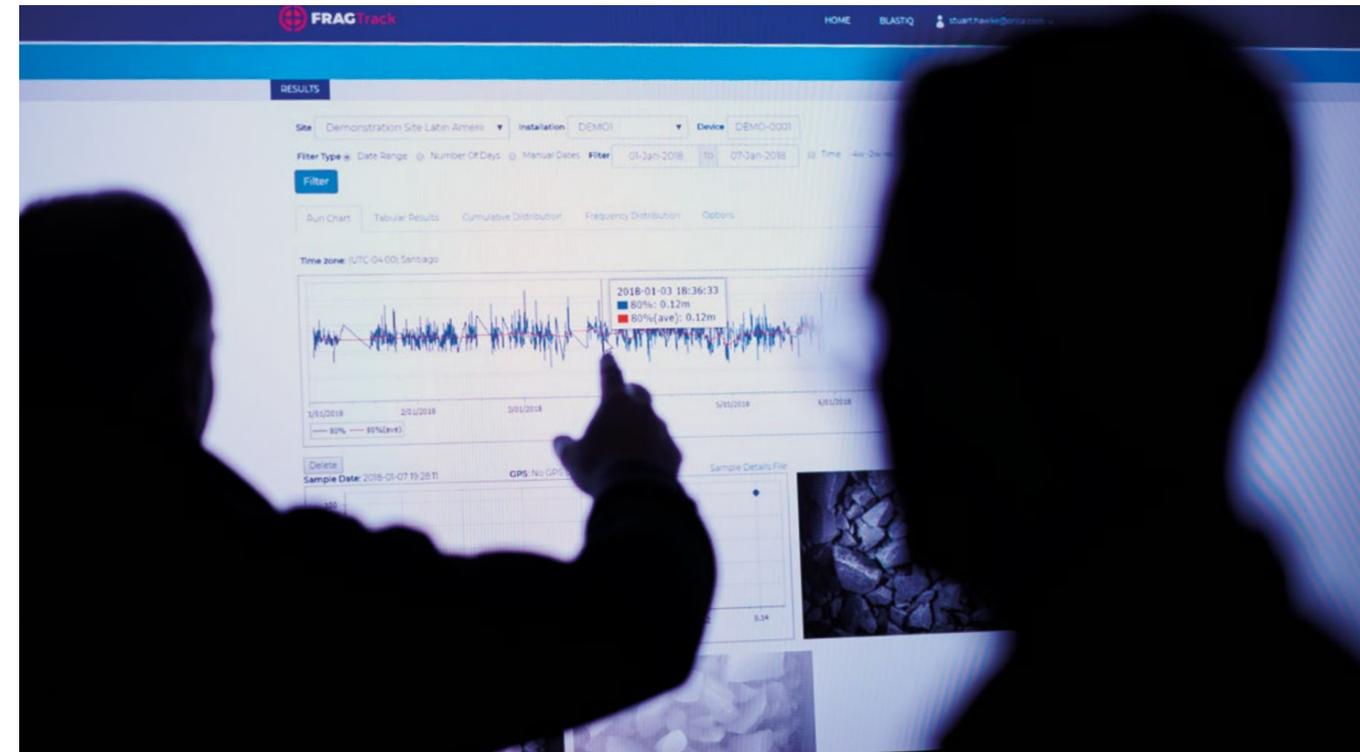
### Security compliance

No product security incidents categorised as Severity 3<sup>2</sup> or higher were recorded in FY2020. We are also not aware of any incidents regarding non-compliance of regulations and voluntary codes relating to misuse of our products and services, product information and labelling, or marketing communications.

To comply with mandatory product traceability requirements that came into effect in FY2020, box level traceability has been implemented for all our products in India. The competent authority has also mandated that the manufacture and sale of electric detonators be reduced by 50 per cent over two years and replaced by other technologies. To meet this requirement, a target of 20 per cent reduction has been set for FY2021.

### PRIORITIES AND FOCUS FOR FY2021

- Implement the Group procedure for security across our business, together with a comprehensive guidance document.
- Develop and implement an investigation methodology for security events.
- In accordance with our strategic objective to always protect our people and ensure a tight chain of custody across our products, we will focus on three key areas:
  - provide training for our people and our business partners to ensure they are aware of security risks and our management systems and controls
  - enable traceability of our products
  - explore new innovations and technologies that may be used to prevent the misuse of our products.



## CYBER SECURITY

### OUR APPROACH

We implement cyber security procedures to protect our global information network. Our cyber security strategy defines our approach to securing our network from significant malware damage or disruption and improving our service continuity and disaster recovery capabilities.

The ability to protect our network, technology and data from cyber attacks is treated as a material operational risk. Our cyber security program is governed by the BARC and managed by our Chief Cyber Security Officer. Our internal Cyber Security Governance Committee is convened each quarter to review risks, events and improvement initiatives and includes senior business managers and our Vice President of Safety, Health, Environment and Security.

In conjunction with our external service providers, our Security Operations Centre (SOC) monitors our facilities, information, networks, data and other assets. Cyber security is integrated with our Major Incident Management plan.

### PROGRESS IN FY2020

Our cyber security strategy is focused on controls designed to prevent, detect, respond or recover from attacks that could result in critical services outages, or loss of production and business services in particular.

In FY2020, we continued to mature our cyber security controls with a focus on:

- identity and access management controls, ensuring appropriate internal allocation of access to our network and systems
- systems, particularly Orica's implementation of SAP, and replacement of end-of-life systems that presented a security risk
- protecting our systems and data on and off our network through the rollout of updated workstation control tools
- refining our incident detection and response processes, and extending our vulnerability management capability to detect vulnerabilities through our network
- communication and training for our people to raise awareness of cyber security threats and recommended actions.

### PRIORITIES AND FOCUS FOR FY2021

Our multi-year cyber security program of work delivers enhanced controls supporting the goals of the cyber security strategy, with a particular focus on supporting our people as they continue to work remotely. Activities in FY2021 include:

- ongoing work to protect our IT hardware, software, mobile devices and network from malware both on and off the Orica network including improvement of cloud security controls to increase visibility and protections for cloud-based applications
- strengthening controls around critical systems and improving information protection
- continuing to engage with our material and high-risk third-party service providers to understand their cyber security approach
- continuing cyber security assessments of customer products including WebGen™, BlastIQ™ and FRAGTrack™ as part of our ongoing enhancement process.

<sup>1</sup> Severity 2: events that resulted in loss of security sensitive Orica product.

<sup>2</sup> Severity 3: events that resulted in misuse of security sensitive Orica product.

# ETHICAL AND RESPONSIBLE SUPPLY CHAINS

At Orica, we have the ability to influence change through our supply chain and opportunities to work collaboratively with our suppliers to address social, environmental and ethical impacts. We also recognise that procuring from local and diverse suppliers is a way to share economic value in the communities in which we operate and contribute to creating more inclusive economies.



## FY2020 PERFORMANCE



**13,500**  
SUPPLIERS

**LOCATED IN**  
**48**  
**COUNTRIES**

In FY2020, we procured products and services from 13,500 suppliers in 48 countries around the world. Prior to doing business, we assess suppliers during the tendering and onboarding process to ensure they meet our minimum standards. As a condition of doing business with us, our suppliers must:

- agree to comply with all contractual conditions, policies and procedures, including our Code of Business Conduct and Human Rights at Work Policy
- meet all country-specific legislative requirements required to operate their respective businesses
- meet our safety, sustainability and capability requirements.

We regularly engage and work closely with our suppliers to support improvements where required.

### PROGRESS IN FY2020

Our approach and performance on supply chain sustainability continues to evolve. In recent years our focus has centred on managing key compliance risks such as anti-bribery and trade sanctions, due diligence and assurance practices.

A practical approach to moving beyond compliance and improving sustainability in supply chains is to identify critical issues across the whole supply chain, link our supply chain sustainability goals to the global sustainability agenda, and help our suppliers manage their impact.

In FY2020, we increased our understanding and responded to specific social and environment risks within our supply chain. More specifically, we:

- performed a high-level country and procurement category-based risk assessment to identify suppliers with high modern slavery risks
- engaged with our global suppliers of ammonia and ammonium nitrate to obtain greater transparency of GHG emissions through our supply chain
- set a FY2022 GHG emissions intensity target which covers Scope 3 supplier emissions associated with ammonia and ammonium nitrate supply
- responded through the Carbon Disclosure Project (CDP) Supply Chain program, providing key customers with information on our climate change performance.



## FOCUS ON SUSTAINABLE PALM OIL



The Roundtable on Sustainable Palm Oil (RSPO) is a not-for-profit body that draws membership from across the palm oil sector, from producers to buyers. The body's environmental and social criteria are the most widely accepted standard for certified sustainable palm oil. Bulk palm oil purchased by Orica meets 'segregated' certification criteria and is currently sourced from multiple certified plantations. We maintain this purchasing strategy to ensure surety of emulsion supply to some of our customers and in order to meet compliance requirements associated with emulsion storage and transport. During the year, we initiated a concept study to investigate options to remove the use of palm oil from select products.

## MANAGING SUPPLY CHAIN DISRUPTION RISK



In FY2020, challenges brought on by the COVID-19 pandemic required us to closely monitor supply chain risk to ensure security of supply. With our global footprint and manufacturing and distribution facilities distributed globally, total network disruption is unlikely. However, response measures to COVID-19 have resulted in restrictions on ports, airports and roadways around the world which have disrupted normal supply of purchased goods.

Early in the crisis, our regional and global supply chain and procurement teams implemented a number of actions to mitigate disruption risks including:

- identifying impacted routes of supply and determining alternate routes and carry options to minimise impact to delivery times
- identifying material suppliers to understand reliability of supply based on anticipated demand. Where goods were sole sourced, efforts were made to identify alternate sources of supply. In evaluating new suppliers, a number of criteria were considered as part of the due diligence process, including safety and sustainability performance
- focusing internal support for critical and highly specialised categories and products through the development of strategic category plans
- ensuring adequate safety stock to minimise effect on production in the event of a disruption.

Each of our manufacturing facilities also maintains a business continuity plan. These plans were reviewed to ensure potential material and labour disruptions were addressed. By implementing mitigating actions, coordinated between manufacturing, sourcing and other supply chain source groups, we successfully avoided any material or product shortages to customers and operating plants.

## PRIORITIES AND FOCUS FOR FY2021

In FY2021, our focus is to mature our approach to supply chain sustainability. We need to better understand how we can most effectively manage material risks and capture opportunities for positive contribution, particularly within our communities of operation. Key actions include:

- identifying the necessary components for a practical and effective sustainable supply chain framework, covering our key risks, opportunities, governance and processes in relation to ethical, social and environmental performance

- baselining current performance and establishing a sustainable supply chain approach to address identified gaps and opportunities
- continuing to engage our suppliers and customers on social, environment and ethic topics, and responding through industry and investor-led initiatives such as the CDP Supply Chain program
- completing a concept study for the removal of palm oil from emulsion products.

# CLIMATE RESILIENT ECONOMIC GROWTH

We have an important role to play in protecting the environment and addressing climate change by minimising our environmental footprint and delivering commercially beneficial solutions that enable our customers to minimise their own environmental impact.



## TRANSITIONING TO A LOW-CARBON ECONOMY

We have matured our understanding of the potential impacts of climate change on our business and defined a credible plan to increase our resilience in a low-carbon economy.



### FY2020 PERFORMANCE



## RESPONDING TO CLIMATE CHANGE

Despite the global disruption caused by the COVID-19 pandemic, we maintained our efforts to mitigate and adapt to climate change. Climate action remains critical over the next decade and we believe a transition to a low-carbon economy can drive near-term job creation while increasing economic and environmental resilience.

Reduce operational Scope 1 and Scope 2 GHG emissions by **AT LEAST 40%** by FY2030 (on FY2019 levels)<sup>1</sup>

Consistent with our Climate Change Policy, we accept that human activities are influencing global warming and support the primary objective of the Paris Climate Agreement<sup>2</sup> to keep global temperature rise to well below 2 degrees Celsius and pursue efforts to constrain warming to 1.5 degrees Celsius. While scientific consensus<sup>3</sup> suggests achieving net zero emissions by 2050 is required in support of these temperature goals, many challenges remain.

In electricity, renewable technologies are readily available but not yet deployed with sufficient scale. In hard-to-abate sectors, including chemicals and explosives, technologies to fully decarbonise industrial emissions are only just emerging or being demonstrated.

Despite these challenges, our priority is to accelerate our decarbonisation over the next decade and continue to work collaboratively to find solutions towards a low-carbon future.

Our success can only be founded on practical evidence-based initiatives, rapid deployment of mature technologies and access to emerging solutions and support incentives to reduce emissions in an economically sustainable manner.

This year, we progressed work to align our reporting with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). We know there is more to do, however our FY2020 disclosures detail our progress on governance, risk management, strategy, and metrics and targets in relation to climate change. Further information on our disclosures can be found in our **TCFD Index**.

In November 2020, following the conclusion of the financial year, we included decarbonisation measures within our relevant executive remuneration incentive plan, with effect from FY2021.

Operational Scope 1 and Scope 2 GHG emissions **9%** below FY2019 levels

<sup>1</sup> Applies to existing operations. Base year emissions will be recalculated consistent with emissions accounting protocols if structural changes occur such as acquisitions or divestments.  
<sup>2</sup> On 12 December 2015, parties to the UNFCCC reached a landmark agreement to combat climate change and to accelerate and intensify the actions and investments needed for a sustainable low carbon future. This is known as the Paris Agreement.  
<sup>3</sup> Intergovernmental Panel on Climate Change (IPCC) Special Report, October 2018.

**TRANSITIONING TO A LOW-CARBON ECONOMY** (Continued)

**OUR STRATEGY FOR CLIMATE ACTION**

**STRATEGIC PILLARS**



**GUIDING PRINCIPLES**

- A transition to a net zero emissions economy is required to limit global warming in line with the goals of the Paris Agreement<sup>4</sup>
- The path to a net zero emissions economy must represent a 'just transition' and encourage sustainable development<sup>5</sup>
- Commodities, raw materials and technology are fundamental to the low-carbon transition
- Transparency and disclosure drive individual and collective business performance

**POSITIONING ORICA FOR A LOW-CARBON ECONOMY**

As the global leader in mining and civil blasting, we have a fundamental role to play in addressing climate change. A low-carbon economy is about sustainable development and achieving economic growth through societal and systems transitions that limit global warming in conjunction with poverty eradication and efforts to reduce social inequalities.

Our response is underpinned by four guiding principles and three pillars of decarbonisation. This represents the next phase of our actions to meet our responsibility to act on climate change.

**CLIMATE CHANGE GOVERNANCE**

**Orica Board**

Climate change is a material governance and strategic risk and is routinely overseen by the Orica Board. Climate-related topics are considered during strategy discussions, strategic risk management oversight and monitoring, policy implementation and

performance updates. Our Board is experienced in climate-related matters (refer 2020 Corporate Governance Statement), approves our Climate Change Policy and monitors its implementation to support the execution of the business strategy. Climate change strategic risk updates are provided to the Board annually, with climate risk deep dives provided every two years.

During FY2020, the Board:

- endorsed the revised Climate Change Policy in November 2019, following the consideration of a strategic climate risk update in FY2019
- considered a new set of macro-economic scenarios incorporating a range of global warming futures which will underpin more sophisticated, quantitative scenario analysis to be performed in FY2021
- considered an update on our strategic risks and mitigating responses (including climate change), risk signposts, long-term manufacturing strategy and decarbonisation opportunities as part of the Board strategy review in August 2020.

Following discussions between management and the SHECS Committee, the Board endorsed Orica's new climate change targets for 2030 and a further updated Climate Change Policy in November 2020.

In FY2021, the Terms of Reference for the Board and committees will be reviewed with regard to the oversight of climate-related issues.

**Safety, Health, Environment, Community and Security Committee**

The SHECS Committee assists the Board in the discharge of its responsibilities to allow detailed consideration of complex climate issues, and has oversight of our SHECS management framework, systems and performance, including climate change. The adequacy of our SHECS strategy and updates on performance are monitored quarterly in addition to other scheduled meetings. Our climate-related disclosures are reviewed and endorsed by the SHECS Committee, including metrics and targets.



**Board Audit and Risk Committee (BARC)**

The BARC assists the Board in assessing the adequacy and integrity of our financial and operating controls, providing oversight of risk management systems, and compliance with legal requirements. Exposure to material strategic and operational risks is monitored for changes and reported on twice a year, along with their controls and plans to manage them.

The BARC reviews a sustainability materiality assessment each year, including advice on emerging risks and opportunities. During the year, the BARC considered strategic risk updates on climate change, commodity demand and markets among other risks. Progress was monitored on aligning our climate action and disclosures against the recommendations of the TCFD.

**Executive Committee**

Our CEO and the Executive Committee are responsible for directing and promoting the profitable operation and development of the Orica Group. Key management decisions are made in accordance with their delegated authority.

Responsibility for assessing climate change risks and opportunities is assigned to our Chief Financial Officer. A dedicated global sustainability team in the Finance function is responsible for advising the Executive Committee, Board sub-committees and the Board on our response to climate change. A representative of the sustainability team is also embedded in the Investment Committee to inform financial planning decisions. Our Chief Development Officer and strategy team are responsible for integrating climate change into strategic planning.

Orica's material sources of GHG emissions arise from the manufacture and third-party

purchasing of ammonia, nitric acid, ammonium nitrate, cyanide and related blasting systems. Accordingly, responsibility for managing GHG emissions is assigned to the Chief Manufacturing Officer.

A cross-discipline internal governance steering committee provides additional oversight of climate-related initiatives, management priorities and annual reporting.

During FY2020, the Executive Committee:

- supported operational efficiency and emissions reduction opportunities
- formulated our long-term manufacturing strategy and decarbonisation pathway
- endorsed our new climate change targets and an updated Climate Change Policy
- endorsed an enterprise-wide approach to further embed climate change into our operating model.

**CLIMATE CHANGE GOVERNANCE**

**BOARD OF DIRECTORS**

Non-executive Directors and CEO  
Strategy, Performance, Risk Management, Culture

**BOARD COMMITTEES**

- Safety, Health, Environment, Community and Security Committee**  
SHECS management and performance
- Board Audit and Risk Committee**  
Risk management
- Human Resources and Compensation Committee**  
Remuneration policy

**EXECUTIVE COMMITTEE**

Chiefs and Regional Presidents  
Orica's climate change response

**STEERING COMMITTEE**

Chief Financial Officer, Chief Communications Officer, representatives from Finance, Strategy, Risk and Assurance, Sustainability, Company Secretary Office, Strategy, Human Resources  
Orica's climate change action plan and TCFD reporting

**MANUFACTURING & SUPPLY CHAIN**

Chief Manufacturing Officer, Regional Presidents and Group Executives  
GHG emissions management

**GROUP POLICIES, STANDARDS AND PROCEDURES**

**OUR PEOPLE**



<sup>4</sup> Net zero emissions: achieved when human-induced emissions to the atmosphere are balanced by natural removals over a specified period. The Paris Agreement recognises the need to achieve net zero emissions by the second half of this century.  
<sup>5</sup> Ambitious emissions reductions are achieved in conjunction with economic development, adaptation, poverty eradication and reducing social inequality.

**TRANSITIONING TO A LOW-CARBON ECONOMY** (Continued)



**PROGRESS IN FY2020**

**Embedding climate in decision making**

During FY2020, we undertook a program of work to improve understanding of our exposure to climate change and integrate these considerations into our risk management and strategic planning. Our FY2020 work program was aligned with the TCFD recommendations and included:

- undertaking a climate change risk assessment across our global value chain to identify our most significant physical and transitional climate risks and opportunities, building on past work completed over the last two years
- further integrating physical climate and transitional risks and opportunities into our strategic scenario planning, risk management and decarbonisation processes
- updating Board, BARC and SHECS committees reporting and establishing a management steering committee to monitor progress against the implementation of TCFD
- extending membership of the Orica Investment Committee to sustainability to support climate-related decision-making in capital allocation.

**Integrated scenario planning**

We have a long history of using scenario planning as a strategic tool to inform our commodity outlooks and long-term strategic direction. In FY2020, we built on work done in previous years to embed climate-related factors more comprehensively into our corporate macro-economic scenarios.

A base case and three scenarios were developed in the context of relevant megatrends impacting our industry and tailored to our business success drivers. These represent a range of alternative futures compliant with the five TCFD principles of plausible, distinctive, consistent, relevant and challenging, and considered:

- macro-economic and demographic factors, including gross domestic product (GDP) and population growth
- changes to policies and regulations, including carbon policy, trade barriers and recycling regulation
- technology development and uptake, with a focus on hydrogen, battery storage, electric vehicles, renewable energy, carbon capture, utilisation and storage, and automation
- changes in market supply and demand for inputs and commodities, including consideration of fuel prices, trends towards more conscious customer behaviour and the degree of substitution of certain minerals and raw materials

- reputational considerations as the expectations from our customers, investors and other stakeholders continue to evolve
- the physical impacts of climate change under different global warming trajectories.

**TIME HORIZONS**

**To inform the scenario narrative development and the assessment of risks and opportunities, we defined relevant short, medium and long-term time horizons:**

**Short term: 0-3 years**

We have a three-year business planning outlook considering financial and operational aspects.

**Medium term: 3-5 years**

Our market and customer outlooks typically have a five-year horizon.

**Long term: 5-20 years**

Our long-term commodity and business strategy outlooks incorporate semi-quantitative scenarios extending out to 2040.



Qualitative and quantitative assumptions underpinning the scenarios were drawn from publicly available reference scenarios and data sets produced by the International Energy Agency (IEA), the Intergovernmental Panel on Climate Change (IPCC), Wood Mackenzie and Bloomberg New Energy Finance, and complemented by internal analysis on demand forecasting and other relevant external sources. Assumptions arising due to the global COVID-19 pandemic were not incorporated.

**A SUMMARY OF THE SCENARIO NARRATIVES**

<p><b>3°C</b></p> <p>Base case</p>	<p><b>&lt;2°C</b></p> <p>Scenario 1: <b>Ambitious, coordinated global climate action</b></p>	<p><b>&gt;4°C</b></p> <p>Scenario 2: <b>Widespread nationalistic economic policy</b></p>	<p><b>3°C</b></p> <p>Scenario 3: <b>Emergence of new regional powerhouse</b></p>
<p><i>Informed by IEA WEO<sup>6</sup> 2019 STEPS<sup>7</sup>, Wood McKenzie ETO<sup>8</sup>, and IPCC RCP6.0<sup>9</sup></i></p>	<p><i>Informed by IEA WEO 2019 SDS<sup>10</sup>, Wood McKenzie AET-2<sup>11</sup>, and IPCC RCP2.6</i></p>	<p><i>Informed by IEA WEO 2019 STEPS, Wood McKenzie ETO, and IPCC RCP8.5</i></p>	<p><i>Informed by IEA WEO 2019 STEPS and SDS, Wood McKenzie ETO and AET<sup>12</sup>, and IPCC RCP6.0</i></p>
<ul style="list-style-type: none"> <li>• Global economic growth is constrained by moderating demographic factors, geopolitical frictions and sluggish productivity growth.</li> <li>• While governments deliver on stated climate and energy policies, limited additional policy intervention results in an uncoordinated transition both at the national and international levels, that falls short of the Paris Agreement's objectives.</li> <li>• Modest investment in research and development sees incremental advancements in technology, rather than major breakthroughs.</li> <li>• The industry continues to focus on productivity, steadily increasing adoption of innovative products and services.</li> <li>• Rate of adoption of low-carbon emission technologies and retirement of existing conventional capacity driven by cost competitiveness.</li> <li>• Carbon pricing broadly aligned with the IEA's WEO 2019 Stated Policies Scenario. A\$19-58 in 2030 (in FY2020 real terms).</li> <li>• The physical impacts of climate change intensify, including the frequency and intensity of extreme weather events, increasing the costs of doing business.</li> </ul>	<ul style="list-style-type: none"> <li>• Global cooperation and commitment among governments to address climate change puts global emissions on the well-below 2-degree trajectory, in line with the Paris Agreement.</li> <li>• Transition to a low-carbon economy becomes one of the drivers of global economic growth, partly constrained by reduced end-use consumption.</li> <li>• Broader innovation and technology investment drives accelerated adoption of new technology, including breakthrough clean technologies and early retirement of conventional capacity.</li> <li>• Consumer and stakeholder preferences evolve towards building a zero-emissions circular economy.</li> <li>• Carbon pricing broadly aligned with the IEA's WEO 2019 SDS: A\$121-\$161 in 2030 (in FY2020 real terms).</li> <li>• Timely adaptation and mitigation measures allow the economies to deal with physical climate impacts.</li> </ul>	<ul style="list-style-type: none"> <li>• Increasing nationalism leads to limited global cooperation, reversal of free trade, and ultimately suppressed growth in economic output.</li> <li>• Governments abandon global climate change commitments in favour of other national priorities.</li> <li>• Weak investment limits research and development activity and commercialisation of new technology, hindering adoption of low-carbon alternatives.</li> <li>• Consumers and the industry are driven by economic choices and rely on conventional options.</li> <li>• As countries fail to deliver on stated climate commitments and in the absence of a global mitigation framework, focus shifts to adaptation and resilience. Physical climate change intensifies impacts on operations and supply chains.</li> </ul>	<ul style="list-style-type: none"> <li>• Successful economic reforms result in unconstrained growth in many developing countries. Emergence of new economic powerhouses – India and Africa – supported by a favourable global trading and investment environment.</li> <li>• To offset additional emissions experienced in India and Africa, the US, the EU and China ramp up their ambition to a level aligned with the Paris Agreement.</li> <li>• High capacity of both the private and public sectors to invest in technology development leads to a proliferation of innovative products and an acceleration of technology adoption in most industries.</li> <li>• Strong adoption of low-carbon emission technologies in the developed world; India and Africa progress along a more conventional pathway.</li> <li>• The physical impacts of climate change intensify, including the frequency and intensity of extreme weather events, increasing the costs of doing business.</li> </ul>

<sup>6</sup> International Energy Agency World Energy Outlook 2019.  
<sup>7</sup> Stated Policies Scenario.  
<sup>8</sup> Energy Transition Outlook.  
<sup>9</sup> Representative Concentration Pathway.  
<sup>10</sup> Sustainable Development Scenario.  
<sup>11</sup> 2-Degree Scenario.  
<sup>12</sup> Accelerated Energy Transition.

## TRANSITIONING TO A LOW-CARBON ECONOMY (Continued)

Our strategic planning in FY2020 focused on understanding long-term commodity demand changes and key response areas to maintain business resilience. Critical signposts have been identified to monitor and help predict the world's future state.

We continue to confront medium-term climate policy uncertainty in our two key jurisdictions of Australia and Canada. Exposure to carbon costs is modest and we largely offset financial impacts through the generation of carbon credits and participation in relevant global carbon markets.

While our understanding of physical climate change risks is evolving, they are not anticipated to materially threaten our ability to serve our customers. Orica's security of supply is a key competitive advantage facilitated by our global manufacturing supply chain.

We are focused on managing risk and capturing growth and diversification opportunities to maintain the resilience of our business by:

- monitoring and actively managing the scale-back from thermal coal exposure
- continuing to invest in new mine technology and assembling a portfolio of digital products servicing the broader mining value chain

- increasing organisational focus on future commodities such as copper, as demonstrated by our recent acquisition of Exsa in South America

- growing our market share across a diversified commodity portfolio and sectors such as quarrying, construction, civil infrastructure and tunnelling.

While we strengthened our integrated strategic thinking in FY2020, we will continue to enhance our approach to integrated scenario analysis by analysing potential financial implications and strategic responses to ensure our ongoing business resilience.

### OUR POSITION ON THERMAL COAL



**In FY2020, 16 per cent of our global revenue came from servicing the extraction and supply of thermal coal, rendering it one of the key commodities in our existing portfolio mix. Due to its size and ongoing demand-side uncertainty, energy markets and the future of thermal coal has for a number of years been recognised as a strategic business risk for Orica. We continuously monitor relevant signposts to gauge key changes and trends in the external environment to ensure risks are understood and our business strategy remains resilient.**

Thermal coal is mainly used as a fuel source in electricity generation, representing 38 per cent of global generation<sup>1</sup>. The analysis supporting our 'base case' forecast<sup>2</sup> shows a modest increase in global thermal coal demand in the medium term<sup>3</sup>, driven by continued electricity demand growth and the lack of cost-effective base-load alternatives in developing Asia.

This is despite ongoing reduction in thermal coal consumption in developed countries, as more reliance is placed on natural gas, wind and solar generation. With limited expected deployment of carbon capture, utilisation and storage (CCUS) in our 'base case', global thermal coal consumption peaks in the mid-2020s with demand trending downwards thereafter. This trend is expected to accelerate after 2030 as utility-scale battery solutions become commercially attractive in developing countries.

One recommended disclosure from the Task Force on Climate-related Financial Disclosures is to consider different climate-related scenarios, including a 2°C or lower scenario. Long-term commodity demand assumptions underpinning our 'base case' are stress-tested through comparison against our three alternative scenarios. With ambitious, coordinated global climate action, thermal coal demand decreases more steeply than the 'base case', driven by

climate policy support and accelerated commercialisation of low emission technologies.

This is a crucial decade for climate action and we are committed to playing our part. We believe the necessary transition to a lower carbon economy must be responsible, coordinated and just for both developed and developing economies. This is why we will:

- Continue to service our coal customers in the medium term, acknowledging the right to development of emerging economies, while seeking opportunities to become a partner in our customers' efforts to transition to a low-carbon economy.
- Leverage our expertise in science and technological innovation to help develop sustainable products and services for our customers, and foster smarter, safer mining with the potential to enable emissions savings across the mining sector's value chain.
- Continue to strengthen our scenario analysis, assess and capture growth and diversification opportunities to increase our exposure to commodities that contribute to a low-carbon future, such as copper (for example, our recent Exsa acquisition increases our exposure to copper in South America).
- Collaborate and partner with industry and government to reduce emissions and further understand pathways towards net zero emissions. Orica is a founding member of the Australian Industry Energy Transitions Initiative, working to research and demonstrate decarbonisation in hard-to-abate sectors like mining, explosives, and oil and gas.

<sup>1</sup> International Energy Agency (2019), 'Coal 2019. Analysis and Forecasts to 2024'.

<sup>2</sup> Orica's 'base case' represents our company's view of the most likely 2030 forecast based on the information available at the time of the analysis (February to August 2019). Orica uses its 'base case' forecast to inform business and strategic planning. Since we finalised our FY2020 corporate scenario analysis, new reference scenarios have been developed, including the IEA WEO 2020; this and other relevant updated sources will be incorporated into our FY2021 scenario planning.

<sup>3</sup> Thermal coal production forecasts are informed by our internal commodity analysis and Wood McKenzie ETO 2019.



### Climate risks and opportunities

Our corporate scenarios informed an assessment of climate risks and opportunities, which was aligned with our enterprise-wide Risk Management framework and the recommendations of the TCFD. The assessment was undertaken through a highly collaborative process, involving representatives from our risk, strategy, manufacturing, product, financial, supply chain and sustainability functions. Risks and opportunities identified were assessed for their relative significance based on Orica's time for reaction and the magnitude of potential financial impact. Deep dives using a semi-quantitative risk methodology have been undertaken or are planned for those risks and opportunities deemed of most significance to Orica.

Our most material climate-related risks and opportunities, and our management responses are summarised on pages 38-39. The impact of the risks and opportunities will likely vary across the different geographies and jurisdictions in which we operate.

In FY2021, we will progress our TCFD journey by:

- strengthening our assessments of the physical impacts of climate change on our major global assets and operating regions
- further integrating responses to the climate risks and opportunities identified
- developing additional metrics and targets to monitor and drive improvement of our management of climate risks and opportunities.

**TRANSITIONING TO A LOW-CARBON ECONOMY** (Continued)

Theme	Description of risks and opportunities	Orica's response
<p><b>Supply chain resilience and security</b></p> <p>Time horizon: short, medium and long term</p> <p>Physical: Acute</p> <p>Transitional: Market, Policy and Legal, and Reputation</p>	<p>Increased frequency and/or intensity of extreme weather events (cyclones, floods, bushfires) have the potential to disrupt our supply chain, impacting our ability to maintain production levels and service customer demand.</p> <p>Changes in the supply and demand dynamics of critical inputs may also impact our ability to secure our sourcing needs while preserving cost-competitiveness. For example, the prospects of ammonia being increasingly used as a vehicle to transport hydrogen may impact the demand and cost profile for ammonia.</p> <p>Increasing regulated carbon pricing may increase our sourcing costs due to raising prices of key inputs and services, including raw materials, gas, electricity and freight services.</p>	<p>The disruption of our supply chain has long been identified and managed as one of our material operational risks. We have:</p> <ul style="list-style-type: none"> <li>robust supplier on-boarding processes that include consideration of the supplier's geographical exposure to extreme weather events</li> <li>supplier managers assigned to our critical suppliers to increase awareness on issues, including climate-related, that may have the potential to impact our supply chain and develop mitigation actions where necessary</li> <li>alternative sources of supply for critical goods such as ammonia and ammonium nitrate</li> <li>safety stocks at our sites to increase adaptability and ensure production continuity</li> <li>relationships with multiple global shipping companies and evaluations of ports and shipping routes to increase the resilience of our sea freight services.</li> </ul> <p><b>We will:</b></p> <ul style="list-style-type: none"> <li>further assess and respond to our supply chain's exposure to physical climate risks</li> <li>continue to build capability within the business to ensure climate change considerations are embedded into our sourcing strategy.</li> </ul>
<p><b>Asset integrity and production continuity</b></p> <p>Time horizon: short, medium and long term</p> <p>Physical: Acute and Chronic</p>	<p>Increased frequency and/or severity of extreme weather events (flooding, storm surges, winds, bushfires) have the potential to damage our assets and/or interrupt our ancillary services, leading to operational disruptions, impacts to planned production levels and increased repair costs.</p> <p>More frequent and prolonged droughts and changes in rainfall patterns may lead to constrained water supply in areas where we operate, impacting the production capacity and environmental obligations of our manufacturing processes.</p> <p>Increasing temperature extremes may also lead to reduced performance, reliability or integrity of our plant equipment.</p>	<p>In FY2018, we undertook physical climate risk assessments for several of our global manufacturing assets. These assessments helped us understand our exposure to natural perils and key potential physical climate change impacts. At the time, we deemed our current risk to sites as low and the existing controls in place as appropriate in the short to medium term. However, we recognise climate-related risks are dynamic and regular assessment is required to ensure we continue to appropriately manage any risks to our asset integrity and production continuity.</p> <p><b>We will:</b></p> <ul style="list-style-type: none"> <li>revisit and strengthen our approach to assessing physical climate risks on our major global assets and develop additional risk mitigation and adaptation responses, where required.</li> </ul>
<p><b>Worker health and safety</b></p> <p>Time horizon: short, medium and long term</p> <p>Physical: Acute and Chronic</p>	<p>Acute (extreme weather events) and chronic (increasing temperatures and number of hot days, increased prevalence of tropical diseases, etc.) physical climate change has the potential to pose increased health and safety risks for our employees and contractors, impacting productivity and absenteeism rates, as well as our ability to attract and retain talent.</p>	<p>Nothing is more important than the health and safety of our people. Preventing illness and injury, particularly due to heat stress and other weather extremes, is governed by our Safety, Health and Environment policy and our SHES management systems. The systems, processes and controls in place to protect our people are included in our SHES Group standards and underpinning procedures.</p> <p><b>We will:</b></p> <ul style="list-style-type: none"> <li>continue to improve our management responses to health and safety risks, including with consideration to the threats posed by climatic trends and events</li> <li>continue to build our people's capability to better understand and manage the impacts of climate change on their health and safety.</li> </ul>
<p><b>Carbon pricing and markets</b></p> <p>Time horizon: short, medium and long term</p> <p>Transitional: Policy and Legal</p>	<p>An increasing price on carbon may lead to increasing operating costs, including through higher input prices, compliance costs and insurance premiums.</p> <p>The introduction of trading taxes and/or barriers for high emissions intensive products has the potential to impact our import and export costs and/or our ability to import/export in some jurisdictions.</p>	<p>One of the pillars of our strategy for climate action focuses on reducing our GHG emissions over the next decade. To deliver on this commitment, we have set new climate targets to 2030 supported by an evidence-based decarbonisation pathway.</p> <p>We continue to monitor our direct (Scope 1 emissions) and indirect (Scope 2 and Scope 3 emissions) potential exposure to carbon policy, trade and carbon costs in our key jurisdictions. Our operational emissions are currently subject to direct regulatory carbon cost in Australia and Canada. Our exposure in these jurisdictions continues to be modest. We largely offset financial impacts through the generation of carbon credits and participation in global carbon markets.</p>

Theme	Description of risks and opportunities	Orica's response
<p><b>Carbon pricing and markets (Continued)</b></p>	<p>The development of carbon market mechanisms and government carbon policy can provide opportunities to participate in carbon markets to support our emissions abatement strategy.</p>	<p>We integrate an internal carbon price into our emissions reduction investment cases to inform our business and financial planning.</p> <p><b>We will:</b></p> <ul style="list-style-type: none"> <li>seek further opportunities to collaborate with government, industry bodies, research institutions and our customers to advance low-emissions technology and carbon market opportunities to help manage our exposure to carbon pricing</li> <li>advocate for clear and effective policy signals and regulatory frameworks that enable an orderly and just transition to a low-carbon economy.</li> </ul>
<p><b>Orica's reputation</b></p> <p>Time horizon: short, medium and long term</p> <p>Transitional: Reputation</p>	<p>Our reputation may be negatively impacted if we fail to demonstrate and communicate appropriate climate action, both with regards to our decarbonisation efforts as well as our market positioning. This could impact our ability to secure financing and investment capital, our social license to operate, and our ability to attract and retain talent.</p> <p>Alternately, positioning our business to support the transition to a low-carbon economy can bring positive stakeholder response and enhanced reputation.</p>	<p>Climate change is one of our material business risks. We have updated our Climate Change Policy to better reflect our long term commitment to playing our part in achieving the goals of the Paris Agreement and aligning with the TCFD recommendations.</p> <p>In FY2020, we undertook substantive work to shape the way in which we will implement and disclose climate action over the next crucial decade. We have contracted additional resources specialised in climate change to inform our abatement strategy and accelerate the implementation of TCFD. This work has allowed us to formulate our strategy for climate action.</p> <p><b>We will:</b></p> <ul style="list-style-type: none"> <li>continue to embed climate in our decision-making, reduce our emissions and be a catalyst for climate action through technology and innovation, partnerships and responsible climate advocacy.</li> </ul>
<p><b>Changing demand for Orica's products and services</b></p> <p>Time horizon: medium to long term</p> <p>Transitional: Market and Technology</p>	<p>The demand for our products and services may change if market demand shifts as the world transitions to a low-carbon economy. This brings both risks and opportunities.</p> <p>For example, we may experience reduced demand from thermal coal customers as the substitution of thermal coal in power generation accelerates over the next decade. Similarly, an increase in the use of scrap and a potential move towards electric or hydrogen-based processes in the steel manufacturing sector may reduce demand for metallurgical coal, impacting the demand for the products and services we offer to mine this commodity. More generally, increasing circularity trends have the potential to reduce the need for primary mined commodities such as copper, gold and iron ore.</p> <p>Alternately, the development and mass adoption of new technologies such as hydrogen and electric vehicles have the potential to increase the end use of materials produced by Orica and our customers. Increased investment in climate change adaptation and resilience measures may also lead to increased demand for quarrying and construction materials, increasing the demand for our products and services targeted to these commodities.</p>	<p>Our strategic scenario planning process helps us explore relevant trends with the potential to impact market demand. We use a range of scenarios to ensure our strategy remains flexible and resilient under different possible futures. This year, we continued to improve our integration of climate change considerations into our corporate scenario analysis.</p> <p><b>We will:</b></p> <ul style="list-style-type: none"> <li>enhance our scenario planning processes to better understand any necessary adjustments to our strategic direction ensuring our products and services continue to cater for the evolving needs of our customers</li> <li>focus on capturing growth and diversification opportunities to increase our exposure to commodities likely to be in higher demand in a lower emissions world, and to use our technology and innovation expertise to develop more sustainable product and service solutions for our customers.</li> </ul>
<p><b>Operational competitiveness</b></p> <p>Time horizon: medium to long term</p> <p>Transitional: Technology</p>	<p>The development and deployment of low-carbon energy and transport technologies have the potential to impact our ability to remain competitive in our operations. This impact can be positive if we successfully integrate these technologies to drive lower operating costs and emissions intensity, or negative if we transition at a slower pace than our competitors and customers.</p>	<p>As part of our manufacturing strategy, we have explored opportunities to achieve emissions reductions through a range of technology, energy efficiency improvements and renewable energy initiatives at our manufacturing sites. Our analysis has allowed us to confidently set evidence-based climate targets to 2030 and provided a clear pathway forward to improve both our emissions intensity and our operational competitiveness.</p> <p><b>We will:</b></p> <ul style="list-style-type: none"> <li>continue to explore opportunities to integrate emissions reduction technologies into our operations.</li> </ul>

## TRANSITIONING TO A LOW-CARBON ECONOMY (Continued)

### Accelerating decarbonisation

#### GHG emissions performance

Global Scope 1, 2 and 3 GHG emissions<sup>13</sup> were 6.3 MtCO<sub>2</sub>-e, a reduction of 9.8 per cent from FY2019. Emission reductions this year facilitated the achievement of our short-term FY2020 GHG emissions intensity target. In FY2020, we achieved a GHG emissions intensity of 1.64 tCO<sub>2</sub>-e per tonne of AN sold, 6.5 per cent below our FY2019 intensity (1.75 tCO<sub>2</sub>-e per tonne of AN sold).

In FY2020, our total operational Scope 1 and Scope 2 emissions were 2.1 MtCO<sub>2</sub>-e. This represents a 9.5 per cent (222 ktCO<sub>2</sub>-e) reduction from FY2019, achieved by replacement and improved performance of selective catalyst abatement in our nitric acid plants.

Bontang, Indonesia recorded a 43.3 per cent reduction in net emissions despite increasing production by 6.3 per cent compared to FY2019. Our Kooragang Island Nitrates Plant, in Australia achieved a 6.3 per cent reduction in net emissions despite increasing production by 0.2 per cent. Our Carseland, Canada facility reduced its net emissions by 8.6 per cent compared to FY2019.

Scope 2 (purchased electricity) emissions increased 12.3 per cent from FY2019 primarily due to updating our GHG emissions inventory with region-specific Canadian electricity emission factors. Our Scope 2 emissions have reduced 18.1 per cent over the last three years. We continue to implement a range of energy efficiency initiatives and in FY2020, generated 600 MWh of electricity from renewable sources. We are presently investigating new opportunities for renewable energy across the company.

Our Scope 3 emissions reduced by 10 per cent in FY2020 from FY2019 levels. This was primarily due to lower volumes of third-party sourced bulk products this year as the impacts of the COVID-19 pandemic were felt across the world.

Our Scope 3 emissions inventory accounts for the emissions associated with the sourcing of ammonia and ammonium nitrate from third parties, a material source of indirect emissions. In FY2021, we will improve the completeness of our inventory by accounting for other relevant and material Scope 3 emissions sources. Further details on our progress will be included in our FY2021 corporate reports.

### IMPROVING THE ACCURACY AND COMPLETENESS OF OUR SCOPE 3 INVENTORY



During FY2020, we reviewed our approach to estimating Scope 3 emissions from purchased ammonia and ammonium nitrate to improve the accuracy of our calculations. As part of this process, we:

- updated the emissions factors used to better capture the life cycle of our purchased products across different regions
- engaged with our main suppliers of ammonia and ammonium nitrate to obtain actual emissions intensities where possible.

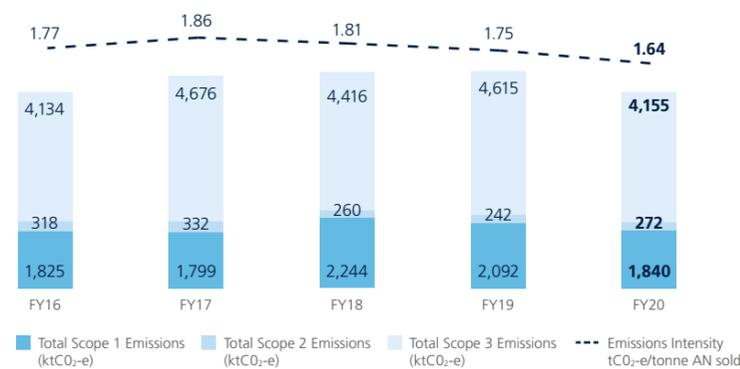
These changes have seen our Scope 3 emissions increase by 11 per cent compared to our previous methodology. This increase is due to our revised methodology incorporating a more complete boundary.

- FY2020 emissions calculated in line with revised methodology: 4.2 MtCO<sub>2</sub>-e
- FY2020 emissions calculated in line with previous methodology: 3.7 MtCO<sub>2</sub>-e

**Our new methodology will enable us to more accurately track and report on our Scope 3 emissions and continue to engage with key suppliers to progressively drive emissions reductions along our supply chain.**

In FY2021, we will continue to progress the completeness of our Scope 3 inventory by estimating additional relevant and material emissions sources beyond purchased products.

Global GHG emissions and emissions intensity per tonne of AN sold



<sup>13</sup> FY2020 global GHG emissions include estimations for some missing periods; estimated data represents 2.3 per cent of total Scope 1, 2 and 3 data for the reporting period. FY2020 global GHG emissions data excludes Exsa operations due to the acquisition taking place in May 2020. Emissions associated with Exsa operations will be included in our emissions reporting from FY2021.

### A PUBLIC-PRIVATE PATHWAY TO DECARBONISING INDUSTRY

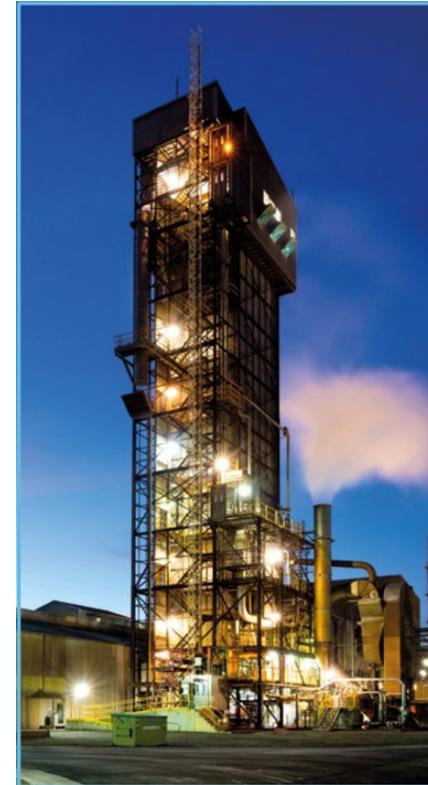


Successful decarbonisation and adaptation to climate change impacts requires a collaborative approach across supply chains. We continue to support national and sub-national government efforts to implement effective policy frameworks to support decarbonisation that would be otherwise uneconomical.

This year, in partnership with the Alberta provincial government in Canada, we co-invested in a new catalyst abatement system. This technology will deliver over 95 per cent abatement of nitrous oxide emissions in one of our nitric acid plants from FY2022.

We concluded a grant partnership with the New South Wales Government in Australia, focused on best practice energy management at our Kooragang Island manufacturing facility. Following management system diagnostics, renewable energy procurement and energy efficiency opportunity analysis, we identified several efficiency and carbon reduction opportunities with a payback of less than two years. Some of these will be implemented in FY2021.

We also became a founding participant of the Australian Industry Energy Transitions Initiative convened by independent not-for-profit bodies, ClimateWorks Australia and Climate-KIC Australia, and in collaboration with the Energy Transitions Commission. The initiative will strengthen our knowledge to develop pathways and actions that can accelerate emissions reductions across our operations.



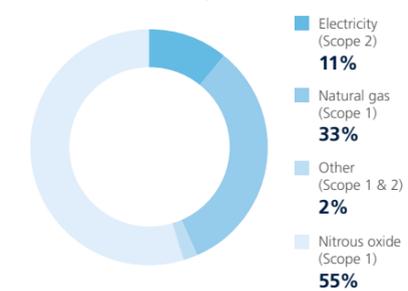
### Decarbonisation strategy and emissions targets

Since FY2018, we have continued to focus our decarbonisation studies and trials on continuous manufacturing facilities where we are targeting substantial reductions in our nitrous oxide emissions, which represent 55 per cent of our total operational emissions.

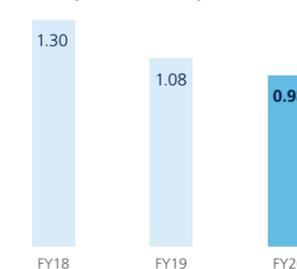
Over the past two years we:

- replaced selective abatement catalyst in Bontang, Indonesia – reducing the facilities nitrous oxide (N<sub>2</sub>O) emissions by 61 per cent (195 ktCO<sub>2</sub>-e) since FY2018
- performed a range of abatement catalyst trials at Kooragang Island, Australia – reducing N<sub>2</sub>O emissions by 29 per cent (243 ktCO<sub>2</sub>-e) since FY2018
- designed and procured a new catalyst abatement system for installation at Carseland, Canada in late 2021.

Global operational GHG emissions (Scope 1 and 2) by source



Global nitrous oxide emissions from nitric acid production per tonne of nitric acid



**TRANSITIONING TO A LOW-CARBON ECONOMY** (Continued)

During FY2020, we performed an evaluation of longer-term abatement opportunities as part of developing our manufacturing strategy. A range of practical, proven technology-driven solutions are available to unlock further decarbonisation of our global operations.

We have renewed our suite of emission reduction targets to drive our efforts over the decade to FY2030. The target-setting process was informed by the Science Based Targets Initiative (SBTi). While a chemical sector-specific methodology is currently under development, we provided feedback during the year and will assess its applicability upon publication.

**AT LEAST  
40%**

**REDUCTION IN OPERATIONAL SCOPE 1 AND 2 GHG EMISSIONS BY FY2030 (ON FY2019 LEVELS)<sup>14</sup>**

**MAINTAIN EMISSIONS INTENSITY**

**AT OR BELOW  
1.7 tCO<sub>2</sub>-e/  
TONNE AN  
SOLD**

**BY FY2022<sup>14, 15, 16</sup>**



<sup>14</sup> Applies to existing operations. Base year emissions will be recalculated consistent with emissions accounting protocols if structural changes occur such as acquisitions or divestments.

<sup>15</sup> This target will be reviewed and updated in FY2022 to account for a more complete Scope 3 emissions inventory.

<sup>16</sup> Short-term emissions intensity target is above FY2020 performance due to forecast production increases in facilities with less effective abatement technology.



**MINERAL CARBONATION INTERNATIONAL – CREATING VALUE FROM CO<sub>2</sub> EMISSIONS**



In 2016, Mineral Carbonation International (MCI) switched on the world's first carbon reactor at the University of Newcastle in Australia. The pilot plant reacts industrial CO<sub>2</sub> emissions with alkaline mine waste to produce a range of carbonate products for the construction sector.

With backing from Orica, the start-up joins a growing research effort targeting negative emissions technologies (NETs). NETs aim to capture emissions at the source or remove them directly from the atmosphere for safe and permanent storage via physical or chemical means. The IPCC has noted it is now impossible to meet the 1.5°C target established under the Paris Agreement without significant deployment of NETs.

Conventional wisdom views carbon emissions as waste and this viewpoint has underpinned the development of early carbon capture and storage (CCS) technologies. However, by converting carbon emissions into useful new products, MCI is part of an emerging subset of the NET industry called carbon capture and utilisation (CCU).

**This is transforming the way we think about carbon 'waste'. Where CCS is driven by cost, CCU is driven by value. By providing pathways for industrial partners to transform their CO<sub>2</sub> and alkaline waste streams into useful products such as cement, aggregate, plaster board and pavers, MCI is decoupling its NET from legislation and subsidies.**

COO Sophia Hamblin Wang says that if they can create business models, "we can incentivise these industries quicker than waiting for governments to legislate."

MCI was in Davos, Switzerland this year to showcase this technology on the world stage. MCI is now working with partners in hard-to-abate sectors to commercialise the mineral carbonation technology.

Our targets are underpinned by a credible and achievable pathway to decarbonisation focused on the reduction of Scope 1 and 2 emissions across our global operations. This includes a continued focus on industrial process emissions, energy efficiency and heat recovery, and renewable energy. With natural gas feedstock a significant component of our emissions profile and cost base, we are assessing how renewable hydrogen could play a role in our decarbonisation journey over the longer term.

Implementation of low emissions abatement technology has a long lead time. Over the short term, we forecast global GHG emissions to stabilise or rise modestly as customer demand for our products increase and execution of our decarbonisation pathway commences.

**Catalysing climate action**

**Low-carbon innovation and technology**

The low-carbon transition will require innovation, government support incentives and rapid technology development and deployment across all sectors of the economy. We believe our innovation and technology expertise can serve as a catalyst to improve our response and the action of our customers to climate change.

Since 2013, we have supported Mineral Carbonation International (MCI), an Australian start-up focused on developing technologies to safely capture carbon dioxide emissions for potential use in construction materials such as cements and plasterboard.

We have also established partnerships with universities and research institutions including CSIRO and CRC ORE<sup>17</sup> in Australia, to develop a knowledge base of decarbonisation technologies and solutions. For example, Orica has been collaborating with CSIRO on a project funded by the Australian Renewable Energy Agency to develop a novel process for ammonia synthesis that is compatible with hydrogen produced from renewable sources.

<sup>17</sup> CRC ORE is part of the Australian Government's Cooperative Research Centre (CRC) program, which supports industry-led collaborations between researchers, industry and the community to address major challenges facing Australia.

We will continue to use our capability to support research, development and innovation of low-carbon solutions and technologies. This will both support the progressive decarbonisation of our manufacturing assets and the transition efforts of our customers and the broader community.

**Responsible advocacy**

Orica is a member of industry associations around the world. We believe industry plays an important role in helping formulate effective policy frameworks, standards and practice to facilitate a low-carbon economy. The principles guiding our climate-related advocacy efforts are included in our Climate Change Policy, in addition to:

- open and transparent international carbon markets
- managed transition for the energy sector towards low emissions generation, while balancing the needs of energy security, affordability and emissions reduction
- consideration of emissions-intensive, trade exposed businesses and the priority of maintaining relative competitiveness between trading nations.

Our approach is governed by our Corporate Affairs and Brand, Government and Community Relations Group Standard. The standard outlines business requirements in relation to memberships aligning to business needs, internal approval pathways and responsible advocacy.

It requires that representations to stakeholders are consistent with any Orica Group positions on regulatory or government-related issues.

We suspended our membership with the Business Council of Australia (BCA) in February 2020 and will review our approach in FY2021. This decision reflected our increasing focus on sector-based manufacturing policy issues such as the national growth agenda, research and development incentives and in particular, long-term energy affordability and security.

In response to increasing investor and stakeholder interest on climate change advocacy, we reviewed our governance and approach to industry associations in FY2020. This has identified opportunities to further strengthen our Group Standard in FY2021.



## TRANSITIONING TO A LOW-CARBON ECONOMY (Continued)

### Key industry association memberships

Industry association	Geography	Involvement and contribution
<b>World Coal Association</b>	International	<ul style="list-style-type: none"> <li>Membership fee</li> <li>Participation in strategic projects, contribution to submissions</li> </ul>
<b>Chamber of Minerals and Energy of Western Australia</b>	Australia	<ul style="list-style-type: none"> <li>Membership fee</li> <li>Participation in strategic projects of relevance</li> </ul>
<b>Energy Users Association of Australia</b>	Australia	<ul style="list-style-type: none"> <li>Membership fee</li> <li>Participation in strategic projects, contribution to submissions</li> </ul>
<b>Australian Industry Group (Ai Group)</b>	Australia	<ul style="list-style-type: none"> <li>Membership fee</li> <li>Participation in strategic projects, contribution to submissions</li> </ul>
<b>Chemistry Australia</b>	Australia	<ul style="list-style-type: none"> <li>Membership fee</li> <li>Participation in strategic projects, contribution to submissions</li> </ul>
<b>Carbon Market Institute</b>	Australia	<ul style="list-style-type: none"> <li>Membership fee</li> <li>Participation in strategic projects, contribution to submissions</li> </ul>
<b>Minerals Council of Australia</b>	Australia	<ul style="list-style-type: none"> <li>Membership fee</li> <li>Participation in strategic projects of relevance</li> </ul>
<b>Australian Industry Energy Transition Initiative (ETI)</b>	Australia	<ul style="list-style-type: none"> <li>Participant fee</li> <li>Steering Committee member, participation in research, workshops, reports</li> </ul>
<b>Fertilizer Canada</b>	Canada	<ul style="list-style-type: none"> <li>Membership fee</li> <li>Participation in strategic projects, contribution to submissions</li> </ul>
<b>The Fertilizer Institute</b>	USA	<ul style="list-style-type: none"> <li>Membership fee</li> <li>Participation in strategic projects of relevance</li> </ul>
<b>International Fertilizer Association</b>	International	<ul style="list-style-type: none"> <li>Membership fee</li> <li>Participation in strategic projects of relevance</li> </ul>
<b>Federation of European Explosives Manufacturers</b>	Europe	<ul style="list-style-type: none"> <li>Membership fee</li> <li>Participation in strategic projects of relevance</li> </ul>
<b>Institute of Makers of Explosives (IME)</b>	USA	<ul style="list-style-type: none"> <li>Membership fee</li> <li>Participation in strategic projects of relevance</li> </ul>

### PRIORITIES AND FOCUS FOR FY2021

- Implement year two of our TCFD roadmap with a focus on our integrated approach to scenario analysis.
- Finalise preparations for abatement technology deployment at Carseland, Canada in late 2021.
- Collaborate with partners to accelerate emissions reductions across our operations.
- Improve the completeness and accuracy of our Scope 3 emissions inventory.
- Develop additional relevant financial and non-financial metrics to monitor our climate performance.
- Strengthen our governance by updating our Group Standard with regard to climate change performance and responsible advocacy, and reviewing the Terms of Reference for our Board and committees in relation to the oversight of climate-related issues.

### TCFD ROADMAP

In FY2020, we undertook a gap analysis against the TCFD recommendations and developed a roadmap to guide our response over a three-year period. Progress against the delivery of our TCFD roadmap is overseen by the BARC.

	Recommendation	Action	FY2020	FY2021	FY2022
Governance	Disclose the organisation's governance around climate change-related risks and opportunities.	Strengthen Board and committee oversight of climate-related issues.	☑		
		Establish a cross-functional, management-level steering committee to ensure progressive alignment with TCFD and integrated thinking.	☑		
		Strengthen climate-related governance processes to embed climate-related considerations into decision-making at function, region and division level of the business.		○	➤
Risk Management	Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning where such information is material.	Complete a company-wide climate risk assessment to identify physical and transitional risks and opportunities over the short, medium and long-term.	☑		
		Review strategic and operational risk definitions, outlooks and signposts in light of the outcomes of the climate risk assessment and scenario planning processes.		○	➤
		Review Enterprise Risk Management framework to ensure it appropriately incorporates climate change considerations.		○	●
Strategy	Disclose how the organisation identifies, assesses, and manages climate-related risks.	Integrate climate change considerations into strategic scenario planning processes to analyse potential financial impacts and assess business resilience under different scenarios.		○	➤
		Review and develop strategic responses to mitigate risks and maximise opportunities informed by scenario planning and risk assessments.		○	➤
		Develop a long-term operational GHG emissions decarbonisation pathway.	☑		
Metrics & Targets	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	Set long-term emissions reduction targets informed by the decarbonisation pathway.	☑		
		Improve the completeness of the Scope 3 GHG emissions inventory.		○	●
		Disclose Scope 1, 2 and (material) 3 GHG emissions.		○	➤
Key		Introduce climate-related performance metrics into management-level remuneration incentives.		○	➤
		Develop additional metrics and targets for assessing climate-related risks and opportunities in line with strategy, financial and risk management processes.		○	➤
		Disclose metrics and performance against targets for assessing climate-related risks and opportunities.		○	➤

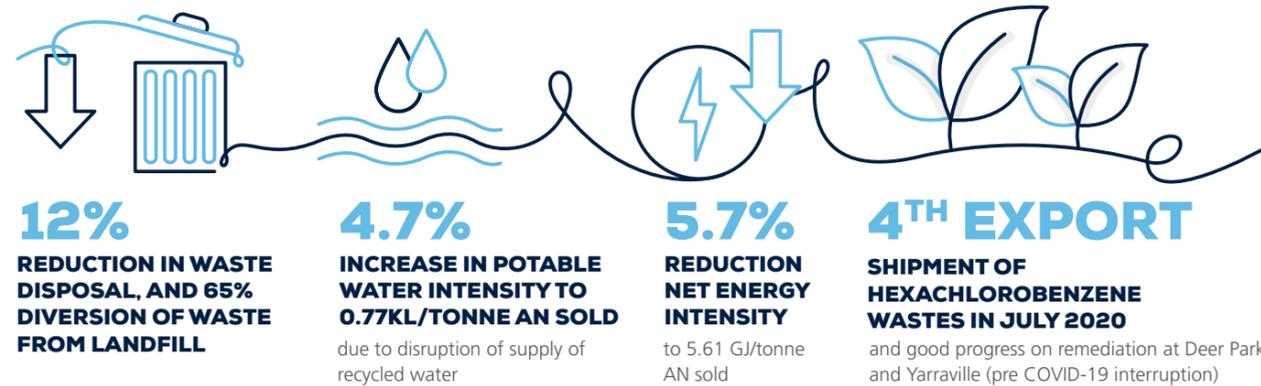
○ Commencement date   ● Target completion date   ➤ Target completion date and ongoing   ☑ Action completed

# STEWARDING NATURAL RESOURCES

Our business depends on and impacts natural resources and we are committed to strong environmental stewardship across all our operations.



## FY2020 PERFORMANCE



The Environment Group Standard within our SHES management system defines performance requirements and expectations for environmental practices across our global network. It requires us to identify and understand our key environmental risks and to proactively manage them to minimise the likelihood and impact to the environment. Material environmental risks are assessed as part of our risk management programs, which aim to identify and mitigate unacceptable risks to the business.

We develop, implement and embed programs to achieve the environmental requirements set out in our SHES Management System. Our guidance documents, training materials and other support tools enable standardisation of our approach, and assessment and verification of environmental performance and natural resource management. In FY2020, we maintained our focus on managing environmental risks, reducing our environmental footprint and progressing our legacy remediation projects.

### UPDATING SHES PROCEDURES TO MEET STANDARD REQUIREMENTS FOR ENERGY, WATER AND WASTE

In FY2020, we worked with our environmental experts and key business stakeholders to develop and release global guidance on:

- spill preparedness and response
- engaging environmental consultants
- reviewing consultant reports and setting up environmental monitoring plans
- understanding and managing contaminated land
- conducting environmental aspects and impacts assessment reviews
- inspection and testing of in-ground pits and bunds.

Continuing our commitment to standardisation and simplification, we revised and updated:

- guidance on environmental reporting requirements for energy, water, waste and emissions
- Environmental Management Plan template focused on mining services operations
- training on the environmental aspects and impacts identification process.

# ENVIRONMENTAL COMPLIANCE

**ZERO**  
Severity 2 or Severity 3+ environmental events

We purchase, manufacture, transport, and store hazardous materials in facilities globally. Eliminating loss of product events and managing our material environmental risks are foundational objectives that support our stewardship of natural resources. We aim to comply with relevant environmental legislation, licenses, and environmental consents across our global operations.

In FY2020, we increased our focus on identifying environmental impacts and improved our site event and spill response protocols. These actions, in part, have reduced the severity of environmental impacts from our day-to-day operations and contributed to our environmental performance in FY2020.

In addition to achieving our target of zero Severity 3+<sup>1</sup> environmental events, we also reported zero Severity 2<sup>2</sup> events for the period. In FY2021 we will continue to focus on opportunities to avoid loss of containment at our sites to reduce our environmental impact.

# MINIMISING OUR ENVIRONMENTAL FOOTPRINT

Potable water intensity  
**0.77KL/TONNE AN SOLD**

## WATER

Management of freshwater resources continues to be a core focus area and is an issue that impacts directly on the communities in which we operate. While competition for water resources continues to increase globally due to multiple pressures (particularly climate change, population growth and pollution), we recognise the critical importance of water for community and ecosystem health.

Water is a raw material used in our products, within manufacturing and safety processes, and for site amenities. The water we use is drawn from surface water, ground water, potable water and recycled water sources.

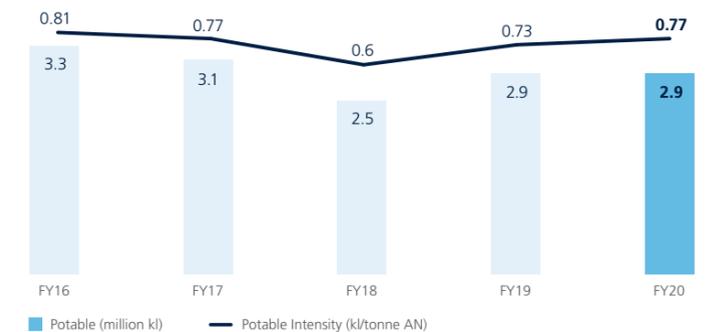
Our focus at all sites is on reducing our dependency on potable water to limit our impact on host communities and increase our resilience to water stress. We are aiming to achieve this by increasing the efficiency with which we use water and maximising our use of recycled water wherever possible.

Total consumption of potable water rose slightly to 2.94 million kL compared to 2.91 million kL in FY2019. The supply of recycled water to our Kooragang Island site, our most water intensive facility, was

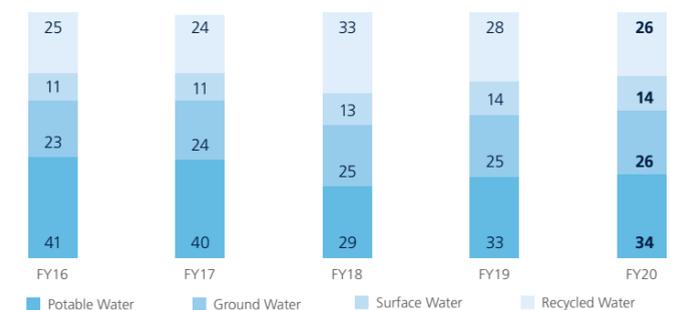
interrupted through Q4, and as a result our annual potable water intensity rose five per cent to 0.77 kL per tonne of AN sold, higher than our target of 0.71 kL per tonne of AN sold. In the absence of the Kooragang Island recycled water access issues, potable water intensity would have remained below target.

Overall water use decreased slightly (two per cent) to 8.54 million kL driven primarily by COVID-19 related site activity reduction. Recycled water and potable water contributed 26 and 34 per cent of total water use respectively, slightly below our performance in FY2018 and FY2019. We are committed to increasing our use of recycled water, with our FY2021 target for potable water intensity set at 0.67 kL per tonne of AN sold.

### Potable Water Consumption and Intensity



### Gross Water Consumption (%)



<sup>1</sup> Severity 3 environmental events result in relatively wide-spread serious environmental damage, with some impairment of ecosystem function that will recover after remediation.  
<sup>2</sup> Severity 2 environmental events have a localised but measurable environmental effect that is reversible after clean-up.

**STEWARDING NATURAL RESOURCES** (Continued)

**WASTE**

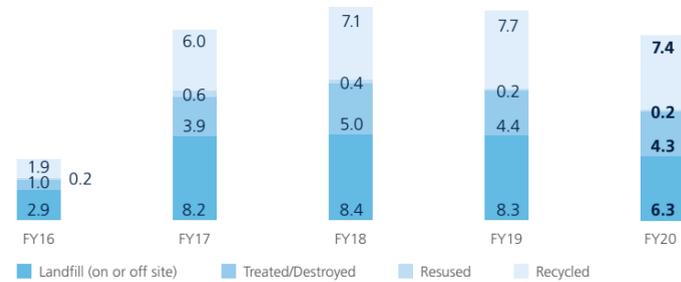
**Total waste diverted from landfill**  
**65%**  
 up 9% on FY2019

In FY2020, we continued to make progress toward the goals of minimising total waste disposed and maximising diversion of waste from landfill. Our total waste disposed<sup>3</sup> fell by 12 per cent to 18.2 kT, meeting our target of two per cent, however reduced production volumes due to COVID-19 contributed to this result. Waste diverted from landfill rose to 65 per cent up from 60 per cent in FY2019. For Mining Services in Asia-Pacific, Europe and Middle East and Latin American regions, greater than 80 per cent diversion was achieved. In continuous manufacturing and other manufacturing activities comprising initiating systems/package explosives/specialty chemicals, 76 and 78 per cent diversion was achieved respectively. These results reflect our focus on sustainable waste management practices and help set a path to increase our total waste diverted from landfill through FY2021 and beyond.

We pursue our waste reduction goals by adhering to a site-based hierarchy of avoiding waste generation wherever possible, increasing reuse and recycling, and diverting wastes from landfill.

To further support our ongoing commitment to waste reduction, this year we conducted an extensive review of our FY2018 and FY2019 waste data. More detailed assessment of the types and volumes of wastes through FY2021 and beyond is required to establish programs which will prevent waste generation, or reuse or recycle more of the higher volume wastes generated as a result of our process and manufacturing.

Gross waste disposal by destination (kT)



Proportion (%) of waste diverted from landfill

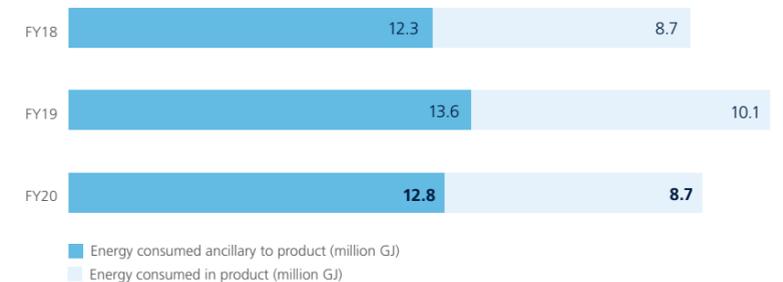


**ENERGY**

**Net energy intensity**  
**5.7%**  
 below FY2019

In FY2020, our gross energy consumption fell nine per cent from FY2019 levels to 21.5 million GJ. Net energy intensity also fell 5.7 per cent from 5.94 GJ per tonne of AN sold to 5.61 GJ per tonne of AN sold. The proportion of energy in product increased by two per cent, largely due to energy efficiency improvements at Kooragang Island which reduced overall ancillary energy use. Ancillary energy was 41 per cent of gross energy. Kooragang Island and Yarwun remain our largest energy users, accounting for 77 per cent of total energy consumption. The reduction in gross energy consumption can be attributed to reduced production volumes due to COVID-19 as well as the implementation of efficient manufacturing processes. Each site is committed to improving energy efficiency over time and is actively pursuing more efficient means of manufacturing.

Gross energy consumption in product vs ancillary



<sup>3</sup> Metric title was changed to waste disposed in FY2020 from waste generated as a more accurate description of the metric

## STEWADING NATURAL RESOURCES (Continued)

### ENVIRONMENTAL REMEDIATION

#### OUR APPROACH

Our major environmental (land and groundwater) contamination and remediation challenges are dominated by legacy issues from former chemical manufacturing activities. However, there are some remediation requirements associated with ongoing manufacturing operations.

Our approach to managing environmental remediation is situationally dependent. It broadly includes:

- compliance with local regulations and guidelines as a minimum
- assessment and proactive management of risks to human health and the environment with interim controls
- remediation to permanently reduce risks to human health and the environment where required, considering the technical efficacy, logistical, financial and sustainability aspects of alternative approaches
- remediation of surplus land to enable divestment and reuse
- active involvement and consultation with key stakeholders including regulators, neighbouring sites and local communities.

We maintain a core group of environmental remediation experts who are responsible for our more challenging chemicals business legacy remediation projects, as well as providing support to Group SHES and regional SHES teams on remediation projects where necessary.



#### INNOVATION AND COLLABORATION SUPPORTING REMEDIATION PROGRESS IN FY2020

Our ongoing remediation of legacy sites continues. In FY2020 we progressed a number of projects, collaborating with partners and applying innovative technologies where possible as part of our remediation approach.

##### Botany Groundwater Project, New South Wales (NSW), Australia

In March 2020 we held a workshop involving international and local experts and the NSW Environment Protection Authority to review clean-up progress and remediation. It was followed by an open information session with broad community attendance. This is an example of our policies and commitment to use appropriate remediation technologies and effective stakeholder engagement.

**We are seeking to improve the sustainability of our remediation systems through a pilot trial of Moving Bed Biofilm Reactor (MBBR) technology. The process could potentially replace the more energy-intensive air stripping and thermal oxidation front-end of the treatment for destruction of chlorinated hydrocarbons.**

##### Brownsburg, Quebec, Canada

We are partnering with the Institute for Research in Plant Biology in Montreal on a trial program of phytoremediation (plant-based uptake and/or root zone biodegradation) of mercury and polychlorinated biphenyl shallow contaminated soils. This is an appropriate sustainable technology where human health and environmental risks are not acute and delivers significant co-benefits to the host community including increased biodiversity and aesthetics.

##### Botany Hexachlorobenzene (HCB) Wastes, NSW, Australia

We continue the removal of hexachlorobenzene (HCB) waste from our Botany facility, with destruction of HCB waste from the third shipment to Finland and Sweden completed, and the fourth shipped in July 2020. Planning for the fifth shipment is in progress as we progressively eliminate this long-term legacy from chlorinated solvents manufacture at Botany.

##### Deer Park, Victoria, Australia

The remediation of soils contaminated with various nitrated and chlorinated benzenes was undertaken in FY2020. The remediation area was close to heavily trafficked public roads, a busy railway station and residential housing. Excavation of contaminated soils and truck loading was completed inside a large temporary emissions control enclosure to mitigate risks from contaminant vapours and odour. Works were completed without community complaint. This was evidence of our commitment to permanent reduction of risks to health and the environment, while protecting the health and wellbeing of our neighbouring communities.

##### Yarraville, Victoria, Australia

Remediation of shallow soils component was completed. The construction of an in-situ thermal remediation system was progressing to schedule when interrupted by the inability of the US-based contractor's team to travel to site due to the Australian Government's COVID-19 response. Evaluation of remediation requirements and approach for a neighbouring property continues. This project is evidence of our commitment to risk-based remediation including on off-site properties.

#### PRIORITIES AND FOCUS FOR FY2021

- Build capability towards eliminating loss of product events that adversely impact soil or water at our sites.
- Enhance risk identification and mitigation to identify environmental risks and implement further controls with tracking of actions and verification at key manufacturing sites.
- Identify feasible opportunities to increase the proportion of waste diverted from landfill.
- Progress remediation programs including:
  - evaluation of MBBR pilot trial at the Botany Groundwater project, Australia
  - fifth export shipment of Hexachlorobenzene Wastes from Botany, Australia
  - completion of soil remediation works at Deer Park, Australia
  - completion of onsite in-situ thermal groundwater remediation project at Yarraville, Australia.

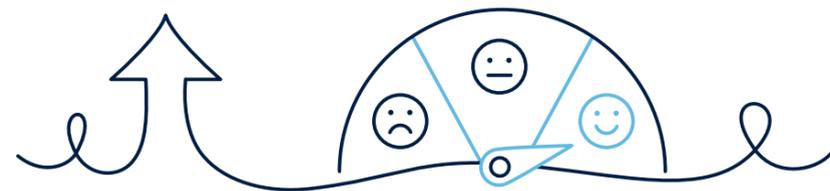
# SUSTAINABLE COMMERCIAL SOLUTIONS

Our purpose is to create value for our customers. As a company, we are recognised by our customers as an innovative leader in blasting technology.

We believe we are uniquely placed to address our own environmental footprint and deliver commercially beneficial solutions for our customers that enable them to minimise their own environmental impact. Our portfolio of research and development projects are targeted at creating solutions to optimise the blasting process, delivering more productive and safer outcomes that also reduce the environmental footprint of our customers' operations.



## FY2020 PERFORMANCE



**21%**

IMPROVEMENT IN NPS ON FY2019 LEVELS

## A CUSTOMER FOCUSED BUSINESS

### OUR APPROACH

To ensure we deliver on our promise to our customers, more than 100 area and territory business managers across our main geographical business regions are accountable for understanding customer needs and delivering commercial outcomes. The experience of our customers, our plans to continually improve and the results of our customer surveys are strategic metrics for our business. Our Executive Committee reviews customer experience on a monthly basis and continually identifies initiatives to improve customer experience at the global, regional and account level.

Our Voice of the Customer (VoC) program is our main vehicle for independently and consistently capturing customer feedback across our global operations and rapidly responding to feedback. The main metric is the Net Promoter Score (NPS), which provides a measure of loyalty and whether customers would recommend Orica to others. Feedback noted in survey responses is promptly addressed to ensure our customer needs and expectations are met.

In view of the global COVID-19 disruptions, an additional section was introduced into our customer survey to understand how we can best support them to ensure the continuity of their operations during this time.

### ORICA AND EPIROC COLLABORATE ON SHARED AUTOMATION GOAL



As mines go deeper and ore bodies become more remote, the case for blasting automation becomes clearer. Orica has partnered with Epiroc to jointly develop a semi-automated explosives delivery system, enabling safer and more productive blasting operations in underground mines.

**Epiroc is the industry leader in developing innovative underground mining equipment, including face drill rigs and production drill rigs.**

The partnership brings together the deep expertise and experience of two global industry leaders to address the growing demand from customers who are mining in increasingly more hazardous and challenging underground operations.

Epiroc President and CEO, Helena Hedblom, says the promising collaboration with Orica is an important first step on an exciting journey toward automating the entire drilling and explosives charging process.

**"It is a vital part of both Epiroc's and Orica's vision of making the mining operation as safe, productive and cost efficient as possible."**

**Helena Hedblom, Epiroc President and CEO**

The first prototype system is expected in 2020, with the first commercially available systems to enter service after extensive trials throughout 2021.



### PROGRESS IN FY2020

FY2020 saw a record improvement in customer satisfaction with a 21 per cent increase in NPS. This was largely driven by recognition from our customers of our sustained service and supply reliability during COVID-19, and the application of technology to remotely support their operations.

Our NPS in FY2020 represents an overall improvement in customer satisfaction of 54.5 per cent since the inception of our VoC program in FY2017, with 92 per cent of participants registering positive and neutral feedback.



Considerable improvements were recorded across all aspects of our Customer Promise. Customers have observed increased responsiveness and engagement, more timely and accurate order delivery, greater product quality and reliability, and overall value delivered through technology and innovation.

\* As of August 2020.

### FULFILLING OUR COMMITMENT TO MAKING OUR CUSTOMERS SUCCESSFUL, EVERY DAY, ALL AROUND THE WORLD



In addition to leveraging VoC feedback to learn how we can better support the evolving needs of our customers, cross-functional teams consistently work hand-in-hand with colleagues across our geographical regions to engage customers and understand their unmet needs, especially in the challenging COVID-19 environment.

With our customers increasingly facing remote working challenges, our digital solutions team provided guidance and support in leveraging our suite of digital tools and platforms to keep their mining operations running smoothly.

One example is a series of remote installations of our award winning blast fragmentation analysis system, FRAGTrack™ across the globe. Our teams worked together to rapidly deliver a 'plug and play' solution with rigorous training material and installation instructions, and real-time support via augmented reality to guide customers through the installation process. This ensured customers could continue to operate efficiently and continuously optimise their operations with real-time data and analysis.

Fulfilling our commitment to making our customers successful, every day, we also extended complimentary SHOTPlus™ Premier licenses to customers at the onset of COVID-19 ensuring they could continue to design, visualise and analyse blast initiation sequences while working from home.

While COVID-19 prevented face-to-face meetings, we rolled-out multiple webinar-style learning series to keep customers updated of our latest innovations and technological enhancements designed to solve their unique and evolving challenges.

### PRIORITIES AND FOCUS IN FY2021

Our improved NPS signals our customers are confident in our ability to deliver on our promise. We remain cognisant of the uncertainties arising from COVID-19 and will continue to build on our customer support and deliver superior customer service by:

- further simplifying our global product portfolio and optimising our supply chain network
- targeted product releases focused on blast optimisation to minimise environmental impacts, address complex conditions and remove people from harm's way, i.e. WebGen™ 200, Underground Automation, specialty explosives formulations and digital product offerings
- continuing to develop and deliver new blasting, digital and automated technologies to enhance customer outcomes
- further reducing procedural controls through the technology development process
- increasing overall customer experience and satisfaction through increased engagement and communication.

## SUSTAINABLE COMMERCIAL SOLUTIONS (Continued)

### COMMERCIALISING NEW TECHNOLOGY TO CREATE SUSTAINABLE OUTCOMES

By working with our customers to understand their sustainability challenges, we can design and develop solutions that deliver commercial outcomes for Orica and enhanced sustainability outcomes for our customers. Safety, process efficiency and environmental performance are at the heart of our innovation process and drive our focus toward digitisation, automation and increased use of data to optimise the downstream processes. Commercialising sustainable customer solutions is a fundamental element of our sustainability approach.

#### PROGRESS IN FY2020

In FY2020, we continued to develop, commercialise and apply technologies to improve safety and reduce environmental impact at our customers' operations including:

- bulk explosives that improve our customers' productivity and enable them to operate in increasingly difficult environmental conditions
- deployment of WebGen™ to enable the world's largest wireless blast conducted using our wireless detonators. WebGen™ removes people from harm's way by allowing blasts to be loaded under safe conditions and initiated remotely using through the rock technology
- continuing to facilitate a data-driven approach to blast optimisation through our blast fragmentation analysis system FRAGTrack™. By enabling more precise and optimised blasts, FRAGTrack™ can reduce downstream processing requirements leading to improved productivity and operational efficiencies across the mining value chain
- deploying GroundProbe remote monitoring services to support customers through unplanned site shut-downs due to the COVID-19 pandemic. GroundProbe uses radar and Light Detection and Ranging (LiDAR) to monitor slope stability in mines and tailings dams. The Geotechnical Support Services unit is delivering uninterrupted safety-critical support during the pandemic.

#### SPOTLIGHT ON MEASURING AND MONITORING TECHNOLOGY

##### Supporting downstream mine processing efficiency

Over the past few years, inroads have been made to reduce our own operational emissions. We have rolled out a global abatement plan, pursued a range of energy efficiency projects, and this year, set medium-term emissions reduction targets. While we will continue to pursue innovative solutions to reduce our direct environmental impact, we also recognise the opportunity to facilitate downstream emissions reductions in the industries we service.

Electricity consumption associated with milling and grinding dominates the energy and emissions profiles of mineral processing operations, typically requiring between 10 to 40kWh for every tonne of ore milled. However, the need for downstream processing can be significantly reduced by optimising fragmentation during the blasting phase. We believe the best blast outcomes are achieved when design decisions are underpinned by robust, unbiased data.

##### FRAGTrack™

FRAGTrack™ is a complementary technology that supports our data-driven approach to blast optimisation. The state-of-the-art fragmentation measurement tool provides through-the-rock rapid insights into the outcome of the blasting process. The binocular vision camera systems provide automated high-quality fragmentation image analysis, allowing high performance in variable lighting, material colour and textured environments. The system can be shovel or conveyor belt mounted to provide continuous particle size assessment at the dig face or at the conveyor.

The insights gleaned from FRAGTrack™ data enable engineers to adapt strategies to varied geological conditions, make targeted design modifications and immediately assess the effectiveness of each action.

Looking forward, we plan to conduct further research to quantify the downstream emissions reductions that can be achieved through achieving optimal fragmentation outcomes.

##### Insights from Kevitsa, Boliden Group, Finland

FRAGTrack™ has been deployed at the Kevitsa nickel, copper, gold, platinum and palladium mine in Finland since 2016. Kevitsa identified fragmentation as a key performance indicator for several productivity improvement projects including optimising crusher settings and increasing powder factors.

The mine is located 150km north of the Arctic Circle, requiring a tough, automated system to provide the large data samples needed to assess the productivity improvement projects.

Two shovel units and one conveyor mounted system were installed in 2016. The shovel systems measured post-blast Particle Size Distribution (PSD) allowing engineers to assess and modify blast design. Meanwhile, the conveyor unit measured PSD of material leaving the primary crusher allowing crusher settings to be optimised.

Within the first 12 months, the two shovel systems collected over 30,000 images across 256 blasts and allowed engineers to adapt the blasting approach to specific geological domains. For example, the FRAGTrack™ data revealed that areas of high amphibole content yielded a 20 per cent coarser fragmentation when compared to equivalent blasts in lower amphibole content areas. This information allowed engineers to make targeted modifications, with FRAGTrack™ able to measure how effective each modification had been.

After adapting the blast design to the high amphibole geological conditions, Kevitsa achieved finer fragmentation better suited to optimised processing.

##### GroundProbe allows remote safety monitoring during COVID-19

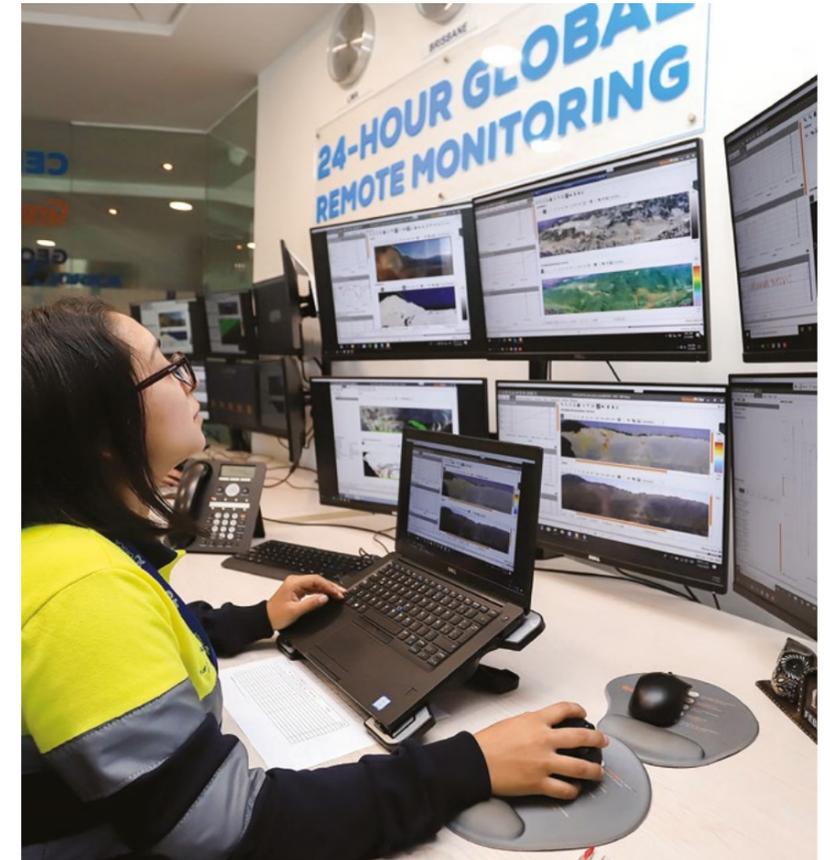
Our customer-oriented approach to innovation and technology continued to deliver safety outcomes during the unique challenges of 2020. GroundProbe is our slope stability monitoring business and over the last few years, has been helping our customers respond and adapt to emerging risks and changing safety priorities.

GroundProbe radars have long been deployed in open pit mines and have successfully detected thousands of slope instabilities. Our proprietary radar and LiDAR technologies continuously scan a slope in real time, detecting the often very small movements that precede a slope collapse event, issuing alarms and predicting when a collapse is likely to occur. Early warning allows for informed decision-making, risk management and most importantly, the movement of people out of harm's way.

Recently, we have seen a growing demand for our technology in the monitoring of tailings dams, an issue that attracted global concern in the wake of several catastrophic failures. In the last 24 months, we have deployed custom monitoring solutions to dams in Brazil, Peru, Canada, Mexico, Australia and Africa. Our best-in-class hardware and software are well suited to the monitoring of dam wall deformation. As our customers expand their safety focus to non-operational sites, it is our customer-centric model and commitment to ongoing support that has positioned us as a trusted partner.

This year, as COVID-19 forced mine shutdowns around the world, we saw an increase in demand for our remote monitoring services. GroundProbe's Geotechnical Support Services (GSS) is a pillar of our ongoing commitment to building long-term partnerships with customers and allowed us to deliver safety-critical support during unexpected periods of restriction on site. GSS conduct 24/7 monitoring of GroundProbe systems from remote monitoring centres ensuring no movement goes undetected. We have monitoring centres in Indonesia, Chile and Brazil and provide support in English, Bahasa, Spanish and Portuguese.

GroundProbe is now focused on refining existing hardware and data aggregation software and increasing automation and incorporation of artificial intelligence. As always, our innovation process will remain customer driven.



#### PRIORITIES AND FOCUS FOR FY2021

The convergence of our new technologies and solutions is enabling us to think differently, mine differently, operate more precisely and sustainably and most importantly, remove people from harm's way. We have a number of products and solutions in various stages of evolution within our research and development portfolio, all part of this transformation. In FY2021, our focus is on:

- The launch of WebGen™ 200, a new generation of wireless initiation system, featuring improved safety, reliability, and enhanced security to support new and complex mining applications.
- The commercial launch of our semi-automated explosives delivery system (leveraging the unique capabilities of WebGen™) in collaboration with partner Epiroc.
- The launch of bulk explosive specialty applications, including Fortis™ Protect, to help open cut operations operating in difficult conditions to minimise the potential for nitrate leaching into ground water, and our Cyclo™ used oil to emulsions service, enabling our remote customers to recycle their used equipment oil into the manufacture of bulk explosives on their site.
- Our digital solutions portfolio, including solutions to measure downstream impacts using smart sensors and edge computing to measure data in real time to drive downstream efficiency and value.

The system enables explosives charging at the development tunnel face in underground mining, enabling people to be removed completely from harm's way.

# EMPOWERING SOCIAL PROGRESS

We actively seek opportunities to collaborate and contribute to social progress, by building diversity, capability and leadership within our workforce and driving social and economic impact in the regions in which we operate.



## DIVERSE, INCLUSIVE CULTURE AND INSPIRED WORKFORCE

We believe a successful workforce is one in which our people are energised by the work they do, empowered to achieve their full potential, and inspired to have a positive impact.



### FY2020 PERFORMANCE



### OUR APPROACH

Our global workforce comprises over 13,000 people with diverse backgrounds and capabilities, working together to deliver our business strategy. Our People and Culture strategy is designed to support our teams and foster a culture where our people are aligned to our purpose, engaged in our business, and inspired to deliver results for our customers. We invest in our people throughout the employee lifecycle, seeking to attract, retain and develop people who want to create a positive impact in a high-performing workforce.

We apply a systematic approach to managing our people, while adhering to local legislative and regulatory requirements. We are guided by our Code of Business Conduct, which gives us a shared understanding of how we do business and deliver on our purpose. Our Human Resources Group Standard provides the minimum requirements and expectations to manage all aspects of human resources activities across Orica. Our processes are enabled through our globally integrated HR system, Success Factors.

Our Board Human Resources and Compensation Committee monitors progress against key strategic objectives

within remuneration, culture and diversity. Our Executive Committee meets at least twice a year for dedicated 'People Days' to drive the global talent and capability agenda. Senior human resources representatives also meet regularly to monitor execution of our People strategy. This approach ensures a clear alignment of our global strategy through to execution at a local level.

### PROGRESS IN FY2020

#### Diversity and inclusion

We know a diverse and inclusive workforce fuels innovation and creativity. Our commitment towards diversity and inclusion is focused on attracting, growing and retaining a pipeline of diverse talent, and providing a work environment where our people feel engaged, respected and connected.

FY2020 marks the final year of our current Diversity and Inclusion strategy (FY2017-20). We achieved our FY2020 target for cultural diversity and we continue to make progress on gender representation, achieving our target of 25 percent women in senior leadership<sup>2</sup> roles, including those acting in positions (<three per cent).

In FY2020 we:

- retained strong female representation of 37.5 per cent on our Board of Directors
- increased the representation of women in roles reporting directly to the Executive Committee (excluding Executive Assistants) to 30 per cent, an increase of 11 per cent from our 2015 baseline of 19 per cent
- continued our focus on developing the next generation of female leaders through our Enterprise Leadership Program (ELP), with 50 per cent of the program nominees for next year's cohort identifying as female. Our priority is to ensure gender balanced representation in the final selection of participants.

Ethnic and cultural diversity remains strong with 48 per cent of roles in senior leadership held by people who identify their nationality as other than Australian or New Zealand, which is aligned to Orica's revenue profile. Across the broader organisation profile, 81 per cent of our workforce identify as a nationality other than Australian or New Zealand.

<sup>1</sup> 2018 OHI score adjusted from 6-point to 5-point scale to compare 2019 results.  
<sup>2</sup> Defined as senior leaders at job bands A-C.

**DIVERSE, INCLUSIVE CULTURE AND INSPIRED WORKFORCE** (Continued)

As per other commitments made in our FY2017-20 strategy, we also:

- raised the Inclusion Index in our last all-employee Organisational Health Survey (results released in FY2020) to 85
- refreshed our Human Rights at Work and Diversity and Inclusion policies.

**Diversity and inclusion: looking ahead**

As a global business, we are made stronger by bringing together diverse individuals with unique backgrounds, perspectives, experiences and capabilities to shape our future strategy and meet the demands of a rapidly changing macro-environment. Our Diversity and Inclusion strategy was developed to build a diverse workforce and promote an inclusive environment. We are accelerating our progress, by focusing on three key pillars over the next four years:

- **build an attractive talent brand** to strengthen our ability to attract and retain a diverse group of employees
- develop an **inclusive culture and new ways of working** by introducing flexibility and addressing limiting factors for inclusion in culture, systems and process
- promote **increased leadership accountability** to ensure we set the tone at the top and continuously improve our performance across diversity and inclusion measures.

Our measures for success under our new Diversity and Inclusion strategy are:

- 35 per cent of women in senior leadership<sup>3</sup> roles by end 2024
- cultural diversity in senior leadership roles and key talent pipelines to reflect our geographic spread, revenue and profit profile
- continuous improvement in our Inclusion Index score to objectively measure our success in developing an inclusive culture.

**Culture and engagement**

In FY2020, we continued to focus on building a positive and engaged workforce who are motivated, supported to reach their potential and deliver superior performance. This is critical for realising a compelling employee value proposition that is aligned to our values.

We evolved our approach to measuring culture and engagement by implementing a continuous listening strategy, building on the cultural transformation that began in 2015.



**BRINGING TWO BUSINESSES TOGETHER**

In May 2020, Orica completed the acquisition of Exsa, Peru’s leading explosives manufacturer. This milestone marked the beginning of the process of bringing the two businesses together.

**To support a smooth integration and foster inclusivity, we invited feedback from Exsa’s employees with a questionnaire aimed to gain insight into Exsa’s alignment with Orica’s values and to understand employee perceptions and concerns about the integration.**

The results demonstrated high levels of confidence in the merger and informed our approach to bringing teams, processes and operations together. Key outcomes included:

- 98 per cent of Exsa’s 1,043 employees provided feedback
- 99 per cent of respondents were confident the merger will result in enhanced value for customers and are confident in their ability to adapt to changes as a result of the acquisition
- 97 per cent of Exsa employees are confident the integration will be a success.

An enterprise-wide survey was deployed online only for the first time, with 68 per cent of our workforce participating. The survey outcomes indicate strong cultural foundations amid a time of transformation and change across the business.

- Our overall Health Score improved by eight points since 2018 (73 to 81).

- We outperformed global industry benchmark companies in all categories of organisational health.
- 50 per cent of people feel working at Orica has changed for the better as opposed to 36 per cent in the previous result released in FY2019.
- Safety was our strongest result outperforming industry and best practice safety benchmarks.

<sup>3</sup> Defined as CEO-2 (includes the CEO, Executive Committee and their direct reports, excluding Executive Assistants).

**SUPPORTING OUR PEOPLE THROUGH COVID-19**



Supporting our people and ensuring their health, safety, and wellbeing through COVID-19 is an ongoing priority.

- **Global and regional crisis management teams:** we quickly established protocols providing guidance and global consistency to team members who are showing symptoms of COVID-19 or have tested positive.
- **New ways of working:** we facilitated remote working where possible. Approximately 185,000 meetings have been conducted virtually since March 2020. We introduced augmented reality technology to keep people safe while delivering services for our customers remotely.
- **COVID-safe workplaces:** we adapted sites to new regulations and processes on social distancing, including infrared temperature checks, reduced on-site staff, enhanced quarantine measures and shift rotations.
- **Staying globally connected:** we initiated virtual Town Hall events with updates on our approach to managing the impact of COVID-19, regular webcasts with advice from senior leaders and sharing resources to stay healthy, engaged and productive during uncertain times.
- **Mental health and wellbeing:** we launched a global wellbeing campaign and regional wellness programs including access to webinars with external health professionals providing tips and resources.

**Developing our capabilities**

In FY2020, we continued to build distinctive capabilities to deliver on our strategy, with an increased focus on developing a pipeline of talent for senior leadership, and critical technical and commercial positions. This included redesigning our methodology to enable a simplified and agile approach to capability development.

Recognising technology as one of the growth engines of our business strategy, we continued to focus on developing technical capability and fostering innovation. We further invested in building our commercial and technical capability through an expanded Technology Career Ladder, promoting development and progression for employees in the technology and digital solutions teams. The Technical Career Ladder is a capability matrix, outlining the skills and capabilities required at each level in the Technology stream to support our strategic goals and maintain our position as a market leader in technology. In March 2020, a commitment was made to develop and rollout a similar capability matrix for regional WebGen™ teams to further develop our pipeline of technical talent.

The challenges of remote working due to COVID-19 meant that opportunities for traditional training programs were limited. In response, we provided online learning

opportunities for our teams. Most notably, we launched a WebGen™ online learning series to provide sales and value proposition awareness across 12 modules as well as a Webgen™ implementation playbook to ensure safe, efficient and consistent application of this technology. To date, we have trained our field engineers on the WebGen™ system with other personnel undertaking the WebGen™ online learning series.

In addition, we delivered a holistic range of leadership development programs and initiatives across the global graduate program, supervisor development, enterprise leadership program and executive development. These programs help develop our talent as we take a longer-term view on the distinctive capabilities required to develop a future generation of leaders.

We continued to focus on core systems, upskilling our commercial teams for the launch of our SAP Enterprise Resource Planning system. We also completed a milestone in our global learning transformation with full implementation of the Learning Management System, providing learning plans for all jobs across the organisation. This standardised global reporting, records management, and planning of learning, achieving greater compliance.



## DIVERSE, INCLUSIVE CULTURE AND INSPIRED WORKFORCE (Continued)

### A REFRESHED FRAMEWORK

This year, we refreshed our People and Culture strategic framework to reflect our vision for the future of work at Orica. To support the implementation of our framework in FY2021, we defined four key focus areas:

#### 1. Implement our next generation operating structure

- We are a diverse company operating in unique locations across the world. Our operating structure recognises the need for flexibility within our standard structures and supports processes to meet the specific needs of each location.



#### 2. Build distinctive leadership and new ways of working

- Leaders shape culture and culture drives performance. We are focused on shaping leaders who inspire, engage and empower our people to meet their potential and drive business performance.



#### 3. Strengthen our talent engine

- Building distinctive capability is core to our new framework. We continue to invest in the development of the commercial and technical capabilities of our people to enable realisation of our long-term strategic direction.



#### 4. Enhance our performance culture

- Our purpose and values are what unites us. Our focus on fostering an inclusive and diverse workplace is a strength that enables us to deliver innovative results for our customers.

These focus areas have been carefully developed to ensure we prepare for the future of work, attracting, developing and retaining talented, diverse individuals in critical roles, and promoting a culture that inspires our people to deliver their best.



#### ENTERPRISE LEADERSHIP PROGRAM (ELP)



The Enterprise Leadership Program (ELP) is our signature leadership program to increase capability and succession of key talent for enterprise senior leadership roles in the future. We target high performing individuals with high leadership potential, who are role models of our values and aspire to senior roles within our business.

The 12-month program applies a holistic view of talent development with a blended learning approach including executive coaching, an off-site development program, mentoring and internally hosted executive webinars to support individual growth and global mindsets.

#### PRIORITIES AND FOCUS FOR FY2021

We will commence implementation of our updated framework with a focus on:

- delivering our next generation operating model
- deploying our approach towards building leadership and distinctive capability
- designing and deploying our employee value proposition aimed at a diverse range of people.

## SAFE, RESILIENT AND THRIVING COMMUNITIES



### FY2020 PERFORMANCE



#### OUR APPROACH

In FY2020, we operated amid a series of challenging events and incidents with significant consequences for communities around the world. This has seen a considerable rise in stakeholder expectations around business conduct and engagement practices, as well as a growing desire for more transparency to better understand how our business operations impact communities.

Developing strong relationships with our stakeholders at a corporate, regional and local level is vital for the success of our business. Our approach to how we engage stakeholders and manage community concerns and issues is outlined in our dedicated Group standard and highlighted in our Code of Business Conduct.

Issues surrounding cultural heritage management and First Nations/Indigenous engagement featured strongly throughout FY2020. This highlighted the consequences for First Nations Peoples, companies and investors when there is a breakdown in dialogue between companies and Traditional Owners/Native Title holders and inadequacies in a company's ability to effectively manage cultural heritage.

In response, we are reviewing our global approach to First Nations/Indigenous stakeholder engagement. Our focus will be on our governance structure and culture, policies, processes and practices, taking into account the outcomes of the current Australian Parliamentary Inquiry into the destruction of the Juukan Gorge caves in

Western Australia. There is an opportunity to learn and continually improve our approach in FY2021 and beyond.

Acknowledging the broader need to evolve with growing stakeholder expectations and following a comprehensive review of our community investment strategy earlier in the year, we introduced a refreshed Group Community Impact and Investment framework in FY2020. We have increased our planned financial contribution over the longer term and are committed to invest at least \$15 million globally across our communities over the next five years to FY2025.

The rollout of our framework and new funding commitment will commence in FY2021.

**Community investment target**  
**AT LEAST**  
**\$15 MILLION**  
**BY FY2025**

#### PARTNERSHIPS FOR POSITIVE IMPACT

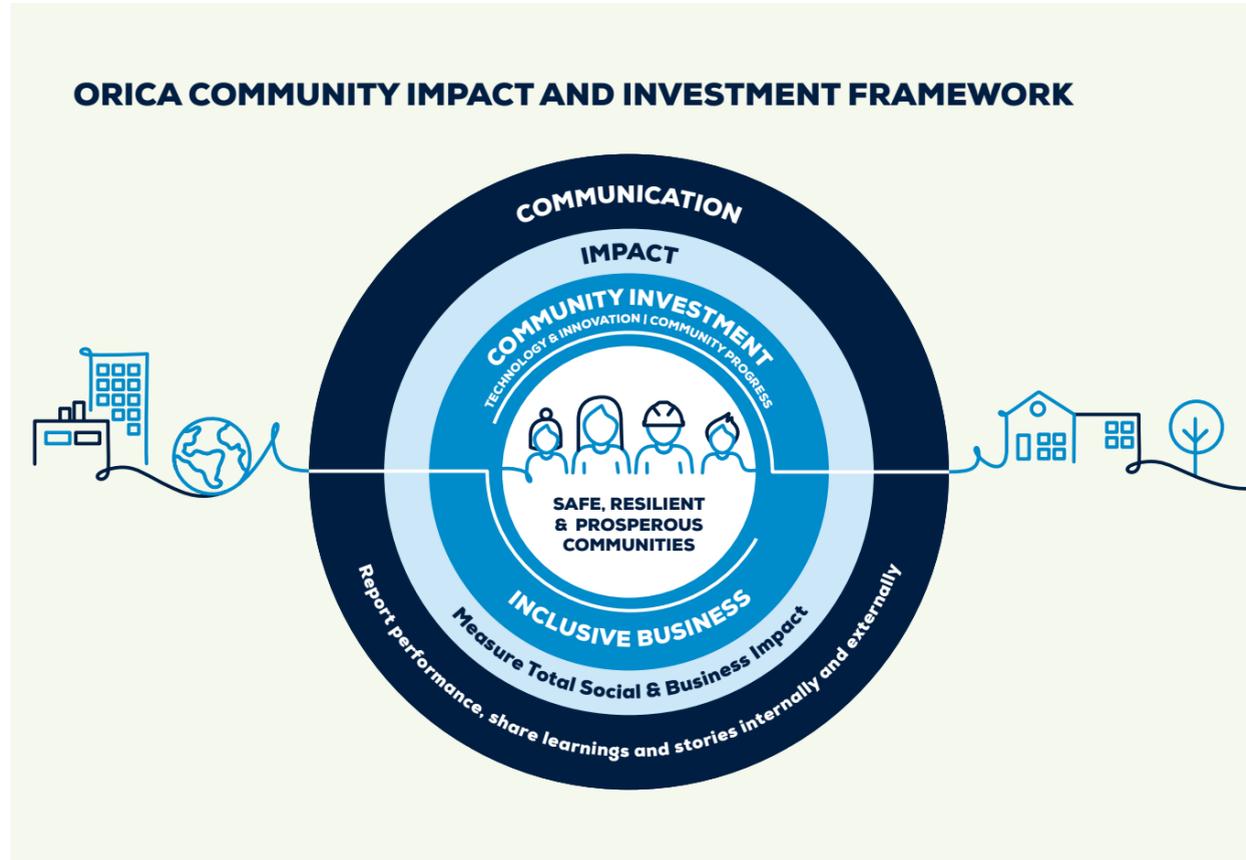


With the world facing enormous sustainability challenges, we continue to work towards better outcomes in partnership with industry bodies, NGOs, research and educational institutions, our customers, suppliers and peers.

As recognised by the United Nations Sustainable Development Goals, (Goal 17, Partnerships for the Goals), increasing our positive impact through partnerships provides a much greater chance of success in overcoming sustainability challenges by creating innovative solutions and shared value, and leveraging our core capabilities, assets and networks.

We continue to work with external partners across our business on projects that deliver a range of commercial, environmental and social benefits. We also seek opportunities to collaborate through voluntary initiatives, such as the UN Global Compact, where our Chilean business is a member. In FY2021, we will further develop and define our approach to partnerships and seek other opportunities for collaboration for impact.

**SAFE, RESILIENT AND THRIVING COMMUNITIES** (Continued)



**PROGRESS IN FY2020**

**Revising our Community Impact and Investment framework**

Our revised approach will see Orica actively look for opportunities to deliver positive outcomes for community stakeholders and is focused on ensuring our contribution to communities is steered toward creating meaningful positive economic, social and environmental impact with enduring value.

Our refreshed framework is anchored by a vision to build **safe, resilient and thriving communities**. To fulfill this vision, we look to manage our impact and create value through:

**1. Inclusive business policy, practices and culture**

- Strive to create a positive impact on society by having policies, practices and governance processes that are integrated, fair and align with expectations of our local communities and other stakeholders.
- Embed an inclusive, respectful and responsive approach to community engagement, seeking to understand and address the needs and expectations of our communities at a corporate, site and regional level.

**2. Community investment**

- Deliver more targeted, strategic investment prioritising initiatives that are responsive to the needs and priorities of a community.
- Identify potential initiatives which leverage our existing technologies and capabilities to create innovative solutions to complex social and environmental problems. This will deliver long-term benefits for communities and commercial value for our business and customers.

Our Community Impact and Investment framework is underpinned by a commitment to measure and report our total business and social impact.

**COMMUNITY INVESTMENT**

By engaging closely with our community stakeholders in regions and across our sites of operation throughout the year, we provided targeted funding to meet the specific needs of our communities. We were also well placed to offer in-kind support for community organisations, applying our expertise, technology and utilising our networks to deliver much needed assistance.

In FY2020, the total value of our community investment contributions totalled \$3.2 million, with almost half of this directed to emergency services/disaster relief efforts, including COVID-19 related support, aid toward bushfire affected communities in Australia and donations to assist the Taal Volcano relief effort in the Philippines.

Almost 89 per cent of all community investments were made within our APA region which includes Australia, China, Indonesia, India and the Philippines. Although APA is a large and important region for Orica, attracting a larger portion of overall annual community investment, a significant one-off \$1 million donation was made to bushfire relief in Australia in early 2020.



**PARTNERSHIP TO SPARK A LEGACY OF CHANGE AND OPPORTUNITY FOR FUTURE GENERATIONS IN ZAMBIA**

Science, technology, engineering and mathematics (STEM) skill sets are in high demand globally. Like many African countries, Zambia has roughly one engineer to every 10,000 people (compared to around 50 engineers in industrialised countries). Greater engineering capacity is crucial to Zambia's growth in critical economic sectors, including energy, mining, and infrastructure.

Our partnership with Funzeleo is helping to close the education gap, getting students back into classrooms and engaging them in hands-on lessons and workshops by upskilling teachers and teaching methods across Zambia.

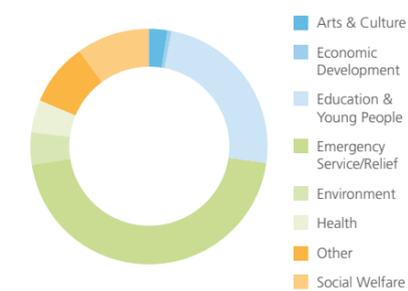
When we formed the partnership in 2018, our initial goal was to bring Funzeleo's learning program to 10 high schools in Zambia. Since then, we have tripled our target and reached 30 schools, engaging more than 12,000 students and training 58 teachers.

This new approach to learning is changing the way students think about STEM. Mwanga, a 10th grade student at Chavuma Secondary School says: "Being part of Funzeleo has helped me access materials for conducting experiments in class. I can now see and touch the instruments during an experiment. It just makes me love engineering more."

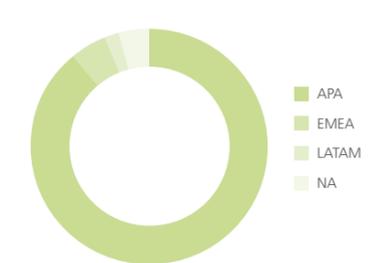
**Community investment by year (\$m)**



**Total community investment by category (%)**



**Total community investment by region (%)**



**FY2020 community contribution \$3.2 MILLION**  
an increase of 68% from FY2019

**SAFE, RESILIENT AND THRIVING COMMUNITIES** (Continued)



Photo by: Dan Paled/AAP

**SUPPORT THROUGH EMERGENCIES AND NATURAL DISASTERS**



**Australian bushfires**

In response to a disastrous fire season in Australia in 2020, we provided support to the fire-fighting effort as well as the ongoing bushfire recovery. A total of \$1 million was donated, including a \$400,000 donation to the NSW Rural Fire Service and \$400,000 to the Victorian Bushfire Appeal. The remaining \$200,000 was matched dollar-for-dollar to donations made by our employees to a range of charities responding to community, wildlife and economic impacts of the bushfire including Foodbank Australia, WIRES and Foundation for Rural and Regional Renewal.

**Taal Volcano relief effort, Philippines**

Many Filipino communities were impacted by the Taal Volcano, which erupted in early January. Located in Batangas, the volcano triggered earthquakes, ashfall and destruction, leading to more than 40,000 people being evacuated from their homes. To support relief and recovery efforts on the ground, we launched an employee donation drive and we were gratified to see the kindness and community spirit of our people.

**In addition to donations of water, clothing, blankets and other essentials, our people raised 37,000 PHP (A\$1,089) which was delivered directly to Batangas through St. John the Evangelist Tanauan Parish.**

To further support the evacuated families, many of whom are still unable to return to their homes, Orica matched employee donations making an additional corporate donation to the Philippines Red Cross, totalling 837,000 PHP (A\$24,600).

**COVID-19 RESPONSE – UNDERSTANDING AND RESPONDING TO LOCAL NEEDS**

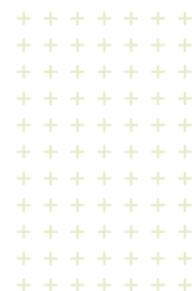
The COVID-19 pandemic has significantly impacted communities around the world, including our communities of operation. Our corporate funding initiative in response to the impacts of COVID-19 has worked to empower our sites and offices around the world to respond quickly and effectively. Our teams on the ground consulted directly with local community organisations to understand their needs and provide targeted support. From providing meals to vulnerable communities, assistance to address domestic abuse and enabling remote learning, we continue listening to locals and provide the help that is needed.

**Leveraging our skills and resources to assist during COVID**

Our Deer Park site in Australia leveraged the technical expertise of our emulsifiers team and the raw materials available to them, to produce over 1,000 litres of hand sanitiser for community groups, Meals on Wheels and Libraries Victoria.

The donation has enabled Meals on Wheels volunteers to maintain good health and hygiene practices, while delivering home-cooked meals and conducting welfare check-ins for elderly and socially isolated community members across Victoria. The volume of sanitiser donated also ensured volunteers were able to provide sanitiser to every Meals on Wheels client visited.

For Libraries Victoria, our donation ensured teams at over 65 branch libraries across central and north east Victoria had access to hand sanitiser to keep themselves, and those visiting the library safe during the pandemic.



**UNDERSTANDING AND DEEPENING COMMUNITY INVESTMENT: GOMIA, INDIA**



Throughout FY2020, we have worked to better understand our socio-economic support for communities in which we operate in preparation for more formal measurement of economic contribution in the coming years.

**Through our community engagement activities we identified opportunities to deepen our investment and address critical community needs to provide more meaningful, long-term benefits.**

In FY2020 at our Gomia site in India, we continued our support for the vital community services and we identified further investment opportunities to address and respond to specific local community needs. These included:

- **Community health:** Ardeer Hospital Trust (AHT) is a 35-bed hospital with three full-time doctors and 10 paramedic staff. While the hospital provides basic health services to our employees, we extend the medical facilities to local community residents at a subsidised cost. The hospital organises medical camps quarterly with free health check-ups provided, particularly for disadvantaged people within the community. On average, over 1,500 patients receive treatment at AHT annually.
- **Education:** with approximately 2,200 students in attendance, Pitts Modern School provides education from kindergarten through to Grade 12. More than 80 per cent of students are from the community, while the remaining students are children of Orica employees. The school is run by an independent trust established with principal funding providing by Orica. We also donated the initial physical infrastructure for the school and maintained our support since.
- **Girls education:** the lack of female toilets was identified as a barrier to girls attending school in their local community. To encourage girls to attend school and participate in education, we invested over \$14,000 in FY2020 to construct girls' toilets at Kaswagarh Middle School and Daridag School.
- **Emergency services:** in response to the COVID-19 pandemic and the growing number of confirmed coronavirus cases in the District of Bokaro, the fire team from our site Fire Station partnered with local authorities to undertake a sanitisation process to help reduce community transmission. Our team applied their expertise and used their equipment to develop an innovative hose system to apply the sanitiser, reducing wastage and increasing the efficiency of sanitation.

**Supporting our local communities with vital supply deliveries**

With key supplies disrupted in many parts of the world, we supported local communities by sourcing and providing essential food, medical and technical supplies to those who need it most.

To help ensure all members of the community had access to food and essential items, our team in Bontang, Indonesia donated over 700 food packages to the local government who, in turn, delivered

them directly to vulnerable communities across the city.

In Limay, Philippines our teams provided essential resources to local police, firefighters, local hospital and school who have been significantly impacted by the pandemic. As part of the team's ongoing commitment to their community, 400 care packages with groceries were donated to families surrounding our Limay site to assist them in the face of a growing food shortage following the town's lockdown.

Across Peru, our teams are providing ongoing support to education providers and healthcare services surrounding our Peruvian operations. From providing tablets to local students so they can continue learning remotely, to supplying personal protective equipment and medical equipment to local hospitals, our teams are contributing to building safe, resilient communities.

**SAFE, RESILIENT AND THRIVING COMMUNITIES** (Continued)



**IMPROVING EDUCATION OUTCOMES FOR YOUNG ABORIGINAL AND TORRES STRAIT ISLANDER MEN**



In FY2020 we launched a national partnership with the Clontarf Foundation in Australia.

The partnership aims to improve the education, discipline, life skills, self-esteem and employment prospects of young Aboriginal and Torres Strait Islander men by setting up academies in school communities around the country.

The Clontarf Foundation currently have 135 academies with approximately 8,000 boys enrolled in programs nationwide. By supporting young Indigenous men to stay at high school longer and receive a better education, the Foundation is helping address the disadvantage cycle across health, education, employment and incarceration.

Our team are working with Clontarf Academies nationally to provide insight on the mining industry and where possible, help them commence a career with Orica.

“We, as a Foundation, are excited to enter into this new partnership with Orica and begin to engage locally where we co-exist. Private Sector funding brings with it so much richness and variety to our programs and in turn, our Academy members lives. We are extremely grateful that many of the young men in our programs will now have the opportunity to explore the mining industry, via Orica’s vast array of operational sites.”

**Russell Aitken, Partnerships Manager NSW, Clontarf Foundation**



**PRIORITIES AND FOCUS FOR FY2021**

Our priorities in FY2021 are aligned to the rollout of our Community Impact and Investment framework. These priorities include:

- **Impact mapping:** perform a gap analysis of our material sustainability issues against community-related business practices, to help identify how best to protect community interests, manage business risk and capture new opportunities.

- **Community engagement review:** conduct a review of our existing community engagement approach, practice and reporting including how we engage with First Nations People and our approach to cultural heritage management, allowing us to implement improvements and deepen relationships.
- **Launch the Orica Impact Fund:** as part of our community investment strategy, grant funding will be made available across our global operations for local community projects or to enable investment in technology and innovation solutions to tackle social and environmental issues.



**SAFE, RESILIENT AND THRIVING COMMUNITIES** (Continued)



“ Throughout the year, our employees across the world have been actively supporting the communities around them. From donating blood, to volunteering and giving their time, and delivering vital items to vulnerable communities during the pandemic, we thank our teams for their commitment to making a positive impact.”



# ABOUT THIS REPORT

Our FY2020 reporting suite includes this Sustainability Report, our Annual Report, and our Corporate Governance Statement. These documents are available to download from our website.

## REPORTING APPROACH AND SCOPE

This Sustainability Report covers the financial year 1 October 2019 to 30 September 2020 (FY2020) for Orica Limited, unless otherwise stated.

We report on the sites and activities we wholly own and operate, and those we operate in a 50 per cent or more joint venture during the year. Information regarding the controlled entities in the Orica Group can be found in our 2020 Annual Report.

The structure of our report is aligned to material sustainability topics identified through our materiality review. For each topic we have provided an overview of our approach and performance over the reporting period, with the aim of providing a clear view of how we are addressing our most material impacts.

Data for energy, greenhouse gas emissions, water and waste is only reported for the operations we wholly own and operate, with the exception of the Bontang Indonesia joint venture, which is included as we maintain management control of the operation and its material greenhouse gas (GHG) emissions profile.

Numbers in this document are subject to rounding and presented in Australian dollars unless otherwise stated.

Additional sustainability metrics and data is provided in our Sustainability Data Centre available on our website.

## REPORTING STANDARDS

This report contains standard disclosures guided by the Core Global Reporting Initiative (GRI) Reporting Standards. A GRI Content Index is available on our website.

In our reporting on climate change, we follow the guidance provided by the Financial Stability Board's Task Force on Climate-Related Financial Disclosures voluntary disclosure framework (TCFD Framework). Pages 30 to 45 (Transitioning to a Low-Carbon Economy) of this report details how we consider governance, risk management, strategy, and metrics and targets in relation to climate change.

We report GHG emissions, energy consumption and energy production from our Australian facilities under the Australian Government's *National Greenhouse and Energy Reporting Act 2007*, supporting regulations and relevant guidelines. GHG emissions from our non-Australian sites are reported using the same general framework, with the application of local regulations, energy and emission factors. The reporting of non-Australian data is based on materiality thresholds.

## VERIFICATION PROCESSES

We employ internal and external verification processes to assure the completeness and accuracy of information.

Our internal processes cover data review, verification and validation to accept, reject or qualify data in an objective and consistent manner. Our processes are governed by our integrated management system incorporating Group Standards covering Safety, Health, Environment, Security (SHES) Management and Environment.

Requirements for monitoring equipment calibration, data collection, recording, reporting, verification and validation are documented and implemented.

We perform independent limited assurance over a selection of performance disclosures in our FY2020 Sustainability Report. Specifically, this covers:

- Absolute Scope 1, 2, and 3 emissions in tonnes of carbon dioxide equivalent (tCO<sub>2</sub>-e) and total GHG emissions intensity (tCO<sub>2</sub>-e/tonne of ammonium nitrate sold) within the section Climate Resilient Economic Growth, Transitioning to a Low Carbon Economy – GHG Emissions Performance
- Disclosures in relation to the TCFD, found within the section Climate Resilient Economic Growth, Transitioning to a Low Carbon Economy.

Our Assurance Statement can be found on page 71.

# ASSURANCE STATEMENT



## Independent Limited Assurance Statement to the Management and Directors of Orica Limited

### Our Conclusion:

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that suggests that selected disclosures ('Selected Performance Disclosures') from the Climate Resilient Economic Growth section of Orica's Sustainability Report 2020 ('the Report') and detailed in Table 1 below have not been prepared and presented fairly, in all material respects, in accordance with the criteria defined below.

### What we assured

Ernst & Young ('EY', 'we') was engaged by Orica Limited ('Orica') to undertake limited assurance as defined by Australian Audit Standards, here after referred to as a 'review', over Selected Performance Disclosures in Orica's Sustainability Report ('the Report') for the year ended 30 September 2020, as presented in Table 1 below.

Table 1: Selected Performance Disclosures

Section	Sub-section	Selected Performance Disclosures
Climate Resilient Economic Growth	Transitioning to a Low Carbon Economy - Greenhouse Gas Emissions Performance	<ul style="list-style-type: none"> <li>• Absolute scope 1, 2, and 3 emissions in tonnes of carbon dioxide equivalent (tCO<sub>2</sub>-e)</li> <li>• Total greenhouse gas emissions intensity (tCO<sub>2</sub>-e/tonne of ammonium nitrate sold)</li> </ul>
	Transitioning to a Low Carbon Economy	<ul style="list-style-type: none"> <li>• Disclosures in relation to the Task Force on Climate-related Financial Disclosures (TCFD)</li> </ul>

### Criteria applied by Orica

- The criteria for our assurance engagement ('Criteria') include the following:
- ▶ *National Greenhouse and Energy Reporting Act 2007*
  - ▶ *National Greenhouse and Energy Reporting Regulations 2008*
  - ▶ *National Greenhouse and Energy Reporting (Measurement) Determination 2008*
  - ▶ *Alberta Emissions Management and Climate Resilience Act, Updated July 2020*
  - ▶ Alberta Greenhouse Gas Quantification Methodologies, Version 2.0
  - ▶ The GHG Protocol Corporate Accounting and Reporting Standard, Revised Edition
  - ▶ International Greenhouse Account Factors, equivalent to the Australian National Greenhouse Account Factors, July 2019
  - ▶ Orica's methodology for reporting Scope 3 emissions
  - ▶ Principles defined in the Global Reporting Initiative (GRI) Standards (GRI 101: Foundation)
  - ▶ Recommendations of the Task Force on Climate-related Financial Disclosures.

### Key responsibilities

#### EY's responsibility and independence

Our responsibility was to express a limited assurance conclusion on the noted subject matter under "What we assured".

We were also responsible for maintaining our independence and confirm that we have met the independence requirements of the APES 110 Code of Ethics for Professional Accountants and have the required competencies and experience to conduct this assurance engagement.

### Orica's responsibility

Orica's management was responsible for selecting the Criteria and preparing and fairly presenting the Selected Performance Disclosures in accordance with that Criteria. This responsibility includes establishing and maintaining internal controls, adequate records and making estimates that are reasonable in the circumstances.

### Our approach to conducting the review

We conducted this review in accordance with the International Standard for Assurance Engagements Other Than Audits or Reviews of Historical Financial Information (ISAE 3000), Assurance Engagements on Greenhouse Gas Statements (ASAE 3410) and the terms of reference for this engagement as agreed with Orica.

### Summary of review procedures performed

A review consists of making enquiries, primarily of persons responsible for preparing the Report and related information, and applying analytical and other review procedures. Our procedures included:

- ▶ Interviewing key personnel to understand the business, reporting process and processes and systems for collecting and collating data
- ▶ Reviewing evidence to support Selected Performance Disclosures within the selected material topics
- ▶ Undertaking data analytics to check the completeness of the data supporting the Selected Performance Disclosures
- ▶ On a sample basis, based on our professional judgement, agreeing claims and metrics to source information to check the accuracy and completeness of the claims
- ▶ Performing recalculations of Selected Performance Disclosures to confirm quantities stated were accurate
- ▶ Identifying and testing assumptions supporting disclosures related to Selected Performance Disclosures.

We believe that the evidence obtained is sufficient and appropriate to provide a basis for our limited assurance conclusion.

**ASSURANCE STATEMENT** (Continued)

Page 2

**Other Matters**

We have not performed assurance procedures in respect of any information relating to prior reporting periods, including those presented in the Report. Our review does not extend to any disclosures or assertions made by Orica that do not relate to the Selected Performance Disclosures.

**Limited Assurance**

Procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

While we considered the effectiveness of management's internal controls when determining the nature and extent of our procedures, our assurance engagement was not designed to provide assurance on internal controls. Our procedures did not include testing controls or performing procedures relating to checking aggregation or calculation of data within IT systems.

**Use of our Assurance Statement**

We disclaim any assumption of responsibility for any reliance on this assurance report to any persons other than management and the Directors of Orica, or for any purpose other than that for which it was prepared.

Our review included web-based information that was available via web links as of the date of this statement. We provide no assurance over changes to the content of this web-based information after the date of this assurance statement.

Ernst & Young  
Melbourne, Australia  
16 November 2020

Terence Jeyaretnam FIEAust  
Partner



Enquiries can be directed to [companyinfo@orica.com](mailto:companyinfo@orica.com)

