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TRANSFORMING SOCIETY
FOR FUTURE GENERATIONS
OUR SUSTAINABILITY REPORT
2019



SNC • LAVALIN

PEOPLE. DRIVE. RESULTS.



1 / MESSAGE FROM
OUR PRESIDENT
AND CEO

Musée national des beaux-arts du Québec Pavillon Pierre Lassonde
Québec City, Québec, Canada
Photography by Stephane Brugger

1. MESSAGE FROM OUR PRESIDENT AND CEO

We are all in this together

As I write this message the Covid-19 pandemic attacks countries and regions, taking countless precious lives. Most of SNC-Lavalin's employees, including myself, are working from home, while our essential workers keep communities afloat. Our colleagues in Ontario are supporting nuclear power stations. In Québec, our teams are building temporary drive-in clinics and testing facilities in hospital parking lots and in the UK, our colleagues have been using 3D printers to produce PPE masks to protect healthcare workers. We are all in this together and as a company, everyone is eager to help. I wholeheartedly thank the crews of volunteers who, on their own initiative, borrowed company vehicles to deliver groceries and medicine to vulnerable members of the community.

I am also taking stock of the quick succession of challenges that the world and our organization will have to face. In the near future, governments all over the world, in an unprecedented effort to boost the economy, will be authorizing numerous infrastructure projects. Projects for which SNC-Lavalin, as any major engineering firm, will have to be ready for with a skilled workforce and a stable and reliable network of suppliers and partners.

The rapid changes in society present us with challenges and opportunities, we are transforming our business today to respond to the global megatrends of climate change, population growth and urbanization, transitioning to a low-carbon, more efficient and more resilient economy.

Our Sustainability Policy Statement, announced in November 2019 in conjunction with our Sustainable Business Strategy, demonstrates the company's long-term commitment to Sustainable Development and Agenda 2030. The Strategy outlines how SNC-Lavalin will embed sustainability principles in every business activity, at corporate, sector and project levels. The document is based on the UN Sustainable Development Goals and focuses on ten measurement categories to guide implementation across all our operations.

IAN L. EDWARDS
President & CEO





SNC-Lavalin contributes to each of the 17 UN Sustainable Development Goals. As we continue on our new strategic path, announced in July 2019, we are looking forward to improving our performance in relation to three key UN goals. These are the goals considered to be most material both to SNC-Lavalin and to its stakeholders.

Goal 7: Affordable and clean energy – As a world-leading engineering organization, one of the best ways we can combat climate change and overcome the greatest global challenge of our age is by helping society transition to a low-carbon economy. This transition involves the substitution of fossil fuels with other energy sources, primarily renewable and nuclear energies.

We are the stewards of CANDU® technology, and we use our experience as a nuclear reactor designer to collaborate with small modular reactor (SMR) vendors. Our CanAtom joint venture is currently leading the Darlington Retube & Feeder Replacement project for Ontario Power Generation, playing a key role in delivering affordable and clean energy to 2.5 million households. Darlington provides 20% of Ontario's power supply.

Our designers are transforming offshore wind project delivery by standardizing the design of foundations and monopiles, enabling a production line approach to fabrication and reducing costs without compromising on safety and reliability. We are currently developing one of the world's first arrays of floating wind turbines for Kincardine Offshore Wind Farm in Scotland, United Kingdom, which will have the capacity to provide electricity equivalent to powering over 55,000 households.

We are also investigating new technologies to help electrify transportation, store hydrogen as a fuel and build "smart grids".

Goal 13: Climate Action – We are facing a predicted climate breakdown and worryingly global CO₂ emissions have not reduced. Governments and global organizations such as ours must change their actions and decisions to solve the Climate Crisis. In collaboration with the Global Climate Adaptation Partnership, our experts developed the pioneering Climate Safeguards System, a set of decision-making tools and guides, to enable major banks worldwide to assess climate risks associated with large infrastructure funded projects and identify appropriate mitigation measures.

Goal 11: Sustainable Cities and Communities – Our teams develop sustainable infrastructure with consideration of environmental, societal and economic impacts providing our cities and communities with enough energy, water, transport routes, buildings and infrastructure to thrive and grow. We design those essential building blocks keeping in mind that global resource scarcity requires urban areas to conserve energy and water, reduce raw material usage and promote active travel and low-carbon modes of transport.

Sweden's Transport Administration is planning to build a new high-speed rail network, linking the country's three major cities. The East Link, 150 km of new railway from Stockholm to Linköping, will form the first part of this network. The new railway will be designed for speeds above 250 km/h and up to 320 km/h, making it the first dedicated high-speed railway in Sweden.

We are working on similar mass transit networks worldwide such as the Riyadh Metro in Saudi Arabia, HS2 in the UK and Parramatta Light Rail in Sydney.

Delivering sustainable solutions that meet the needs of modern populations is at the heart of how we design towns, cities and communities throughout the world. In a smart city, the city responds to their residents needs in real time;

big data and real-time connectivity help infrastructure asset owners plan for the long-term and manage in the moment. The technologies we employ helps our clients achieve this innovation in action: systems and services become more user-friendly and efficient, while also enhancing safety and wellbeing.

Our responsibility for sustainability includes renewing our commitment as a signatory of the United Nations Global Compact and engaging in projects that promote the UN's broader development goals.

Our 2019 sustainability report serves as our Communication on Progress (CoP) in terms of implementing these principles.

I am really proud that SNC-Lavalin has already integrated its long-term sustainability goals into the company's new strategic direction. Our industry is driven by changes in society, climate disruption, resource scarcity, rapid urbanization, demographic transformations, shifts in economic power and technological innovation. This makes sustainability not only the right thing to do as a world-leading engineering organization, it is critical business priority.

IAN L. EDWARDS
President & CEO

2 / OUR ACHIEVEMENTS





2. OUR ACHIEVEMENTS

Celebrating our Achievements



Awarded the **COMPLIANCE LEADER VERIFICATION FROM ETHISPHERE INSTITUTE** in March 2019



Celebrated a safety achievement of **500 CONSECUTIVE INCIDENT FREE DAYS** in May 2019 for our **FINE ASH DAM** project team, for a total of **750 PERFECT DAYS** during the project lifetime



Inaugurated the 461.2m super-tall, multiple **AWARD-WINNING** project **LANDMARK 81**



Obtained **LEED SILVER CERTIFICATION** and a "**LEONARD**" **TROPHY** at the Grands Prix du génie-conseil québécois Awards Ceremony for the **RENOVATION OF THE CENTURY-OLD WILDER BUILDING**



Awarded **PLATINUM ELITE STATUS** in ReNew Canada's **TOP 100 PROJECTS** Report for the **8TH YEAR** in a row, with the company occupying the **8 FIRST POSITIONS** of the list



Congratulated our **FIRST TWO TRAINEES** who completed our **WELDER COMMUNITY DEVELOPMENT PROGRAM** aimed at up-skilling existing local talent and creating job opportunities in South Africa



Dr Anne Kemp OBE, Technical Director and fellow at SNC-Lavalin, has received the **ORDER OF THE BRITISH EMPIRE IN THE QUEEN'S BIRTHDAY HONORS LIST** for services to Digital Construction Innovation



Marked the **40-YEAR ANNIVERSARY** of our **LANDSCAPE ARCHITECTS** being in practice



Achieved a **7 YEARS LOST TIME INJURY FREE** milestone at **OIL & GAS KEARL OIL SANDS** project

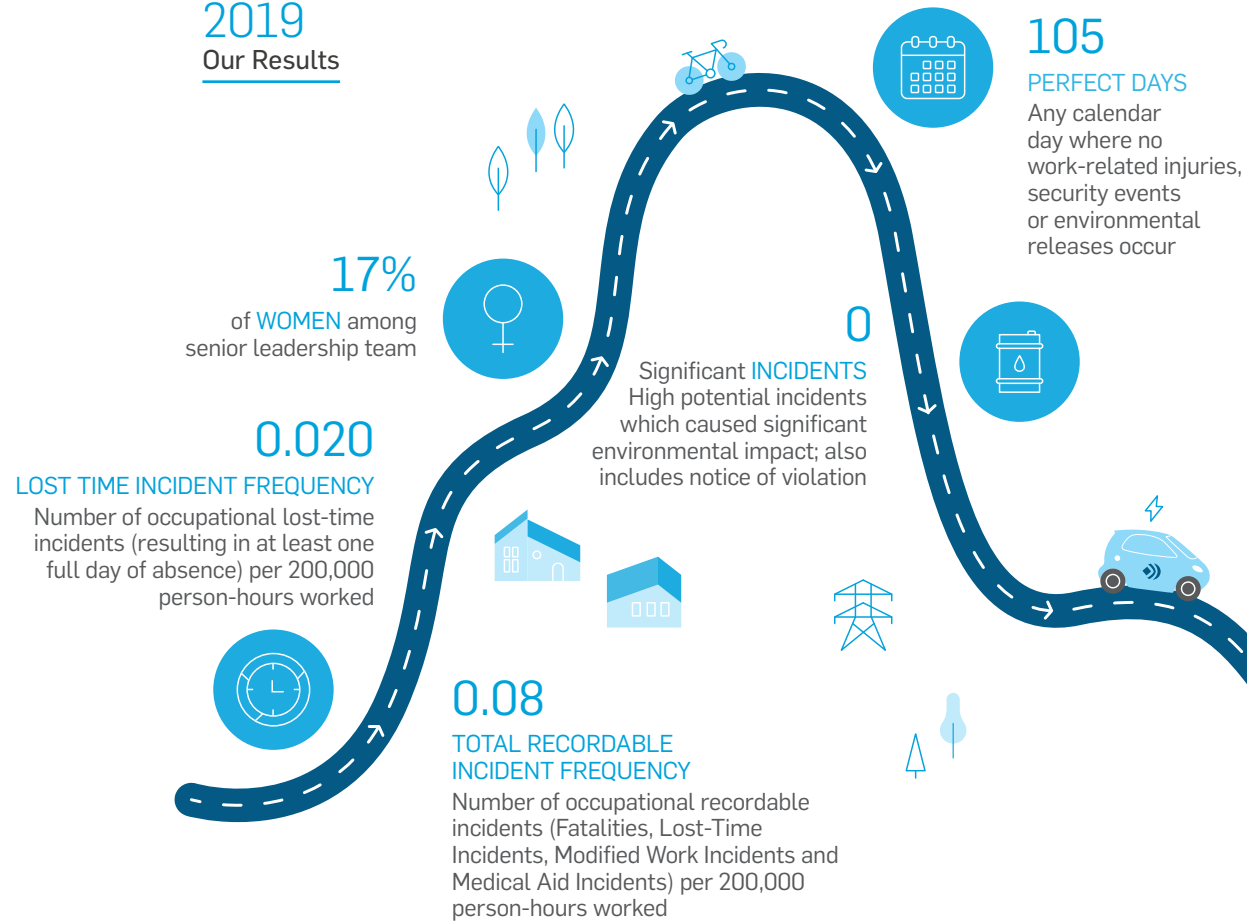


Won two 2019 Awards from the **BRITISH CONSTRUCTION INDUSTRY: TRANSPORT PROJECT OF THE YEAR**, for the iconic **NORTHERN SPIRE BRIDGE** and **DIGITAL TRANSFORMATION INITIATIVE OF THE YEAR** – Building for the 3D Reinforcement Modeling applied on **HINKLEY POINT C**

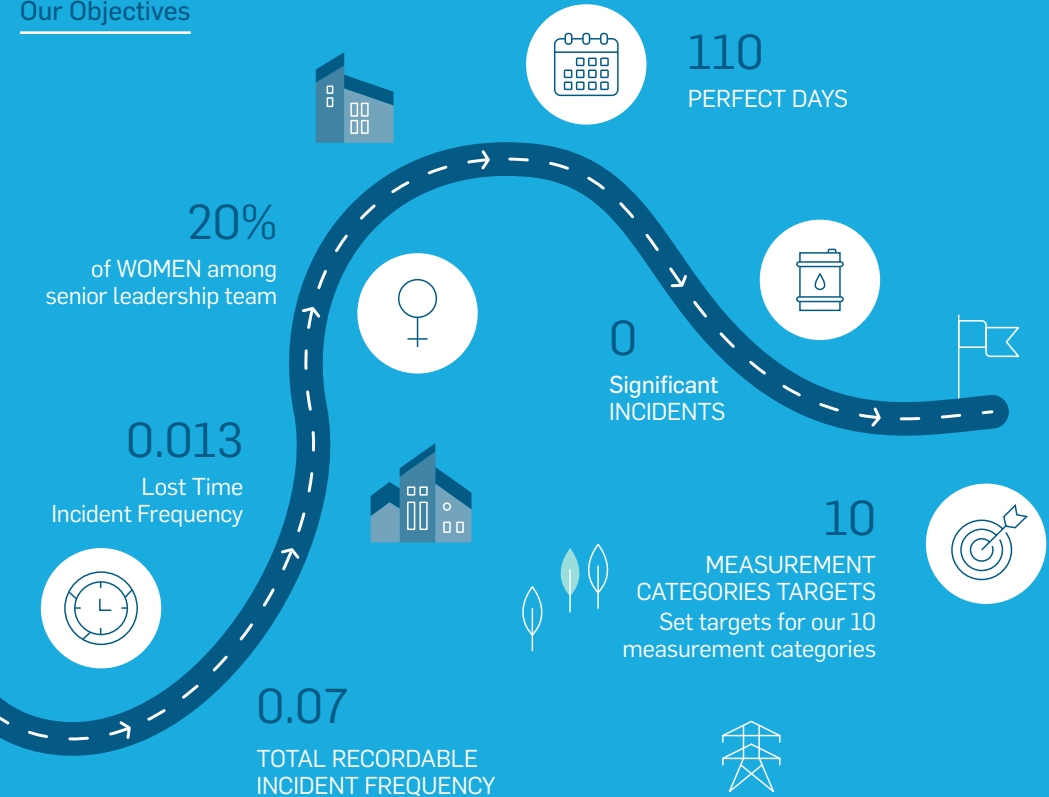


Roadmap

2019 Our Results



2020 Our Objectives





3 / MESSAGE FROM
OUR GLOBAL HEAD
OF SUSTAINABILITY

3. MESSAGE FROM OUR GLOBAL HEAD OF SUSTAINABILITY

Transforming society for future generations

In a society which is changing at a rapid pace, we are not alone in fundamentally transforming the way we operate to respond to climate change, population growth and other major risks and opportunities facing society.

We undertook a market benchmark analysis of our key stakeholders, as part of our materiality assessment, and found that many of our clients and key stakeholders are also signatories of the United Nations Global Compact. They too are in the process of embedding the UN Sustainable Development Goals (SDGs) across their business activities and are focusing their improvement on goals which are most material to their organization.

Following a gap analysis and review of existing policies and procedures relating to sustainability, SNC-Lavalin released a Sustainability Policy Statement and updated its Sustainable Business Strategy. The Statement, in conjunction with the Strategy, demonstrates the company's long-term commitment to sustainable development and Agenda 2030. The Strategy outlines how SNC-Lavalin will embed sustainability principles in every aspect of the company, from sector management, to corporate functions, and across all project activities. The document is based on the UN SDGs and focuses on high-level objectives, allocated with ten measurement categories. These categories will guide implementation throughout the company.

In addition to our ten measurement categories, we have designated three UN SDGs – Affordable and Clean Energy; Sustainable Cities and Communities; and Climate Action – as priorities, reinforcing our strategic direction.

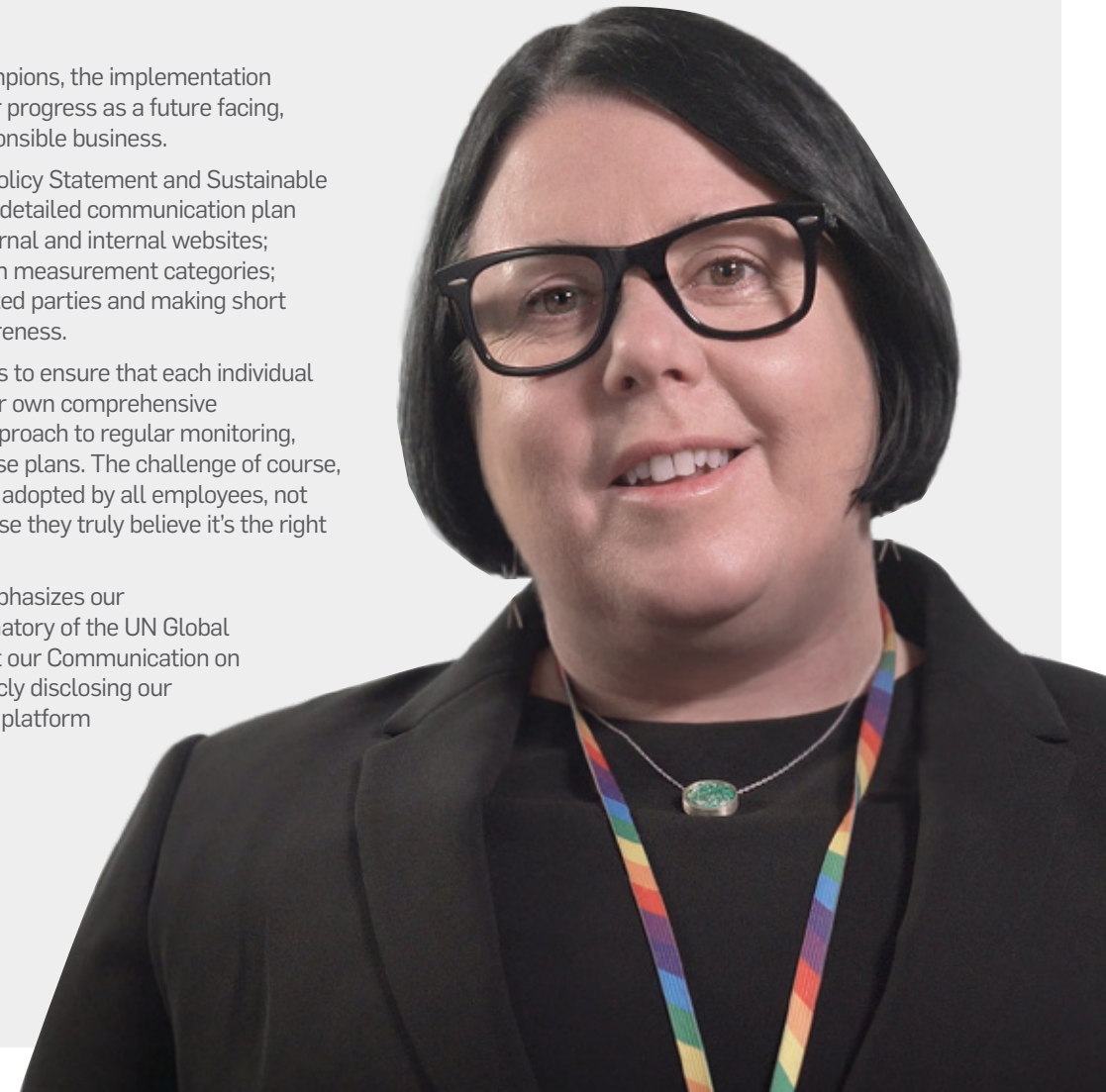
Internally and externally promoted by Champions, the implementation of those priorities is critical to improving our progress as a future facing, ethically, environmentally and socially responsible business.

Following the launch of our Sustainability Policy Statement and Sustainable Business Strategy, we have implemented a detailed communication plan which included updating our dedicated external and internal websites; planning a series of blogs presenting our ten measurement categories; associated sustainability topics and interested parties and making short films with our employees to help raise awareness.

The next step on our sustainability agenda is to ensure that each individual sector and corporate function develops their own comprehensive implementation plans including a robust approach to regular monitoring, auditing and progress reporting against these plans. The challenge of course, is to make sure those new expectations are adopted by all employees, not because they are forced to do so, but because they truly believe it's the right thing to do.

All of our work relating to sustainability emphasizes our commitment to Agenda 2030 and, as a signatory of the UN Global Compact since 2015, we continue to submit our Communication on Progress annually. We also have been publicly disclosing our greenhouse gas emissions report via CDP's platform since 2007.

SARAH JANE STEWART
Global Head of Sustainability





United Nation's Sustainable Development Goals

In September 2015, the General Assembly of the United Nations adopted the 2030 Agenda for Sustainable Development that includes 17 Sustainable Development Goals (SDGs).

Building on the principle of "leaving no one behind", the new Agenda emphasizes a holistic approach to achieving sustainable development for all.

In response to this agenda, we became a signatory of the UN Global Compact and have created a Sustainable Business Strategy aligned with the UN SDGs.





Goal 7: Affordable and Clean Energy

We design the hydroelectric dams, offshore wind farms and powerplants providing energy to keep the lights on in people's homes across the world.

To respond to the climate emergency and global megatrends affecting society, such as population growth, rapid urbanization and the transition to a net-zero economy, we are in the process of becoming a low-carbon business. To that effect, more of the power plants we design must rely on low-carbon and renewable sources of energy.



Goal 11: Sustainable Cities and Communities

We design buildings for people to work and live in, as well as bridges, roads, light rail networks, cycle paths and walking routes to get people to work every morning and home again at night.

To respond to resource scarcity worldwide, we are developing more efficient ways to deliver our infrastructure projects. We are developing innovative ways to consume fewer raw materials and resources during operation, such as energy efficiency measures, modular construction and prefabrication, as well as recycling or renovation of existing infrastructure and buildings.

We are already developing infrastructure to respond to innovations in technology such as the transition to electric vehicles, the use of mobility as a service, the rise of autonomous vehicles and fundamental changes in the way we plan cities, to avoid unnecessary travel.



Goal 13: Climate Action

We provide the future-proofed infrastructure, whether for energy, rail, water, buildings, or industrial processes, needed to withstand climate change and extreme weather events.

Ensuring that new infrastructure is future-proofed is not enough, existing infrastructure also has to be re-designed to address climate change-related risks. We must upgrade existing infrastructure and systems around the world to ensure that they are resilient.

We are already protecting essential and critical infrastructure worldwide through the development of tidal barriers, flood defences and improved stormwater drainage systems. The need for these types of projects will increase as the impacts of climate change and extreme weather events worsen.

When communities are damaged by storms and extreme weather events, reconstruction for communities must be developed to embed climate resilience into the reconstruction to reduce their vulnerability to the impacts of potential future natural disasters.

To respond to resource scarcity worldwide, we are developing more efficient ways to deliver our infrastructure projects.

4 / OUR PROGRESS TOWARDS UN AGENDA 2030



4. OUR PROGRESS TOWARDS UN AGENDA 2030

Introduction to the UN Sustainable Development Goals (SDGs)

SNC-Lavalin has been a signatory of the UN Global Compact since 2015 and we are currently contributing to all 17 of the UN Sustainable Development Goals.

It is important to recognize the link between sustainable development and other relevant ongoing processes in the economic, social and environmental fields. Using the UN SDGs as a framework, we assessed the goals in terms of significance, both to our business and our stakeholders. We concluded that SNC-Lavalin is already addressing relevant strategic, economic, social and environmental issues and has the potential to create even more significant positive changes across all our activities.

This materiality assessment is a key component of our Sustainable Business Strategy and our overall business strategy going forward.

Addressing the UN SDGs through identified material topics has **enabled us to better integrate sustainability and strengthen our economic incentives for operating more efficiently.**

We have sorted the UN SDGs in order of significance. Higher significance goals include those which are material to our current business strategy and considered as priorities by our stakeholders.

Goals with medium significance are those we are actively pursuing and will continue to pursue in forthcoming years. Goals with lower significance are those that are not significantly material to our business strategy but where we can still have an incidental impact. We have outlined the UN SDGs between those three categories below and have included an example of our current progress towards UN Agenda 2030.

Business Strategy: 5-Year Plan

We have selected three goals on which we will focus our improvement initiatives between 2020 and 2025:

Goal 7: Affordable and clean energy

Goal 11: Sustainable Cities and Communities

Goal 13: Climate Action

These are the goals we consider to be most material both to our business strategy and activities, but also in relation to our stakeholders.



UN GOALS
WHERE OUR BUSINESS
CAN HAVE A **HIGHER IMPACT**

UN Goals where our Business can have a Higher Impact



UN SDG3: Good Health and Well-being

Our teams have designed the Clarice Pears Institute of Health and Wellbeing for the University of Glasgow, Scotland, United Kingdom, which undertakes world-class research to prevent ill-health and reduce health inequalities. Our design embodies a health and well-being focused approach, fostering biodiversity, natural ventilation, daylight, provision of active travel and walking routes and facilities to prioritize cycling.



UN SDG5: Gender Equality

Our Middle East Diversity and Inclusion Business Network has signed the United Nations Women's Empowerment Principles (UN WEPs), which are aligned with the company's commitment to foster an inclusive culture that promotes gender equality and supports employees' professional development, skills and knowledge throughout their career.

[Find out more >](#)



UN SDG6: Clean Water and Sanitation

We recently upgraded the Patuxent Water Reclamation Facility in Maryland, USA, to increase capacity and keep up with the rapid population growth in the service area. The expansion design increased plant capacity from 7.5 to 10.5 million gallons per day, helping to restore the Chesapeake Bay's ecosystem and improve water quality by reducing excessive nitrogen, phosphorus, and sediment loads.

[Find out more >](#)



UN SDG7: Affordable and Clean Energy

SNC-Lavalin has developed and licensed nuclear technology for over 60 years and is the steward of CANDU® reactors. Our CanAtom joint venture is currently leading the Darlington Retube & Feeder Replacement project for Ontario Power Generation, playing a key role in delivering affordable and clean energy to 2.5 million households. Darlington provides 20% of Ontario's power supply.

[Find out more >](#)



UN SDG10: Reduced Inequalities

We believe that diversity is essential for business. We support the Conference of Minority Transportation Officials (COMTO), National Organization of Minority Architects, Women's Transportation Seminar, National Society of Black Engineers, and the Society for Women Engineers. This support has extended to the provision of major scholarship programs through our company's foundation, for organizations such as the National Society of Black Engineers, the Society for Women Engineers, COMTO, and WTS.

We are a member/supporter of Catalyst, a global non-profit organization that works with companies around the world to accelerate women into leadership.



UN SDG11: Sustainable Cities and Communities

The Réseau Express Métropolitain (REM) is an electric and fully automated light rail transit network designed to facilitate mobility across the Greater Montréal area. REM will contribute to decreasing 680,000 tonnes of greenhouse gas emissions over 25 years of operation. We are working on similar mass transit networks worldwide.

[Find out more >](#)



UN SDG12: Responsible Consumption and Production

The New Champlain Bridge Corridor Project reused materials generated by demolition activities and incorporated materials with the greatest possible recycled content. The construction methodology required a high degree of off-site prefabrication which further reduced raw material consumption for construction elements.

[Find out more >](#)



UN SDG13: Climate Action

We have developed a software tool for stress testing complex city systems called City Simulator. The City Simulator creates a virtual version of the city to find the best set of strategies that will result in the greatest resilience to potential threats such as climate change, drought, economic downturn, hurricanes, or other natural disasters.

[Find out more >](#)



UN SDG16: Peace Justice and Strong Institutions

Our commitment to integrity has earned us the prestigious Compliance Leader Verification from the Ethisphere Institute, an independent center for research, best practices and thought leadership. Ethisphere conducted a thorough assessment of our Integrity Program and benchmarked it against its 2018 World's Most Ethical Companies data set, providing insight into the programs and practices of leading companies around the world.

[Find out more >](#)



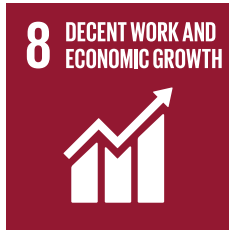
UN GOALS
WHERE OUR BUSINESS
CAN HAVE A **MEDIUM IMPACT**

UN Goals where our Business can have a Medium Impact



UN SDG4: Quality Education

SNC-Lavalin has dedicated support to Osizweni science center whose toy library supports thirty-six early childhood development schools in the Govan Mbeki municipal area of South Africa. Using educational toys, they teach children the fundamentals of numeracy, matching and sorting, hand-eye coordination and reading.



UN SDG8: Decent Work and Economic Growth

SNC-Lavalin has just completed its first year in the Progressive Aboriginal Relations program run by the Canadian Council of Aboriginal Business. The program helped SNC-Lavalin deliver internal indigenous training and helped guide us with best practices prioritizing economic and social development of indigenous communities.

[Find out more >](#)



UN SDG9: Industry, Innovation and Infrastructure

We are working as rolling-stock adviser on the Purple Line Project, a 16.2-mile (26 km) light railway line through Maryland, USA. Our innovative solution offered longer individual train units, with fewer trains resulting in a 50% reduction on the rolling stock and additional construction, operation and maintenance savings on account of shorter station platforms.

[Find out more >](#)



UN SDG14: Life Below Water

At the Port of Miami, our teams performed underwater inspection services for a new sheet pile wall in 45 feet (15 m) of water and oversaw relocation of more than 150 healthy corals from the existing seawall to an on-port recipient area.



UN SDG15: Life on Land

SNC-Lavalin has begun using unmanned aerial vehicles, popularly known as drones, on a variety of projects world-wide to perform tasks such as data gathering. We've been using drones equipped with high-tech cameras to obtain information about sensitive ecosystems to identify and protect species that may be impacted by our projects.



UN GOALS
WHERE OUR BUSINESS
CAN HAVE A **LOWER IMPACT**

UN Goals where our Business can have a Lower Impact



UN SDG1: No Poverty

Glasgow City Mission in Scotland, United Kingdom, works with adults and children who are vulnerable and disadvantaged groups and individuals in Glasgow, many of whom suffer in relation to homelessness, addiction, poverty and wide range of social and economic issues. We have been supporting the Mission for several years by donating food, clothing and toiletries that many of the vulnerable adults and young children cannot afford.



UN SDG2: Zero Hunger

Our office located in Halifax, Canada, chose to support Feed Nova Scotia, the food bank that supports the entire province and has been in operation for over 30 years. Our 60 employees contributed 775 lbs of food (768 items in total) with a monetary contribution of CA\$265.



UN SDG17: Partnerships for the Goals

We are a partner to Ørsted helping to transform the offshore wind industry through standardization of design and cost reduction. We delivered a uniform design that enabled a production line approach to fabrication, reducing the costs of offshore wind without compromising safety and reliability whilst generating affordable and clean energy.

[Find out more >](#)

For questions around sustainability or how we can help your business, please contact:

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www.snclavalin.com/en/sustainability



SNC · LAVALIN

PEOPLE. DRIVE. RESULTS.

Samuel De Champlain Bridge
Montréal, Québec, Canada

Photography by Infrastructure Canada