

# Sustainability Report 2020

Building a better future together



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# CEO Letter

I am pleased to share our 2020 Sustainability Report highlighting our progress on environmental, social and governance topics during this last year. Our sustainability journey continues to evolve along with growing societal and stakeholder expectations. This year's report focuses on the material topics for our business and stakeholders, including how we manage our greenhouse gas (GHG) emissions and the transition to a low-carbon economy, safety, diversity and inclusion, and the important role of our product in society.

2020 was anything but business as usual. Most of us could not have imagined the profound impact that the COVID-19 global pandemic would have on our personal and professional lives. Looking back, it's clear to me that the agility, resilience and dedication of our team members and our business model were critical to helping us navigate through a very challenging year. I am proud of all we accomplished in the face of unique circumstances.

As always, the safety and well-being of our team members and communities where we do business was our top priority in 2020. As part of our crisis management pandemic response, we activated our Global Infectious Disease Contingency Plan (developed after the 2003 SARS epidemic), which enabled us to respond quickly. Despite the COVID-19-related challenges, including additional safety requirements throughout our global operations, our dedicated teams and flexible supply chain allowed us to fulfil our promise to safely and reliably deliver methanol to our customers throughout the year. We learned a lot along the way and responded as One Team to adjust our safety plans and maintain our operations as conditions evolved. We also conducted global well-being surveys to hear directly from team members about their physical and mental well-being as many adjusted to working from home and to help direct our support where it was needed.

Given the devastating personal and economic impacts of the pandemic, our community investments were especially important in 2020. We contributed emergency relief such as medical and food supplies to essential front-line workers and to the most vulnerable in our communities who were suffering the most. I am humbled by the commitment and efforts of team members around the world to give back and help strengthen our communities during such a challenging year.

As methanol demand declined, there was a significant reduction in our manufacturing activity in 2020. However, we successfully completed turnarounds (major planned maintenance) at our plants in Trinidad and Medicine Hat, a significant accomplishment given the challenging pandemic environment and a testament to the agility of our team.

As we look to 2021 and beyond, we expect to see methanol demand rebound and grow. Methanol is a key building block for countless products that enhance our quality of life – including the essential medical supplies and personal protective equipment used in the fight against COVID-19. Methanol also plays a role in supporting society's transition to a low-carbon economy by contributing to energy-efficient buildings, electric cars, solar panels and wind turbines to name just a few of the solutions our product enables. Methanol can also contribute to a low-carbon economy through the growing market for low-emissions fuel. Through innovation and collaboration with our partners, we have proven that methanol is a viable, clean-burning marine fuel that can meet the most stringent future emissions regulations as it can also be made from renewable sources. Today, we have 11 methanol-fuelled vessels in operation in our Waterfront Shipping fleet. In 2020, we increased our investment in this technology and ordered eight additional vessels that will be received in 2023. We are pleased to see several other leading marine shipping companies recently announce that they too ordered their own methanol-powered vessels to run on conventional and green methanol.

As a leader in the methanol industry, we continue to strive to reduce GHG emissions from our operations and are committed to playing an active role in supporting society's transition to a low-carbon economy. We were early investors in renewable methanol technology and continue to evaluate and make



investments in renewable and low-carbon methanol where they make sense for our business. In 2020, we obtained [International Sustainability & Carbon Certification](#) for biomethanol production in the US and produced our first biomethanol at our Geismar plant. We also made continual investments in energy-efficiency improvements to reduce our GHG emissions intensity in our operations.

Strengthening and supporting our diverse global team is another key focus area as we believe our greatest advantage lies in embracing the unique perspectives, experiences and backgrounds of each and every Methanex team member. Our team members span 11 countries, speak different languages, have different backgrounds and represent different cultures. In 2020, we created a taskforce to advance our approach to diversity and inclusion (D&I) and to lay the foundation for the development of an integrated strategy through a new D&I Council established in 2021.

As we look forward to a path of sustained economic recovery, we remain committed to safely and reliably producing and supplying a product that delivers key societal benefits and ensures value for our many stakeholders. I want to thank our customers, partners and investors who have been with us during this challenging year. I especially want to thank our dedicated and resilient team members across the globe. I am proud to be part of such a talented group and look forward to brighter days, knowing that together we can tackle anything that lies ahead.

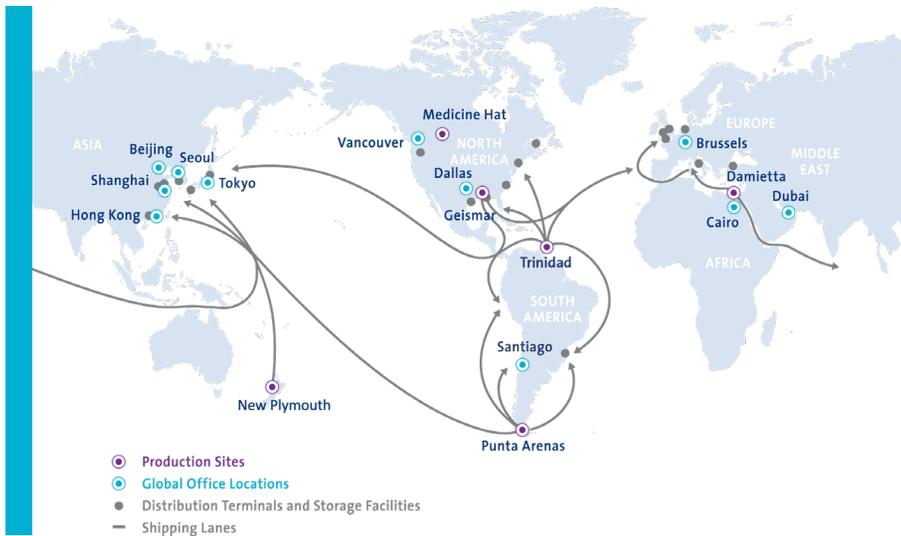
**John Floren**  
President and Chief Executive Officer

# About Methanex

Methanex Corporation is the world's largest producer and supplier of methanol to major international markets in Asia Pacific, North America, Europe and South America. Through our global leadership in methanol, our overarching goal is to create value for our customers and stakeholders by producing an essential chemical product that also provides an alternative low-emissions fuel.

Our methanol production sites are located in New Zealand, the United States, Trinidad, Chile, Egypt and Canada. Methanex is headquartered in Vancouver, Canada, and the company's common shares trade on the Toronto Stock Exchange under the symbol MX and on the NASDAQ Global Select Market under the symbol MEOH.

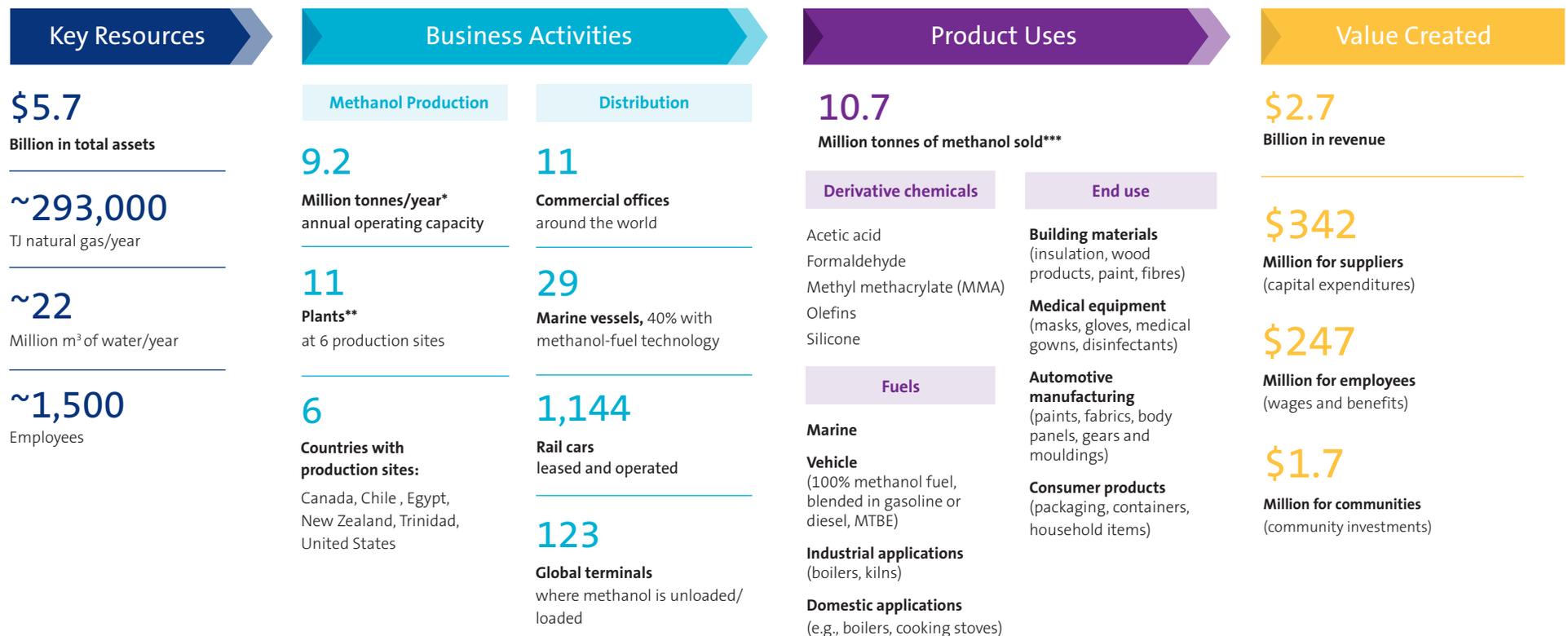
Our wholly owned subsidiary Waterfront Shipping is a global marine transportation company specializing in the safe, responsible and reliable transport of bulk chemicals and clean petroleum products. Waterfront Shipping operates a commercial fleet of modern, deep sea tankers that deliver methanol and other clean petroleum products to major international markets in Asia Pacific, North America, Europe and South America.



Methanex production facility in Chile.

# About our Business

Every year, we safely produce, ship and distribute millions of tonnes of methanol. We are a key player in a global industry that generates \$55-billion<sup>1</sup> dollars in economic activity. Through our business activities, we contribute to local economies by employing people directly and indirectly, purchasing goods and services from local suppliers, and contributing time and financial investments to the communities where we live and work. We produce a product that is incorporated into many innovative and sustainable products and applications that support the transition to a low-carbon economy and sustainable future.



NOTE: All data in tables as at, or for, the year ending December 31, 2020.

\*Annual operating capacity reflects Methanex's interest in the Atlas facility (63.1%) and Egypt facility (50%).

\*\* The Waitara Valley plant in New Zealand and the Titan plant in Trinidad are currently idled indefinitely.

\*\*\*In addition to the methanol produced at our sites, we purchase methanol produced by others, under methanol offtake contracts and on the spot market.

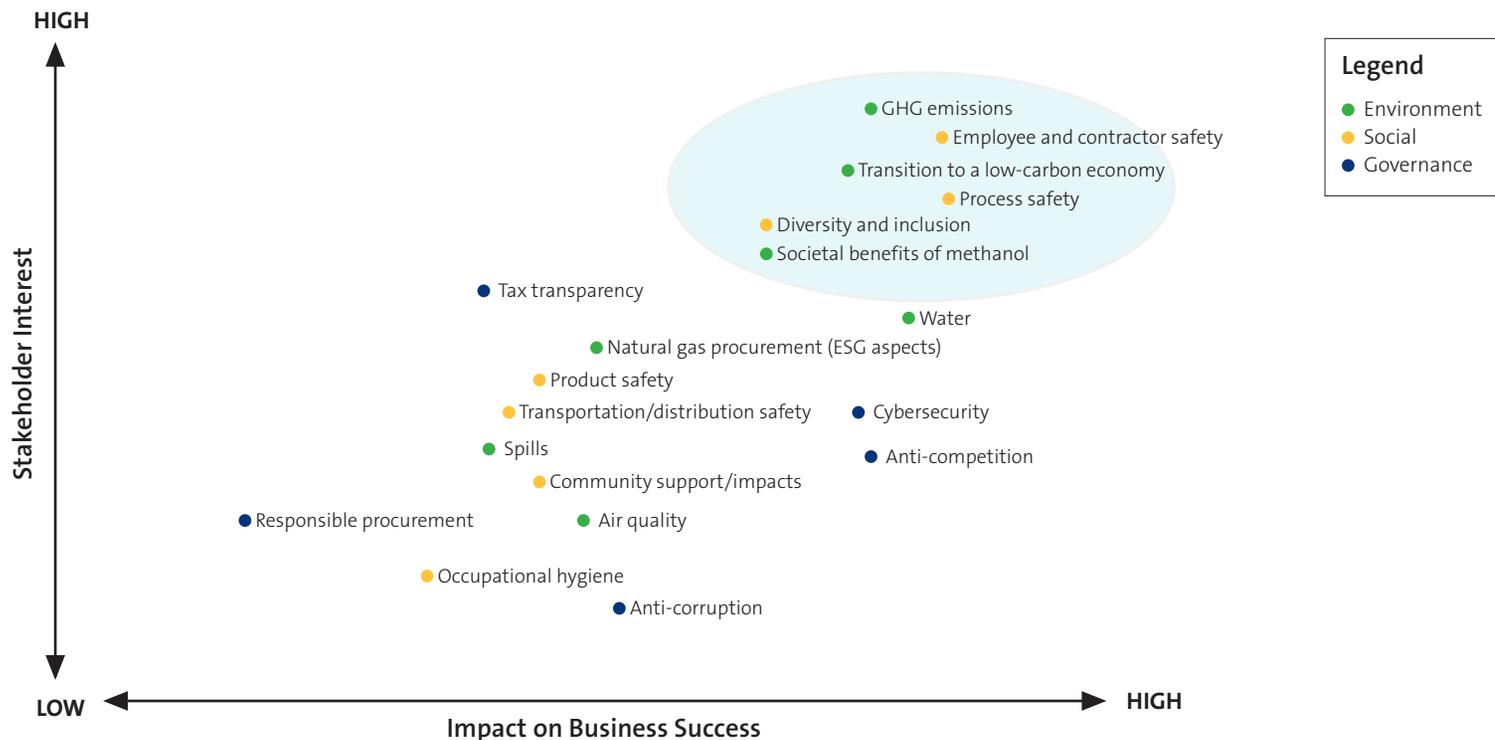
<sup>1</sup>"The Methanol Industry" by the Methanol Institute. Accessed on February 20, 2021. <https://www.methanol.org/the-methanol-industry/>

# About this Report

This report provides our stakeholders with information about how Methanex addresses environmental, social and governance (ESG) topics, and how our business and product contribute value to stakeholders and society. By managing our risks and conducting our operations in an environmentally and socially responsible manner, we can meet the expectations of our stakeholders and reinforce our leadership position in our industry. We believe that managing these risks and opportunities contributes to long-term value creation, protects our reputation, enhances our resilience and contributes to the sustainability of our business. The [Responsible Care®](#) Ethic and Principles for Sustainability, a chemical industry sustainability initiative recognized by the United Nations, informs our governance and sustainability efforts. For more information on this topic, please see [page 45](#).

## OUR MATERIAL TOPICS

In a sustainability context, material topics are ESG topics that can significantly impact our business success and are of interest to our key stakeholders. In 2020, we conducted an internal materiality assessment to update and prioritize the sustainability topics that are most relevant to our business and stakeholders. Topics were sourced from recognized reporting frameworks and reviews of chemical industry peers. Stakeholder perspectives considered during the assessment include those of investors, customers, employees, communities, governments, regulators and supply chain partners. The results of the assessment were reviewed and approved by our Executive Leadership Team and the material topics have been covered in this report. We will continue to regularly review our material ESG topics to ensure they reflect stakeholder expectations and the changing business environment. To learn more about how we identify and manage our ESG risks, see the Governance section [page 45](#).

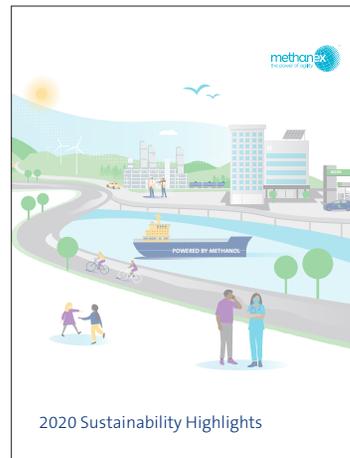


# Our Reporting Approach

Since 1997, we have been reporting publicly on our sustainability performance. We continue to enhance our sustainability disclosures to align with evolving best practices and to support greater transparency and comparability. This year, we enhanced our reporting approach to align with the distinct needs of our key stakeholders. Our 2020 sustainability communications include:

**2020 Sustainability Report:** This report is intended to provide decision-useful information to our investors and other stakeholders who want to know how we are managing the most important sustainability risks and opportunities facing our business. To improve comparability, our 2020 disclosures are aligned with the Sustainability Accounting Standards Board ([SASB](#)) reporting standards for the chemical and marine transportation sectors, the inclusion of some climate-related risks and opportunities as outlined by the Task Force on Climate-related Financial Disclosures ([TCFD](#)) and some requirements of the Global Reporting Initiative ([GRI](#)) Reporting Standards. See the [Appendix](#) for more information.

**2020 Sustainability Highlights:** This document addresses a broader range of stakeholders who want high-level information about our global sustainability initiatives and our role in society. It contains highlights and stories of our efforts to be a valued and responsible neighbour, business partner and employer of choice in the communities where we do business.



## Reporting Scope

- The terms “Methanex”, “our”, “we”, “us”, “the company” and “the organization” refer to Methanex Corporation and its subsidiaries as a whole.
- This report covers information related to our wholly owned subsidiary Waterfront Shipping. Metrics for Waterfront Shipping are provided separately on page 62, with a qualitative discussion on pages 52 to 55.
- We account for our GHG emissions for our methanol manufacturing business based on financial ownership (equity). Therefore, we include 50% of the emissions from our Damietta plant in Egypt and 63.1% from our Atlas plant in Trinidad.
- We account for shipping-related emissions on an operational control basis. We include 100% of the GHG emissions associated with the 29 vessels in the fleet, regardless of financial ownership.
- This report describes initiatives related to our material sustainability topics and supporting metrics for the year ended December 31, 2020 (unless otherwise specified). When available, additional years of historical data are provided for reference.
- Financial data is in US dollars (unless otherwise specified) and environmental data is in metric units.
- Safety data includes Methanex employees and contractors.
- Senior management and relevant employees have reviewed the information in this report and believe it is an accurate representation of our performance. The metrics included in this report have not been externally assured.
- The terms “sustainability” and “ESG” are used interchangeably in this report.

# Societal Benefits of Methanol

Methanol is an essential ingredient of our day-to-day life. A clear, colourless, biodegradable liquid, methanol is used as a chemical building block to produce hundreds of everyday products that enhance our quality of life. Methanol is also an innovative, clean-burning energy solution. For more than 100 years, methanol has been safely shipped, handled and used in a variety of applications around the world – including the essential medical supplies and personal protective equipment used in the fight against COVID-19.

## ESSENTIAL CHEMISTRY FOR OUR QUALITY OF LIFE

Methanol is an essential building block for countless products that enhance our quality of life. Given its unique properties, there is no viable alternative to methanol on the market today for use in traditional chemical applications. As society transitions to more sustainable products and practices, methanol and other chemicals also have an important role to play in supporting society's transition to a low-carbon, circular economy.

For example, methanol is a chemical building block in materials used to construct and insulate our homes, making them more energy efficient and helping to reduce emissions. It's also used to produce solar panels and wind turbines, as well as plastic automotive components that help make cars lighter and more energy efficient, reducing their CO<sub>2</sub> emissions.<sup>1</sup> Methanol is a component of resins that enable engineered wood products to be made from recovered wood waste that would otherwise be burned or disposed of in a landfill, helping to conserve forestry resources and minimize waste.<sup>2</sup> Methanol is also used to make the fabrics, carpets and clothing that style our lives and is an ingredient in high-tech synthetic fibers that help extend the life of consumer clothing and enable carpets and fabrics to be more easily recycled.<sup>2</sup>

## A LOW-EMISSION "FUTURE-PROOF" FUEL

As a liquid fuel, methanol is used today to power cars, buses, trucks and ships that transport people and goods around the world. As a cost-effective, clean-burning fuel, methanol significantly reduces emissions of sulphur oxides (SO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>) and particulate matter (PM) produced by vehicle and ship engines and can help improve local air quality compared to traditional fuels.

Today, methanol is most commonly produced on a commercial scale from natural gas and coal. As methanol can also be made from renewable sources, such as municipal waste, biomass and recycled carbon dioxide, it can provide a future pathway to renewables and support society's decarbonization goals. To learn more about how Methanex makes methanol from natural gas and the alternative ways to produce methanol, see [page 16](#).



<sup>1</sup> The European Chemical Industry Council (CEFIC). Accessed on February 20, 2021. [ChemistryCan - cefic.org](https://www.chemistrycan.org/)

<sup>2</sup> The American Chemistry Council. Accessed on February 20, 2021. <https://www.chemicalsafetyfacts.org/formaldehyde/>

# Societal Benefits of Methanol

## CHEMICAL END USES

Methanol is an essential chemical building block for other chemical derivatives that go into hundreds of consumer and industrial products, including sustainable and high-tech products.

## CONSTRUCTION MATERIALS

Methanol is used to make plywood and medium-density fibreboard (MDF) and is also an essential ingredient in sealants, paints and solvents.

## MEDICAL EQUIPMENT

Methanol is used to make medical supplies such as masks and gloves that help keep front-line workers safe.

## CLOTHING AND TEXTILES

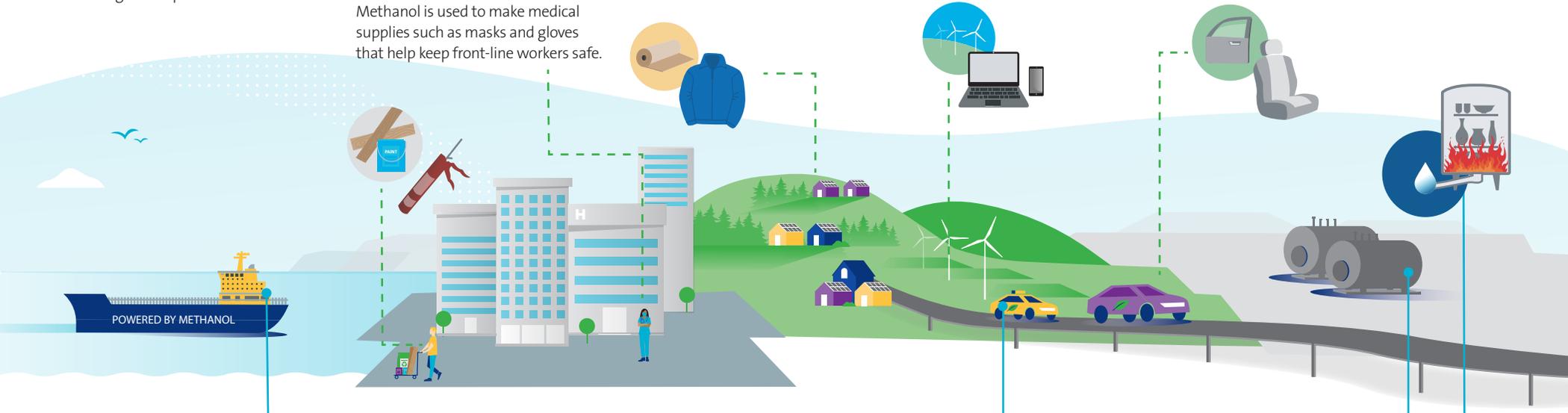
Chemicals made with methanol can extend the durability and life of consumer products like fleece clothing and carpeting. New applications can also make these products more easily recyclable.

## HIGH-TECH APPLICATIONS

Methanol is used in technology that keeps us connected, like laptops and cellphones. It is also used in applications that harness clean energy, such as solar panels and wind turbines.

## AUTOMOTIVE MANUFACTURING

Methanol is used in plastics that make cars lighter and more fuel efficient to reduce CO<sub>2</sub> emissions. Examples include plastic body panels, dashboard foam and plastic gears and mouldings.



## ENERGY-RELATED END USES

A clean-burning fuel, methanol can help improve local air quality by reducing emissions. As it can be made from renewable sources, methanol fuel can also help society achieve its decarbonization goals.

### MARINE FUEL

As a clean burning marine fuel, methanol significantly reduces emissions of SO<sub>x</sub> by 99%, NO<sub>x</sub> by 80%, PM by 95% and CO<sub>2</sub> from combustion by 15%.\*

**60%**

of our fleet will use methanol dual-fuel technology by 2023

### VEHICLE FUEL

Methanol is used to fuel cars, buses and trucks that transport people and goods. Methanol can also be used as a substitute for diesel in vehicles and trucks.

**25,000**

methanol fuel taxis are currently on the roads in China

### HEATING FOR INDUSTRIAL & DOMESTIC APPLICATIONS

Methanol is a clean-burning fuel that can help improve local air quality by reducing air emissions compared to traditional fuels such as diesel or coal. Methanol-fuelled boilers in China generate heat and steam for industrial applications, and methanol provides a heat source for commercial and residential applications like kilns and cooking stoves.

\*Compared to Tier I vessels running on traditional marine fuel (heavy fuel oil).

# Shipping: Proven, Lower-Emission Marine Fuel

Shipping accounts for nearly three per cent of global GHG emissions, and there is growing global demand for lower-emission marine fuel. To reduce the shipping industry’s environmental impact, the International Maritime Organization (IMO) has adopted mandatory measures to reduce carbon intensity from international shipping by at least 40 per cent by 2030 and reduce total annual GHG emissions by at least 50 per cent by 2050. There are also stringent standards in place that limit emissions of SOx, NOx and PM from ships.

Methanol is a safe, proven, cost-competitive marine fuel for the commercial shipping industry that can meet current and future emissions regulations. As a clean-burning liquid fuel, methanol can be used in marine vessels. Methanol as a marine fuel can reduce SOx and PM emissions by more than 95 per cent, and NOx by up to 80 per cent compared to conventional marine fuels. As a marine fuel, methanol also reduces CO<sub>2</sub> emissions during combustion by up to 15 per cent. If made from renewable sources, methanol can reduce CO<sub>2</sub> emissions by up to 95 per cent compared to conventional fuels (source: Methanol Institute [Renewable Methanol Report](#)).

In 2016, we began collaborating with our partners to demonstrate that methanol is a viable, clean-burning alternative marine fuel that can meet the most stringent air emission regulations. We have been operating methanol-fuelled vessels for over five years, and having proven the technology. Another four methanol dual-fuel vessels joined our fleet in 2019 and we ordered eight more in 2020. We anticipate that approximately 60 per cent

of Waterfront Shipping’s vessel fleet will be equipped with methanol fuel technology by 2023. We are pleased that our early investments in this innovation are now scaling across the shipping industry and several other companies have also begun to use or are currently commissioning their own methanol-powered vessels. We were also pleased to see the publication of the IMO’s Interim Guidelines for the Safety of Ships using Methyl/Ethyl Alcohol (including methanol) as Fuel, which was published in December 2020. Publication of these safety guidelines is an important step in the commercialization of methanol as a marine fuel.

As methanol can also be made from renewable sources (see the Alternative Methanol Market section on [page 20](#)) it is also “future proof” in that it provides a transition pathway from conventional methanol to renewable methanol, which supports vessel owners’ compliance with the IMO’s decarbonization goals. According to the IMO, “[methanol is estimated as the fourth most significant marine fuel used.](#)”



**Reduces emissions:** As a clean-burning fuel, methanol supports the maritime industry to meet new IMO environmental regulations that require ships to decrease emissions of SOx, PM, CO<sub>2</sub> and NOx.

**Meets IMO Tier III Standards\***

↓ **80%** NOx

**Improves Air Quality\***

↓ **95%** PM

**Improves Air Quality\***

↓ **99%** SOx

**Lowers CO<sub>2</sub> Emissions\***

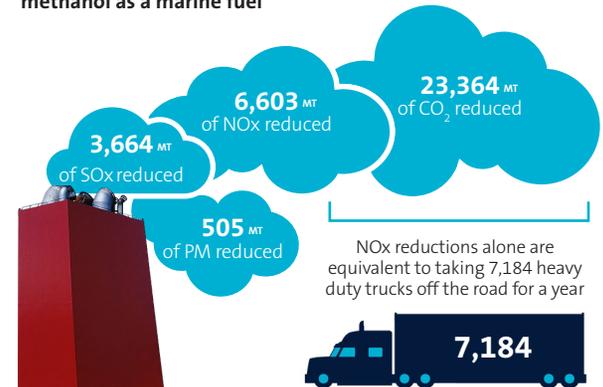
↓ **15%** CO<sub>2</sub> during combustion

\*Compared to conventional marine fuels.



Waterfront Shipping vessel *Cajun Sun*, powered by methanol

## Waterfront Shipping’s emissions reduced from using methanol as a marine fuel



Above is based on data from April 2016 to the end of December 2020 based on the performance of eleven dual-fuel vessels in Waterfront’s fleet. Emissions reduction data is based on 96,915 hours running on methanol and 140,256 MT of methanol fuel consumed. Emissions reductions are compared to traditional marine fuels (i.e., heavy fuel oil).

### LOWER-EMISSION VEHICLE FUEL

Methanol is being used as an affordable alternative liquid transportation fuel due to its efficient combustion, ease of distribution and wide availability around the globe. Methanol is used in gasoline blends around the world at high volume percentages (50-100%), and mid (15-30%) and low blends (3-5%). It is also a diesel substitute for heavy-duty vehicles. In China, increasingly stringent air quality standards are supporting the adoption of methanol as a clean-burning vehicle fuel. For the past ten years, Methanex has been working with automobile manufacturer Geely and other partners in China to support the growth of M100 (100 per cent methanol fuel) for vehicles, including taxi fleets in the country.



By the end of 2020, approximately one hundred M100 filling stations were operating in Shaanxi and Guizhou provinces in China to service approximately 25,000 M100 taxis (running on 100% methanol).

### HEATING FOR INDUSTRIAL & DOMESTIC APPLICATIONS

Methanol is a clean-burning fuel for thermal applications, including industrial boilers, kilns, heating furnaces and cooking stoves. Growing demand for methanol as an industrial boiler and kiln fuel has largely been driven by China, where industrial boilers are used extensively to generate heat and steam for various industrial applications and kilns are used to produce ceramics, dry tobacco and various food items. Industrial boilers have traditionally been coal-fuelled in China. However, environmental regulations being phased in by the Chinese government are resulting in a transition to cleaner-burning fuels (including methanol) that can reduce impacts on local air quality and related human health.



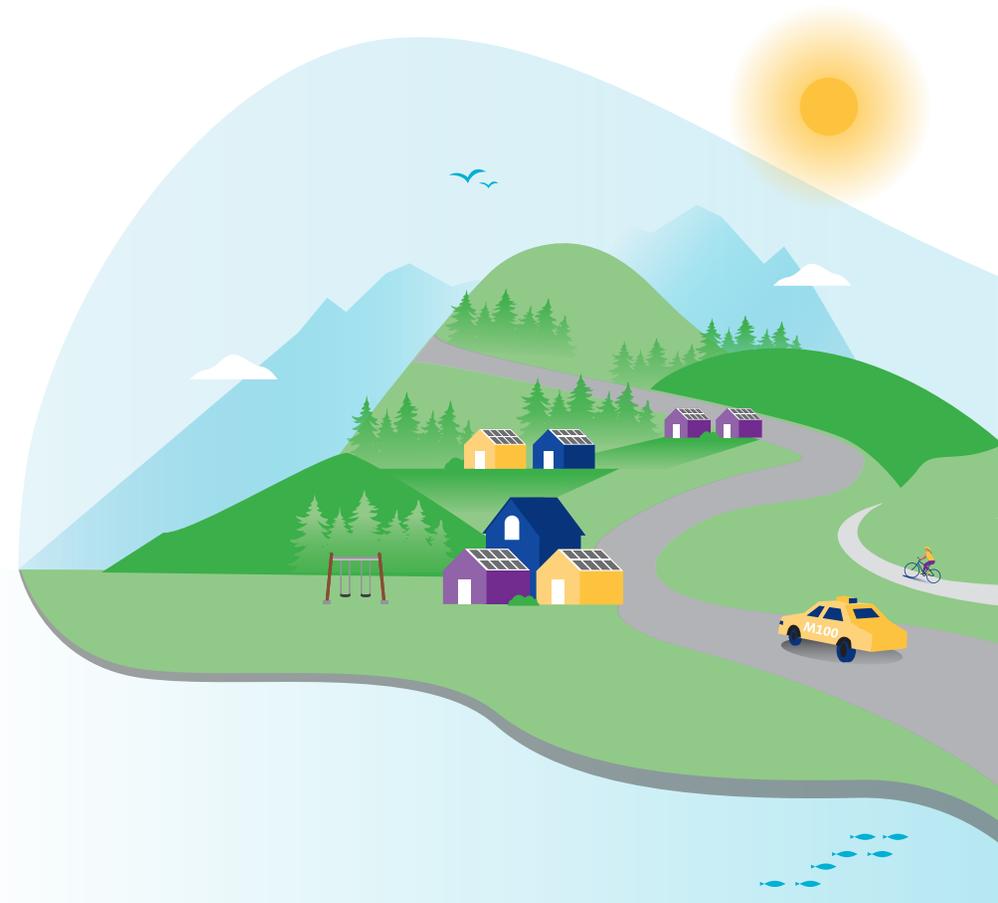
Methanol is a clean-burning fuel for industrial boilers in China. Chinese manufacturers, residential buildings, restaurants and homes are using methanol as a clean-burning, low-emission and affordable heating alternative to burning coal.

# Environment

We strive to minimize our environmental impact through initiatives that reduce GHG and other air emissions; efficiently using resources such as natural gas, energy and water; and preventing spills and minimizing waste from our operations. As a company committed to the [Responsible Care Ethic and Principles for Sustainability](#), we continue to advance our CO<sub>2</sub> emissions reduction efforts and evaluate climate-related opportunities and risks for our business.

## 2020 Highlights

- Produced more than 59,000 tonnes of low-carbon methanol at our Medicine Hat plant (approximately 12 per cent of the plant's 2020 production) by using captured CO<sub>2</sub> from a neighbouring industrial facility that would otherwise be emitted to the atmosphere.
- Obtained [International Sustainability & Carbon Certification for biomethanol production](#) in the US, enabling sales to European customers under the [Renewable Energy Directive II](#), which sets targets for energy from renewable sources. We achieved this certification by producing biomethanol at two of our Geismar plants using biomethane (renewable natural gas) from municipal solid waste and other sources.
- Redesigned and upgraded our Medicine Hat plant reformer (a key part of the methanol production process that creates high heat) to improve the plant's efficiency and reduce CO<sub>2</sub> emissions. We also installed 312 low NOx burners at the Medicine Hat plant, [reducing NOx emissions by 75 per cent](#).
- Began trialling a new catalyst for our methanol production process that may help reduce our CO<sub>2</sub> emissions over the long term.
- Achieved [zero significant environmental spills](#) across our global operations.



# Understanding our CO<sub>2</sub> Emissions

Our operations generate CO<sub>2</sub> emissions directly and indirectly through the production, distribution and use of our product methanol. We are committed to playing an active role in society's transition to a low-carbon economy by seeking ways to improve our energy efficiency and lower the CO<sub>2</sub> emissions from our operations. Methanol also plays a role in enabling many low-carbon product solutions and is an alternative, lower-emission marine, vehicle and boiler fuel (see the [Societal Benefits of Methanol](#) section for more).

Our operations generate emissions both during the methanol production process and when we ship methanol to our customers worldwide. To learn how we manage the emissions from marine vessels, see [page 53](#) in the Waterfront Shipping section. Most of our CO<sub>2</sub> emissions occur during the methanol manufacturing process and result from burning natural gas to generate the high temperatures needed to convert natural gas feedstock into methanol. Like many other companies within the chemical industry, our current reliance on carbon-based fuels as the most economically feasible way to generate these heat requirements at scale presents both challenges and opportunities.

## AN INDUSTRY OPPORTUNITY

The broader chemical industry, of which the methanol industry represents a large sector, has an integral role to play in helping achieve global carbon emissions reductions and supporting ambitions for the decarbonization of the economy. Firstly, methanol and other chemical products are essential building blocks of hundreds of products that improve our quality of life and that help facilitate the transition to a low-carbon economy, such as energy-efficient buildings, electric cars and trucks, solar panels and wind turbines to name just a few. As stated by the [World Economic Forum](#), "...chemical products are essential to many low-carbon technologies – including renewable energy, housing and mobility." The second opportunity is that as of 2020, the chemical value chain was the third-largest industrial source of CO<sub>2</sub> emissions, behind the cement and steel sectors (source: [Science Based Targets Dec 2020 Report](#)). If we as an industry can find ways to use carbon more efficiently in our processes – through the development and commercial implementation of new technologies – the chemical industry could further reduce its overall CO<sub>2</sub> emissions, with the potential for far-reaching global impact (source: [World Economic Forum](#)).

## AN INDUSTRY CHALLENGE

While the scale of the opportunity is great, there are unique challenges that classify the chemical industry as a "hard-to-abate sector" ([International Energy Agency \(IEA\) – Energy Technology Perspectives](#)). While "hard to abate" does not mean "impossible to abate," the ability of Methanex, the methanol industry and the wider chemical industry to achieve material CO<sub>2</sub> reductions is challenged by a number of critical factors:

- **High temperature heat requirements:** The chemical reactions required to produce methanol require energy and high heat (the methanol production processes, for example, require temperatures of approximately 900°C-1000°C). Currently, there are no cost-effective substitutions for carbon-based fuels to generate this level of heat at scale ([IEA – Energy Technology Perspectives](#)). We share this constraint with other chemical producers, as well as the cement and steel industries. Energy sources that can produce these high levels of heat today, without making our end product prohibitively expensive, are coal and natural gas. Methanex only uses natural gas in our production process, which generates a CO<sub>2</sub> emission intensity that is, on average, five to seven times lower than methanol produced with coal (see sidebar).
- **Long lifespan of manufacturing plants:** The technology used to produce methanol determines, to a large extent, the efficiency of converting natural gas to methanol and the resulting CO<sub>2</sub> emissions. The technology we select when a plant is first being designed is based on the best technology available at the time, and is essentially "locked in," with only relatively moderate modifications possible going forward. Although new technologies and plant designs to improve processes might later become available, it can be prohibitively expensive or technically unfeasible to update or retrofit an existing plant. Given the significant capital, materials and resources required to build a new methanol plant, it can also be uneconomic, wasteful and CO<sub>2</sub> intensive to decommission an older



## Energy requirements for chemical reactions

Producing methanol, and many other chemicals, economically and at scale today relies on carbon-based fuels to generate the high heat and energy requirements for chemical reactions to occur. Methanex uses natural gas in our production process, and in 2020, production from our facilities had an average CO<sub>2</sub> intensity of 0.6 tonnes of CO<sub>2</sub> per tonne of methanol. In comparison, this is about five to seven times less than producing methanol from coal. (Source: [International Renewable Energy Agency](#), Innovation Outlook: Renewable Methanol, page 33).

plant rather than seeking opportunities to continually upgrade it. A well-maintained and continually upgraded methanol plant can have a lifespan of more than 50 years. Regardless of the foundational technology at our different plants, we are always seeking ways to upgrade and optimize our facilities to reduce their CO<sub>2</sub> emissions intensity. In addition, investing in future new plant builds will allow us to move to more advanced technologies to reduce our CO<sub>2</sub> intensity from manufacturing operations over time.

- **Trade considerations in a commodity business:** The markets for many bulk chemicals and their derivatives, including methanol, are international and highly competitive. Methanol is a commodity, and our customers are highly price sensitive. This makes it challenging for an individual producer to choose more expensive production pathways, such as renewables, to reduce emissions as the producer risks becoming uncompetitive compared to other market players using conventional technologies that result in a higher CO<sub>2</sub> intensity product.

Due to the challenges noted above and the currently limited availability of commercially scalable alternative production pathways, reaching net-zero CO<sub>2</sub> emissions from heavy industries such as ours is expected to take longer than in other industries (source: [IEA – Energy Technology Perspectives](#)). As one company, we can't do this alone. Achieving a step change reduction in our overall CO<sub>2</sub> emissions will require a multipronged approach that includes significant capital investment in research and development to enable the broad scale-up of new, step change technologies; public policies that incentivize research and development and support industries to transition to low-carbon alternatives; collaboration with technology companies; and customers willing to pay a “[green premium](#)” for a lower-carbon product.



# Our Commitment

Methanex is committed to playing an active role in supporting the transition to a low-carbon economy by using carbon fuels more efficiently and reducing our CO<sub>2</sub> emissions across our operations when producing and distributing methanol. We are also taking a number of steps to support the growing market for methanol as a transition fuel for the shipping industry, which today accounts for nearly three per cent of global GHG emissions. In our marine operations, we have achieved an 18 per cent reduction in CO<sub>2</sub> emissions intensity since 2002 as a result of both transitioning to more fuel-efficient vessels and using methanol as a marine fuel (see the [Waterfront Shipping](#) section for more). As early investors in renewable methanol technology, we also continue to evaluate and make investments in e-methanol, biomethanol and low-carbon methanol (see the Alternative Methanol Market section on [page 20](#) for more information).

We will continue to focus our CO<sub>2</sub> reduction efforts on the methanol manufacturing process, as this area of our operations accounts for the majority of our CO<sub>2</sub> emissions. While many of our initiatives provide incremental benefits, the cumulative effects are significant when spread across our production base and applied over the lifespan of our operations. Since 1994 we have reduced our CO<sub>2</sub> intensity by 34 per cent as a result of efficiency improvements at our existing plants, the closure of some of our older plants due to market conditions at the time, and adding newer, larger and more efficient plants to our asset mix as we sought to grow our production. Newer technology such as combined reforming (used at our Egypt and Trinidad facilities) and autothermal reforming with hydrogen injection (currently used at our Chile 4 plant) are more efficient and have a lower CO<sub>2</sub> intensity than the steam methane reforming (SMR) process that has been the leading technology used over the past few decades. At our plants that were built using conventional SMR technology, we have implemented initiatives including the injection of recovered/recycled CO<sub>2</sub> (that would otherwise have been released to the atmosphere) to reduce our emissions intensity, such as in our Medicine Hat plant. Looking ahead, our Geismar 3 (G3) project, a potential 1.8 million tonne methanol plant in Geismar, Louisiana (adjacent to our Geismar 1 and Geismar 2 plants) would utilize autothermal reforming technology with hydrogen injection which would positively impact our overall emissions intensity profile once operational. The G3 project is currently on temporary care and maintenance and we expect to decide on next steps for the project later this year.

While we are always seeking and implementing efficiency initiatives across our operations, these efficiency gains, although very important, will not be sufficient without additional technological advancements to meet ambitious societal goals for emissions reductions by 2050. Despite the significant challenges to advancing commercially scalable technologies, we are optimistic about the longer-term opportunities and believe that with capital investment in research and development, government incentives and continuing societal support we will see the technological breakthroughs needed to enable the economic viability of alternative production processes that ultimately reduce our industry's emissions more significantly by 2050.

Recognizing society's decarbonization goals to achieve net-zero emissions by 2050 we are currently developing a comprehensive long-term CO<sub>2</sub> emissions reduction and climate strategy. In 2021, we are establishing two internal leadership teams with responsibilities for updating our strategy related to Methanex's GHG emissions and transition to a low-carbon economy. One team will evaluate emissions reduction opportunities, technologies and strategies in our manufacturing operations. A second team will assess potential market-related impacts of a transition to a low-carbon economy and opportunities for low-carbon and green methanol. Recognizing that there is currently no commercially scalable alternative methanol production pathway, we will also continue to evaluate the new and innovative technology solutions needed to achieve society's decarbonization goals and we will disclose more details on our long-term strategy in the coming year.

See the discussion below for an overview of our current activities to reduce emissions from manufacturing, as well as some of the future initiatives we're evaluating.

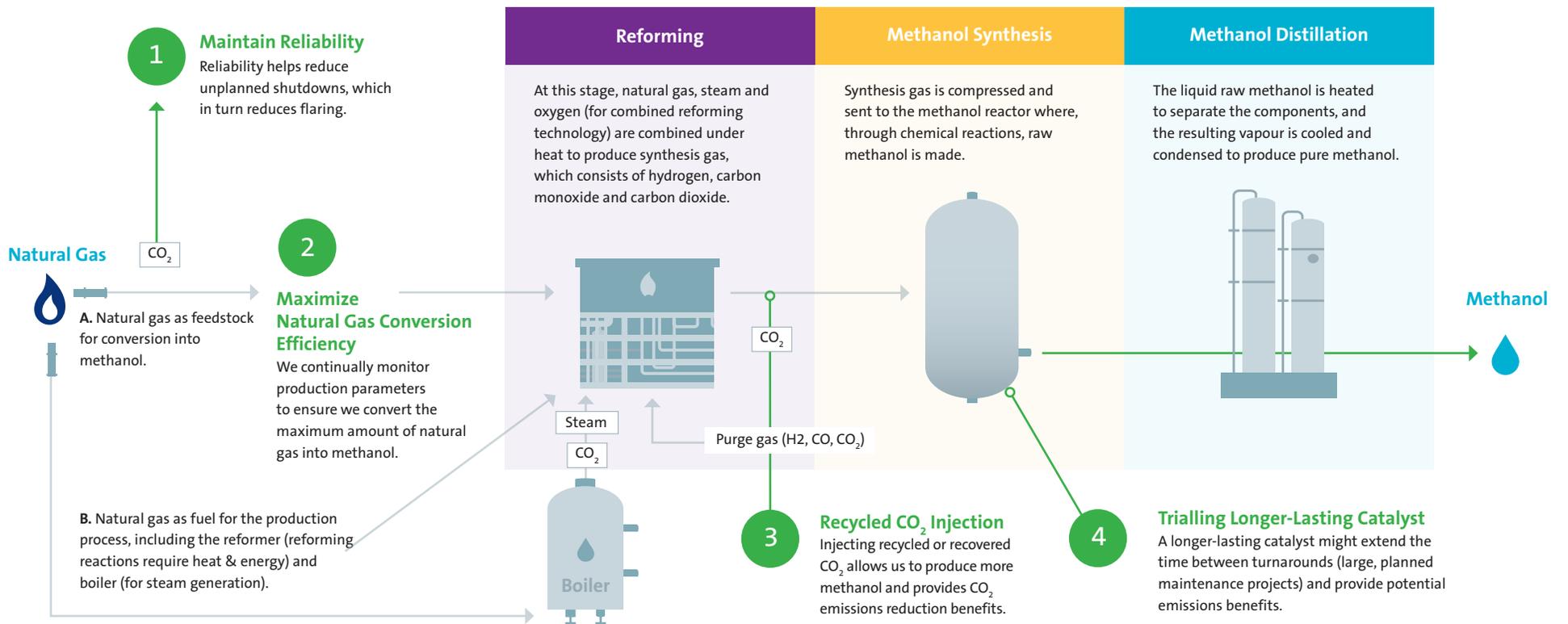
Since 1994, we have reduced the CO<sub>2</sub> emissions intensity of our manufacturing operations by 34 per cent as a result of efficiency improvements at our plants, closure of older plants and adding newer, larger and more efficient plants to our asset mix. In our marine operations, we have achieved an 18 per cent reduction in CO<sub>2</sub> emissions intensity since 2002.

# Current Strategies to Reduce CO<sub>2</sub> Emissions From Manufacturing Operations

Natural gas combustion in the reforming stage of our manufacturing process represents the primary source of CO<sub>2</sub> emissions from our operations.

Multiple factors determine the emissions intensity (CO<sub>2</sub>/tonne of methanol) of our manufacturing process from year to year. These include the reforming technology in use at our plants, process efficiency, fuel composition, age of catalyst, natural gas supply, the source of purchased electricity and steam, and the age, design and reliability of our facilities.

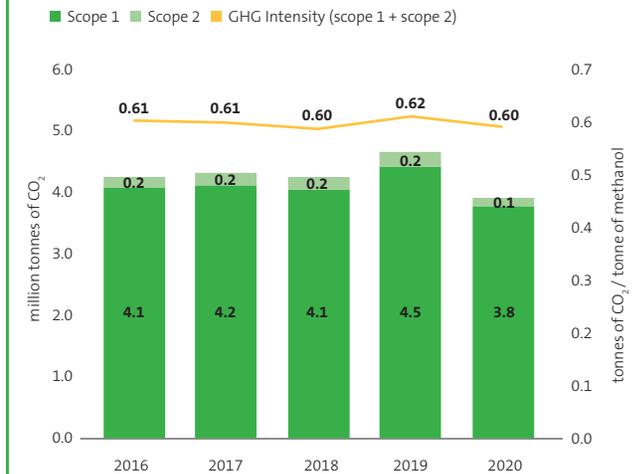
We continually work to reduce the emissions intensity of our manufacturing processes. To reduce our emissions intensity, we focus on maintaining a high level of reliability to keep our plants running continuously and optimizing our natural gas efficiency.



## DETAILS ON CURRENT STRATEGIES TO REDUCE EMISSIONS FROM MANUFACTURING

- 1 Maintaining reliability:** Our ability to keep our manufacturing plants running continuously and at full operating rates is critical to managing emissions. The safe startup and shutdown of methanol production facilities requires flaring some natural gas from the system and this flaring results in emissions. To keep our plants running continually and minimizing unplanned shutdowns, we focus on preventive maintenance, condition monitoring for critical assets and risk-based inspection for static equipment. Our five-year reliability average is 94 per cent, which means our plants have been available to operate 94 per cent of the time.
- 2 Maximizing natural gas conversion efficiency:** We continually monitor and optimize our production parameters to ensure we convert the maximum amount of natural gas into methanol. If the natural gas conversion efficiency (the amount of natural gas used to produce one tonne of methanol) drops, we investigate the cause and adjust operating parameters. The percentage of natural gas converted into methanol depends on the technology and design efficiency of the plant.
- 3 Injecting recovered/recycled CO<sub>2</sub> during the production process:** During the conventional process of making methanol, the chemical reactions result in excess hydrogen production. By injecting additional CO<sub>2</sub> to combine with the excess hydrogen, we can make more methanol. The injected CO<sub>2</sub> can be imported from other industrial sites or extracted from other parts of the plant process. If the CO<sub>2</sub> comes from recovered/recycled emissions (which would otherwise have been released into the atmosphere), the resulting methanol is considered low-carbon methanol. In 2013, we modified our Medicine Hat plant and began to inject CO<sub>2</sub> sourced from an industrial neighbour into our production process. This has two benefits: it prevents the CO<sub>2</sub> from being released into the atmosphere and it improves the conversion efficiency at our site. We continue to evaluate opportunities where this technology can be used at our other plants.
- 4 Trialling the use of a new catalyst:** The chemical reaction process to produce methanol requires the use of a metal catalyst. Catalysts degrade over time and, depending on the technology, need to be changed every three to six years. We replace catalysts as part of our turnaround process, which are planned shutdowns to conduct major plant maintenance. In 2020, we began piloting the use of a new catalyst at our Medicine Hat plant that is projected to degrade more slowly. This new catalyst could improve overall efficiency and extend the time between plant turnarounds. We will continue to evaluate this and other new catalyst technology to determine its benefits and if it can be applied at other sites.

## GHG Emissions from Manufacturing



Over the last five years, our scope 1 and 2 GHG emissions intensity (on an equity basis) has remained consistent and been closely linked to production levels in our asset mix.

# Longer-Term Emissions Reduction Technologies and Strategies

We are developing a comprehensive long-term strategy to help us reduce our CO<sub>2</sub> emissions from our operations and contribute to the transition to a low-carbon economy. While some initiatives involve expanding current activities (as described above) across our sites, other potential initiatives such as changes to methanol production technology and carbon capture are not currently economically scalable.

1. **Producing renewable methanol:** The [International Renewable Energy Agency](#) argues that “A transition to renewable methanol – derived from biomass or synthesised from green hydrogen and carbon dioxide (CO<sub>2</sub>) – could expand methanol’s use as a chemical feedstock and fuel while moving industrial and transport sectors toward net carbon neutral goals. The cost of renewable methanol production is currently high and production volumes are low. But with the right policies, renewable methanol could be cost competitive by 2050 or earlier.” While renewable methanol technology is not commercially feasible at scale today, we continue to explore this technology through our investment in [Carbon Recycling International](#), an Iceland-based startup company that has developed an emissions-to-liquids technology to produce renewable methanol (see more in the Alternative Methanol Market section on [page 20](#)).
2. **Producing biomethanol:** We can use biomethane (renewable natural gas) as a feedstock and heat source, instead of conventional natural gas, in our current reforming process. In December 2020, we produced a small volume of biomethanol at our two Geismar plants (see more in the Alternative Methanol Market section on [page 20](#)). While biomethane costs significantly more than conventional natural gas feedstock, making biomethanol more expensive to produce, we will continue to evaluate the economic viability of biomethanol and its potential to scale in the future.
3. **Carbon capture, utilization and storage:** There are significant industry developments underway that consider a variety of carbon capture technologies. While we have explored carbon capture at a number of our plant locations, this technology is currently capital intensive. Nevertheless, carbon capture is an important technology and a key tool for hard-to-abate sectors like ours, and with ongoing advancements in research and development, we will continue to evaluate integrating new carbon capture technologies in our business going forward.
4. **Green electrification of our manufacturing reforming process:** As discussed previously, there are significant heat and energy requirements for the methanol production process. While evolving technologies could potentially generate this heat and energy using electricity from renewable sources, doing so will require the reliable availability of large quantities of renewable electricity at competitive prices. As per the IEA Energy Technology Perspectives 2020, “it is impractical and expensive to generate this amount of heat from electricity using current technologies, and research efforts aimed at lowering the costs of electrification are at a relatively early stage of development.” Nevertheless, there are companies that are advancing green electrification technologies (i.e., producing electricity from renewable sources such as wind, solar, hydro, etc.) and we are tracking these technology developments to understand opportunities for our facilities going forward.



# Forms of Methanol Production

Methanol is composed of one atom of carbon, one atom of oxygen and four atoms of hydrogen. Carbon is an essential building block of methanol and the products and fuels that methanol enables. While methanol can be produced from different feedstocks and by using different energy sources, the resulting methanol (whether conventional or renewable) is always chemically identical (CH<sub>3</sub>OH). Efforts to reduce the carbon dioxide (CO<sub>2</sub>) emissions from methanol production focus on the methanol production process and choice of feedstock. The technologies and feedstocks used to produce methanol are in varying stages of commercial viability and include:

**Natural-gas-based methanol:** All of Methanex’s production plants use natural gas as feedstock and approximately 65 per cent of the methanol produced globally is made with natural gas.

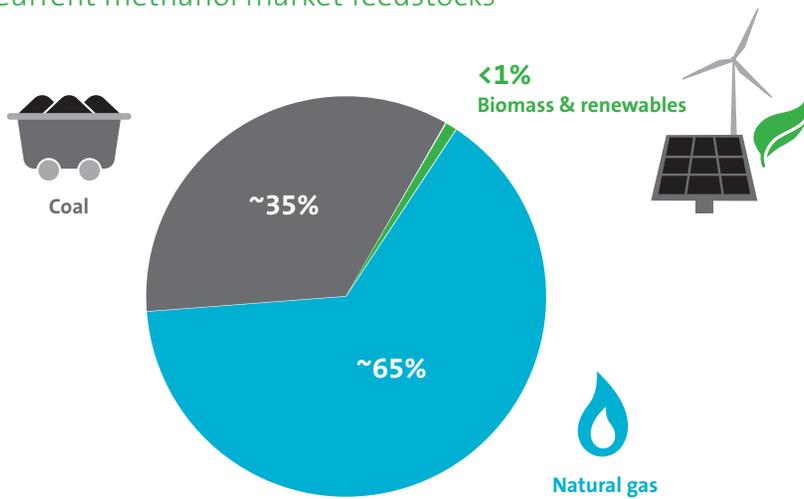
**Coal-based methanol:** Approximately thirty-five per cent of methanol produced globally uses coal in the production process, which produces approximately five times more CO<sub>2</sub> emissions than natural gas.

**Low-carbon methanol:** Low-carbon methanol (sometimes referred to as “blue methanol”) is produced from natural gas using a conventional process with modifications to achieve a lower final carbon intensity. A typical modification is the injection of recycled/ captured CO<sub>2</sub> into the manufacturing process that would have otherwise been released to the atmosphere. In 2013, we began producing low-carbon methanol using this technology at our Medicine Hat facility.

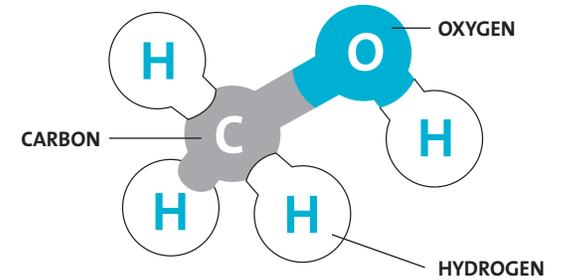
**E-methanol:** E-methanol is produced using green hydrogen obtained from water electrolysis using renewable energy and captured CO<sub>2</sub>. Currently, less than one per cent of global methanol production is from renewable sources.

**Biomethanol:** Biomethanol is produced from biomass (such as wood residues or municipal solid waste) or biomethane (also known as “renewable natural gas” once it has been upgraded to allow transport by pipeline). Less than one per cent of methanol today is made with renewable or biomass feedstocks. We recently produced a small volume of biomethanol at our Geismar plant.

## Current methanol market feedstocks



Source: International Renewable Energy Agency, Innovation Outlook: Renewable Methanol



The methanol molecule

# Alternative Methanol Market

Biomethanol and e-methanol are often referred to as either “renewable” or “green” methanol, as they are both produced using renewable sources of feedstock and have a lower carbon footprint compared to conventional methanol production from coal or natural gas.

The market for renewable methanol is in the early stages of development and is being driven by an increased global focus on CO<sub>2</sub> emissions reduction by governments, regulatory bodies and companies. For example, through regulations such as the Renewable Energy Directive II, European member states require fuel suppliers to deliver a minimum of 14 per cent of the energy consumed in road and rail transport by 2030 as renewable energy. In the private sector, companies are also seeking to reduce their CO<sub>2</sub> emissions and meet voluntary targets through strategies that include purchasing carbon offsets through the small but growing [voluntary carbon market](#).

Methanex supports the growth of renewable methanol in fuel markets where conventional methanol is already in use, such as methanol marine fuel, M100 (100 per cent methanol) vehicle fuel and methanol fuel cells. For example, methanol as a marine fuel is already well established, and renewable methanol can help the shipping industry meet the decarbonization goals set by the International Maritime Organization to reduce carbon emissions by 40 per cent in 2030 and 70 per cent by 2050, compared to 2008 levels.

While it represents less than one per cent of the market today, renewable methanol could play a growing and important role in supporting countries’ and companies’ emissions reduction targets in the future (source: [International Renewable Energy Agency](#), Innovation Outlook: Renewable Methanol, page 23). Methanex is committed to working with our customers and supporting them in meeting their requirements for renewable methanol and for low-carbon methanol. We will continue to assess developing methanol production technologies and look for opportunities for investment and/or offtake agreements that are practical and economically viable for our business.

It’s anticipated that the interest in renewable methanol will continue to grow as a result of consumer preference as well as national and international regulations that require emissions reductions. Our strategic investments in renewable methanol include:

**Methanex investment in e-methanol:** Methanex was an early investor in renewable energy through our 2013 investment in [Carbon Recycling International](#) (CRI), which has developed an emissions-to-liquids technology to produce renewable methanol. Methanex is a shareholder and on the board of CRI. Along with its own plant in Iceland, CRI is also developing two new commercial-scale renewable methanol plants in Norway and China, both of which will leverage the company’s proprietary emissions-to-liquids technology. The plant in China is currently under construction and is expected to be operational by the end of 2021.

**Methanex investment in biomethanol:** In December 2020, we received [International Sustainability and Carbon Certification](#) for production at our two Geismar plants using biomethane (renewable natural gas) from municipal solid waste and other sources. This enables us to support our customers in meeting current and future regulations, industry standards and their own voluntary carbon-reduction targets.



Renewable methanol plant in Iceland.  
Source: Carbon Recycling International

# Climate-Related Risks and Opportunities

Climate change is a strategic risk that has potential financial implications for companies, capital providers, suppliers and customers. Climate change also provides strategic opportunities; in our case, for alternative fuels, such as methanol and green methanol, that reduce CO<sub>2</sub> emissions and can contribute to decarbonization. In this section we outline some of the key climate-related risks and opportunities we are monitoring and evaluating in alignment with the recommendations of the Task Force on Climate-related Financial Disclosures.

## TRANSITION RISKS AND OPPORTUNITIES

We monitor policy and regulatory changes, technology costs and potential changes in consumer behaviour and perceptions to assess the business opportunities and risks they present through the global transition to a low-carbon economy.

### *Legislative and regulatory risks*

Public attitudes around climate change and the transition to a lower-carbon economy are changing. As a result, under the Paris Agreement within the United Nations Framework Convention on Climate Change, some of the countries where we operate have committed to reduce CO<sub>2</sub> emissions and implemented carbon taxes or trading schemes. While our operations in the United States, Trinidad and Egypt aren't currently affected by these types of regulations, our operations in New Zealand, Canada and Chile are subject to CO<sub>2</sub> regulations that result in additional costs to produce methanol. Many of our competitors produce methanol in countries that do not impose CO<sub>2</sub> regulations or carbon taxes. Changes to existing CO<sub>2</sub> legislation, new legislation or changes in carbon prices in the countries where we operate could affect our operating and financial results, making us less cost competitive within the methanol industry. Emissions regulations in New Zealand, Chile and Canada are undergoing reviews and may be subject to change. In 2021, the US re-entered the Paris Agreement and has announced plans to implement its objectives with respect to CO<sub>2</sub> emissions reductions.

New Zealand's Emissions Trading Scheme currently imposes a carbon price on producers of fossil fuels, including natural gas, which is passed on to Methanex. This increases the cost of gas that we purchase in New Zealand. However, as a trade-exposed company, Methanex is entitled to a free allocation of emission units to partially offset those increased costs. The amount of free allocation emission units we are entitled to is expected to gradually decrease over time.

Since 2017, Chile has imposed a carbon tax on certain CO<sub>2</sub> emissions. We are charged a Green Tax for CO<sub>2</sub> emissions from our site's boilers and turbines. Recent legislation will increase carbon taxes in Chile over the coming years. Starting in 2023, we will be taxed on fixed emissions sources on site, including the Chile 1 reformer and the Chile 4 fired heaters.

Since 2007, our Medicine Hat facility in Canada has been subject to compliance reporting and carbon pricing under different government programs applying to industrial facilities that emit more than 100,000 tonnes of CO<sub>2</sub> equivalent annually. Under current regulations, by 2021 we are expected to reduce our facility emission intensity (i.e., the amount of CO<sub>2</sub> emitted per tonne of methanol produced) by 11 per cent compared to our 2013-2015 baseline period. Based on the allowable emissions intensity, each facility receives an amount of allowable CO<sub>2</sub> emissions based on total production. For the remainder of our emissions, we pay a compliance cost and/or purchase offset credits. Canada's carbon price increased to CAD40/tonne in 2021 and will rise to CAD50/tonne in 2022. In December 2020, the Canadian government announced its plans to increase the carbon price by CAD15/tonne every year starting in 2023 to reach CAD170/tonne by 2030.

### *Technological risks*

Many of our methanol plants have operated for multiple decades, and with appropriate maintenance they will be capable of operating efficiently and cost effectively well into the future. This is because the energy-efficiency gains of new technologies for natural-gas-based methanol production have been primarily incremental rather than transformational. Although alternative feedstocks and methods for methanol production, including producing methanol from renewable resources, exist today, they are not currently economic to produce at scale. New technologies for methanol production, including those that reduce the CO<sub>2</sub> emissions intensity of methanol production, may make our current plants less cost-competitive or obsolete over time. In addition, regulatory changes could require us to invest in new technologies to reduce our CO<sub>2</sub> emissions, which could result in significant capital expenditures.

***Market-related risks and opportunities***

In the shift to a low-carbon economy, we are seeing increased methanol demand in two areas. First, we are seeing a growing interest in the use of conventional methanol as a lower-emission fuel. We are also seeing growing interest in green fuel and green chemical alternatives, some of which are alternative forms of methanol and others that are complementary or competing renewable products. This increased interest presents both risks and opportunities for our company. In addition, increasing public focus on climate change and the timing and pace of the transition to a lower-carbon economy could impact the demand for methanol based on the CO<sub>2</sub> emissions produced.

***Reputational risks***

Many stakeholders expect private-sector organizations to take action to address climate change and support the transition to a lower-carbon economy. Risks arise from these changing stakeholder perceptions related to the way in which we are viewed as contributing to (or hindering) these efforts. Our reputation could be impacted by evolving perceptions of carbon-intensive industries, petrochemical industries and, most specifically, the methanol industry and its associated downstream derivatives. Although we believe that we conduct our business in a prudent manner and that we take care to protect our reputation, we do not ultimately have direct control over how we are perceived by others.

The International Energy Agency and the World Economic Forum have acknowledged that the chemical industry faces unique challenges because of the high temperatures needed to trigger chemical reactions, and that these temperatures can only currently be reached economically by burning fossil fuels. An important distinction needs to be made between methanol producers that burn coal and those (like Methanex) that burn natural gas in the production process. We will continue to evaluate opportunities to develop and deploy new technologies to reduce the carbon intensity of our production processes. Reputation loss may make it hard for us to access capital and insurance coverage, decrease investor confidence, make it harder to attract talent and retain employees, challenge us to advance our projects and obtain permits, or make it more difficult to maintain our social license to operate, which could negatively impact our operational and financial results.

**CLIMATE-RELATED PHYSICAL RISKS**

Climate change poses a number of potential risks that may negatively impact our operations, suppliers or customers. The physical impacts of climate change may include water scarcity, changing sea or river levels, changing storm patterns and intensities, and changing temperature levels. The impact of any of these changes could be severe.

Four of our methanol production sites rely on access to fresh water, which is converted to steam in the methanol production process. Water shortages at these sites could restrict the amount of methanol we can produce. Our other two sites, Trinidad and Chile, use desalinated seawater in the methanol production process.

We primarily transport methanol on vessels, shipping our product from our production sites to customers around the world. We have, at times, experienced logistics delays in our supply chain due to high and low river levels when we are exporting methanol from a production site or delivering methanol by vessel or barge to customers. High or low river levels impacting our production assets and supply chain, as well as more severe and frequent storms and weather events, could negatively affect our operating capacity and supply chain.

# Water

We depend on water for our operations and share this vital resource with the communities where we operate. Through our water stewardship program, we focus on minimizing our water use and protecting water quality in our areas of operation.

Methanol production uses water in several stages of the process. While most of the water we use is for cooling systems to remove heat, a portion is also consumed as steam during the methanol manufacturing process (see figure below). Depending on the location, our plants use either seawater or fresh water. The vast majority of the water we withdraw is seawater which is used at two of our manufacturing sites. At these two plants, seawater is used as cooling water and, following desalination and treatment, used to produce steam.

## 2020 Water Use

**115.2**  
million m<sup>3</sup> **withdrawn**

Most of this water is used for cooling, and it can be reused several times.

- 96.7** million m<sup>3</sup> **Seawater**
- 11.6** million m<sup>3</sup> **Fresh water**
- 2.0** million m<sup>3</sup> **Municipal water\***
- 4.9** million m<sup>3</sup> **Purchased water**

**22.2**  
million m<sup>3</sup> **consumed**

Approximately 80% of this water is evaporated.



Approximately 20% of this water goes into making the final methanol.

**93**  
million m<sup>3</sup> **discharged**

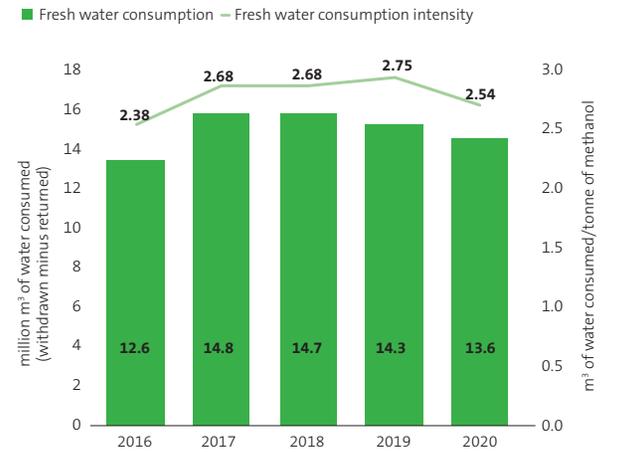
Once the water has been used in the process (in some cases several times) it is cleaned and treated before discharge.

- 92** million m<sup>3</sup> **Seawater**
- 0.6** million m<sup>3</sup> **Fresh water**
- 0.4** million m<sup>3</sup> **Municipal water**

Purchased water not consumed is returned to the sea, surface waters or municipal sources.

\* Municipal water may include desalinated water and fresh water.

## Fresh Water Consumption



Year-over-year fresh water consumption intensity is influenced by production levels at our four sites that use fresh water and their various reforming technologies and cooling systems.

### Improving Water Efficiency

Because fresh water is a shared natural resource with our communities and environment, we put the bulk of our water stewardship efforts into conserving and protecting freshwater sources. This is particularly important in regions with potential for freshwater scarcity. To maximize efficiency and return as much water to the environment as possible, our facilities have water conservation procedures to minimize, reuse and recycle water. For example, almost all of our production facilities reuse condensed steam in different phases of the production process, and over half of our sites reuse the wastewater from distillation columns, reducing the overall volume of water we need to withdraw.

The selection of plant technology can impact plant efficiency, including water consumption. Over time, as we have transitioned to newer reforming technology we have also incrementally reduced our water consumption per tonne of methanol in the reforming stage. Some of our plants with older steam methane reforming technology inject CO<sub>2</sub> gas into the manufacturing process to improve production efficiency, which also helps to lower water consumption intensity.

### PROTECTING WATER QUALITY

Water generated from the manufacturing process is treated in accordance with local requirements and analyzed before we safely discharge it back into the environment or to municipal services. The majority of our water is used for cooling, meaning it simply circulates through pipes and heat exchangers and does not contain contaminants that would require treatment before being released.



Freshwater source at Motunui plant in New Zealand

### Reusing clean effluent for community gardens in Egypt

Our Damietta, Egypt, plant pumps up to 1,500 m<sup>3</sup> of treated, clean effluent water per day from our plant to irrigate community gardens in New Damietta. This innovative project is a partnership between Methanex Egypt and the New Damietta Development Authority to help the community conserve river water from the Nile.



A community garden in New Damietta that has benefited from clean effluent water from our plant

# Spills

Methanol is more environmentally benign than other hydrocarbon products. Since methanol occurs naturally in the environment and is readily biodegradable, methanol spills are unlikely to accumulate in groundwater, surface water, air (as vapour) or soil. However, since a large release of methanol can potentially impact the immediate environment, we have a comprehensive spill-prevention program in place to mitigate any health, safety and environmental impacts.

Given the nature of our operations, our most significant potential spills relate to methanol, petroleum products from machinery (e.g., fuel, lubricating oil) and water treatment chemicals.

To prevent spills, we focus on primary containment, or “keeping it in the pipe.” As part of our regular facility maintenance program, we have a rigorous inspection process for storage tanks, pipes and connectors:

- Across our manufacturing sites, we have tanks (with a capacity of ~ 1 million m<sup>3</sup>) that store methanol. We regularly inspect these tanks as well as piping, flanges and other types of connectors.
- We have spill containment berms (i.e., a secondary containment barrier) around tanks to prevent potential tank spills from reaching soil or water.
- We use monitoring wells across our facilities to periodically track both soil and groundwater conditions. This allows us to monitor potential pathways to water sources should a spill occur, and to plan a response in the event of a spill.

In addition to using petroleum fuels and lubricants for machinery on site, we use water treatment chemicals. The seawater used in our manufacturing process requires desalination, filtering and ion exchange, while the fresh water we use requires filtering treatment, ion exchange and pH adjustments. To safely handle and avoid spills of petroleum and water treatment chemicals, we proactively conduct plant maintenance and inspections. We also train our team members on environmental management, and implement process safety management (PSM) programs (see more on the [Process Safety](#) section on [page 32](#)). The primary goal of PSM is to ensure the safe containment of substances that are harmful to human health, safety and the environment.



# Air Quality

Good air quality is fundamental to human health and well-being. This is why, in alignment with local regulations, we continually work to reduce emissions that could impact local air quality and ultimately our communities. Air quality is measured by the concentration of pollutants in the air, including nitrogen oxides (NOx), sulphur oxides (SOx) and volatile organic compounds (VOCs) such as methanol vapours. Through process and equipment improvements, we aim to reduce emissions associated with our operations.

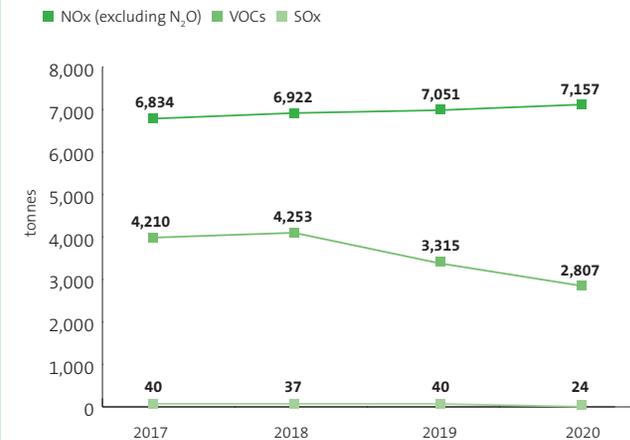
**NOx:** Our primary source of NOx emissions occurs as a byproduct of natural gas combustion during the manufacturing process, primarily from the steam methane reforming process and a smaller amount from the use of boilers to generate steam. We follow air quality regulations at all of our sites and stay within regulatory limits. Over the past 20 years, we have been able to significantly reduce NOx emissions from our plants through the use of technology:

- Our plants with newer combined reforming technology emit significantly lower levels of NOx emissions compared to plants with older reforming technology.
- Lower-NOx burners prevent the formation of NOx in the reformer. We use this technology at two of our newer plant sites. In 2020, we also upgraded our Medicine Hat plant with older reforming technology to low-NOx burners, which reduce NOx emissions by 75 per cent.
- Selective catalytic reduction uses “scrubber” units that remove NOx from the exhaust gas of the reformer unit. These remove approximately 97 per cent of NOx from the baseline case. This technology is used in one of our plant sites with older reforming technology located in an area with strict NOx emission regulations due to existing local air quality issues.

**SOx:** Methanex plants emit very low levels of SOx from the combustion of natural gas. At our plants, the natural gas used contains low sulphur content.

**VOCs:** Methanol storage tanks and some processing equipment can release methanol vapour, a type of VOC. To reduce the amount of VOCs that are released into the atmosphere, we have installed floating roof storage tanks and VOC “scrubbers” at some of our locations. Methanol vapour leak detection and repair programs for methanol pipe fittings, flanges, seals and other connections further enable us to minimize the emission of methanol vapours throughout the plant. We follow air quality regulations at all of our sites and stay within regulatory limits for VOC emissions.

## Air Emissions



Changes in NOx and VOC emissions are closely linked to production levels in our asset mix.

**NOx:** Although we have installed technology to reduce NOx emissions at several of our sites, our NOx emissions increased by 5% in the last four years. This is due to increased production from plants with older reforming technology.

**VOCs:** Year-to-year VOC emissions are linked to production levels. Reduced emissions in 2019 were due to a plant starting the use of a VOC recovery system for methanol loading. The decrease in emissions from 2019 to 2020 was due to a plant with higher VOC emissions being off-line.

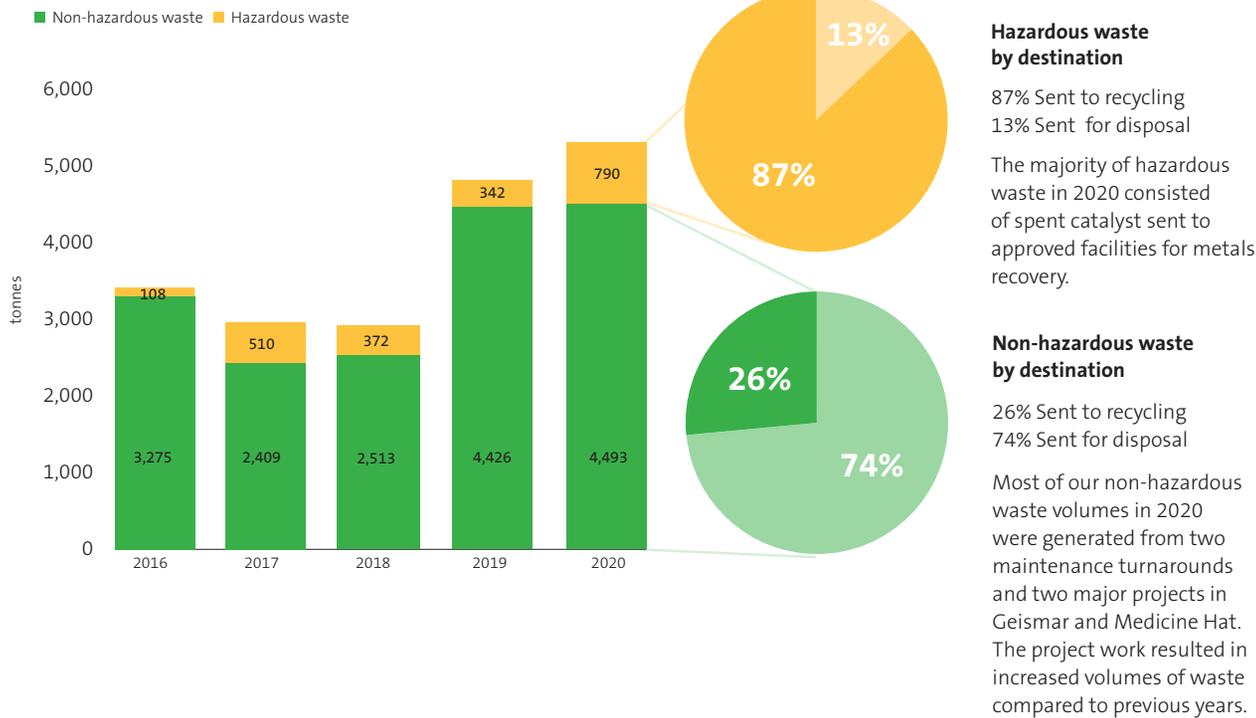
**SOx:** Historically, SOx emission levels have been consistent and associated with sulphur content in natural gas supply. The decrease in SOx emissions from 2019 to 2020 was primarily due to a plant with higher sulphur content in its gas being off-line.

# Waste

We are committed to minimizing the waste from our operations. Most of our waste volume is generated during major maintenance projects (turnarounds), plant refurbishments and servicing work. These waste sources include construction-related materials such as scrap metal, wood waste, piping and vessel insulation.

We also responsibly manage our hazardous waste, which is predominantly “spent” catalyst. Catalyst, which consists of small metal-containing pellets that help promote the chemical reactions required to manufacture methanol, becomes less efficient over time (is “spent”), and eventually needs to be replaced. The metal in spent catalyst can sometimes be recovered and reused. See [page 17](#) for how we use catalysts in our production process.

## Waste



# Social

We care deeply about our people, communities and the environment in which we live, work and play. We believe our business should positively impact people's lives, and the well-being of our stakeholders is a key priority. We focus on building a safe and thriving workplace culture and use our leadership position as the world's largest methanol provider to raise safety standards in our industry, supply chain and beyond.

## 2020 Highlights

- Successfully executed **two turnarounds** in the challenging pandemic environment.
- Hosted **35 product safety and stewardship sessions** to provide information on methanol safe handling and use.
- Established a taskforce to **advance diversity and inclusion** efforts in the organization.
- Invested approximately **\$1.7 million and 7,500 hours to strengthen communities in 2020** (together valued at over one per cent of our average net income over five years) with a particular focus on COVID-19 emergency relief.
- Received a **Grand Slam Award** from the Association of American Railroads for our **rail safety performance** in North America.



# Employee and Contractor Safety

Our number one priority is making sure every team member goes home safe, every day. We believe all injuries are preventable and make a concerted effort to design and manage our health and safety programs with the goal of achieving a zero-injury workplace year after year.

## EMPLOYEE SAFETY

We have comprehensive health and safety programs to protect the safety of our team members and contractors. Our safety management initiatives include:

**Fostering safe behaviours:** Safety is critical across our business, and particularly at our manufacturing sites, where more than 75 per cent of our employees work. New employees at our manufacturing sites participate in a *Switch On to Responsible Care* (Switch On) workshop after joining the company. Our *Switch On* program is a driving force in our safety culture, connecting the reasons that motivate our employees to work safely (such as going home to loved ones) with conscious efforts to behave safely. We also provide regular refresher sessions for all employees.

**Raising hazard awareness:** In 2019, we launched a global hazard awareness and training campaign to help employees and contractors recognize hazards and encourage intervention, reporting and follow-ups to safety concerns. The campaign involved facilitated workshops at each of our manufacturing sites, and all sites completed the training by the end of 2020. Each site now sets goals for hazard observations, and reinforces hazard awareness during Toolbox Talks, which are short safety conversations before starting a particular job or task.



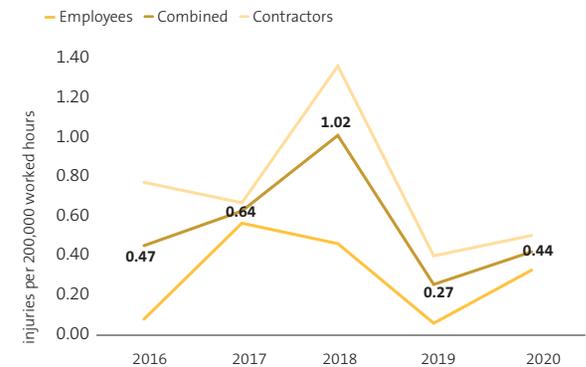
Switch On to Responsible Care training session in Trinidad

**Focusing on critical activities:** Our Critical Activities, Rules and Expectations (CARE) Standard defines the activities that present the greatest risk to workers, and the actions required to work safely and avoid significant injuries. The critical rules (commonly referred to as Life Saving Rules) apply to seven activities: hot work (such as welding), lifting, hazardous energy, confined space entry, electrical work, work at heights and excavation. Each manufacturing site is responsible for hosting CARE training programs, and employees and contractors must take this training as part of their onboarding. Refresher training is offered at least every three years.

**Occupational hygiene and wellness:** We are committed to the well-being of our people and prevention of work-related injuries and illnesses. In alignment with our Occupational Hygiene Standard we set requirements for stress management, noise and hearing conservation, as well as heat stress and cold stress, where applicable. We also prioritize ergonomics, fitness to work and mental health and our global health network and Human Resources teams help to drive efforts in these areas.



## Recordable Injury Rate



In the last five years, we have decreased our combined recordable injury rate by 6%. Our contractor injury rate continues to be higher than our employee rate, mostly due to the nature of the specialized work they conduct. Although our contractor injury rate has decreased significantly in the last two years, we strive for a zero-injury workplace and continue to invest in and improve our contractor safety programs (read more on [page 30](#)).

As part of our proactive approach to building a safety culture, we track leading indicators (as noted below) to measure team member engagement. This data allows us to customize our safety culture and engagement programs to ensure we are all switched on to safety and going home safely each day.

## LEADING INDICATORS 2020

Hazard identification **2,143**

Behaviour-based safety observations **9,843**

Near misses **983**

## CONTRACTOR SAFETY

Contractors are responsible for approximately 50 per cent of our total worked hours due to their role in turnarounds (large capital projects) and ongoing operations. Management of contractors is overseen at the site level and is guided by our Contractor Health, Safety, Security, Environment, and Quality Management Policy. The policy defines a consistent approach for contractor selection and onboarding, on-site supervision and risk management, and offboarding and performance review, across all of our sites.

## TURNAROUND SAFETY

A turnaround is a planned outage at a manufacturing plant to conduct major maintenance, replace equipment and change catalysts. Each of our six manufacturing locations undergoes turnarounds on average every three to five years. Contractors play an essential role in these projects.

Turnarounds present unique safety management challenges for three reasons:

- **Increased people on site:** The number of workers on site during a turnaround increases significantly. For example, a site that typically has 150-200 employees on site can host more than 1,000 employees and contractors for four to eight weeks during a turnaround. Ensuring the safe movement of workers around the work site adds an extra level of complexity to a project.
- **Increased project sizes:** The jobs during a turnaround tend to be bigger, both in scope (e.g., replacing entire sections of a reformer) and scale (e.g., huge modular elements are fitted together using cranes).
- **Specialized skills required:** Safely shutting down chemical processes and cleaning and repairing our equipment requires specialized knowledge and experience.

To manage these crucial projects, we have:

- **Turnaround specialists:** We have a global network of turnaround specialists (e.g., operators, craftsmen, engineers, safety professionals) who support local turnaround teams as they prepare for and execute these major projects.
- **Contractor onboarding:** We provide specialized onboarding for contractors that includes occupational safety awareness and training on our CARE Standard.



### Successful Turnaround in Medicine Hat During COVID-19

In October 2020, our Medicine Hat team celebrated the successful completion of their turnaround.

The turnaround consisted of 44 projects, including installation of new low-NOx burners; upgrades to the reformer, electrical and safety instrumented system; rebuilding the cooling tower and replacing the catalyst in three vessels.

Over nearly 60 days, workers completed approximately 1,300 work orders and worked nearly 400,000 hours to complete these projects. On the busiest day, there were 935 workers on the site.

The successful completion of this turnaround, executed with heightened safeguards and protocols due to COVID-19, is due in large part to the selection of contractor companies whose safety culture and values align with Methanex's. Working together as One Team, we collaboratively planned and executed this complex event in a safe manner.

### Innovative Use of Technology During COVID-19 Trinidad Turnaround

In 2020, when COVID-19 limited on-site access for service providers in Trinidad, we used Augmented Reality Smart Glasses during our turnaround. This enabled our external service providers to virtually see what our engineers were seeing in person, and to provide guidance and expertise in real time.

# Resiliency During the COVID-19 Pandemic

We plan for a wide variety of crisis scenarios and risks that could potentially impact our operations. In early 2020, as the COVID-19 pandemic spread around the globe, we activated our Global Infectious Disease Contingency Plan (developed after the 2003 SARS epidemic) and took immediate action to protect the safety and well-being of our employees, contractors and communities. We remained flexible during the year and adjusted our procedures as the latest safety guidance became available. See the crisis management section on [page 51](#) for more details on our crisis management processes.

**Protecting workers on site:** At our manufacturing sites, we limited on-site employees to those in essential roles needed for the safe ongoing operations of the facilities and implemented additional safety protocols to reduce risk to on-site staff. The pandemic evolved differently around the world, so protocols varied by region and included daily symptom checks, limited access to facilities, modified shift patterns, social distancing, required use of personal protective equipment (PPE), and increased cleaning and sanitization of work areas. We instructed our regions to take a risk-based approach to reopening work sites, based on guidance from national, regional and local authorities.

The pandemic challenged us to innovate and find new ways to carry out our operations safely. For example, in Egypt our team implemented a sequestration work plan to ensure safety. After a series of negative COVID-19 test results, essential staff remained sequestered at our plant site over two-week cycles. This approach created a safe “bubble” within the plant as only people who tested negative were allowed inside. Our team members embraced the challenge of keeping our plant site safe, transforming offices into living quarters and the cafeteria into a recreation room to maintain positive health and mental well-being. These efforts enabled us to continue producing methanol and delivering reliable supply to our customers while protecting our team members’ health and safety.

**Supporting remote workers:** We supported our team members who shifted to working from home with resources available through the Coronavirus Resource Centre on our intranet, including our remote work toolkit, our ergonomics toolbox (resources to support physical well-being and prevent injury in home work environments) and mental health resources (see sidebar for more information).

**Communicating regularly:** Our employees received regular email and video updates from our CEO and regional leaders, with COVID-19 updates and general updates about safety, as well as links to resources and updated COVID protocols. We used results from two Global Well-being Surveys to focus our supports and communication on the areas employees felt they were most needed.

**Restricting travel:** Starting in March 2020, we restricted travel to and within high-risk regions with higher cases of COVID-19. We continue to monitor case numbers and restrict travel as necessary.



## Mental Health Support During COVID-19

To support the mental health of our team members and their loved ones during the challenges of COVID-19, we communicated regularly and made resources available on our intranet, including:

- Mental health strategies to mitigate the negative impacts of isolation while working from home or self-isolating.
- Practical tips for keeping a positive attitude and coping with stress, such as talking with trusted people, maintaining a healthy lifestyle, and sourcing credible information and managing the effects of media coverage about the pandemic.
- Tips to help children cope with stress, including providing them with extra care and maintaining routines as much as possible.

# 97%

of our team responded that they felt well informed about COVID-19, its impact on the company and our response.

(October 2020, Global Well-being Survey)

# Process Safety

Methanex's business involves manufacturing methanol, which, like all chemicals and fuels, has inherent hazards. The process we use to manufacture methanol is also hazardous, requiring the containment of gases and steam at elevated pressures and the use of chemicals, flammable fuels, gas-fired furnaces and heavy machinery rotating at high speeds. Our process safety programs are designed to manage these process-related hazards and protect our employees, contractors and communities from the potential for fires, explosions or toxic releases. Our communities are further protected by the fact that our manufacturing sites are located in rural or low-density industrial locations.

## EXECUTIVE OWNERSHIP OF PROCESS SAFETY

Process safety is one of our company's most critical operational risks and is overseen at the highest level of the organization. Methanex has an Executive Process Safety Steering Committee that includes the participation of senior executives from each manufacturing region and global roles. The committee meets three times a year to discuss and monitor our process safety performance and the execution of strategic improvement plans.

## INTERCONNECTED SAFEGUARDS TO REDUCE PROCESS SAFETY RISKS

Process safety management (PSM) works to prevent incidents from occurring through a blend of technical engineering processes and astute operations management to safely and reliably contain our process-related hazards. Our PSM program is informed by the Center for Chemical Process Safety's [Guidelines for Risk Based Process Safety](#). We contain our process safety risks through a combination of risk-reduction measures known as "safeguards." These safeguards exist in the form of physical infrastructure, processes and management systems, organizational structures and the competence of our people.

**1. Plant design and physical infrastructure:** One of our objectives for new plants and upgrades is "inherently safe design" in which we aim to completely eliminate or minimize hazards inherent in our process. When a process hazard cannot be eliminated, we design our equipment and technology (i.e., physical infrastructure) to minimize the potential for these hazards to bring about harm. For instance, if there are inherent risks associated with an aspect of the manufacturing process, we physically isolate workers from these risks and protect them via automated pressure-relief equipment and shutdown systems.

### 2. Management system and processes:

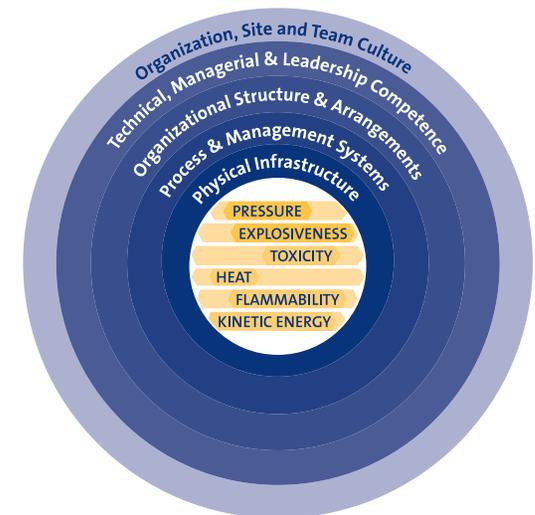
- **Hazard analysis:** Our Process Hazard Analysis (PHA) program helps us identify potential risks at each of our plants, ensure adequate safeguards are in place and identify further risk mitigation opportunities. We conduct PHAs before we design, change or decommission a plant. We also revalidate our PHA every five years.
- **Asset integrity management:** We use a formal and systematic program of risk assessments to determine our asset inspection strategies (i.e., risk-based inspections). During these inspections, we periodically evaluate the physical condition of our assets and verify any degradation modelling we have employed.

### How are process safety and occupational safety different?

*Type of industry:* All industries have occupational safety hazards that must be managed. However, only some industries have process safety hazards. In our manufacturing business, our process has inherent hazards that need to be safely and reliably contained.

*Number of people impacted:* Process safety incidents have the potential to simultaneously cause harm to multiple people, while occupational safety incidents generally harm individuals.

Process safety incidents are rare. Our plants and management programs are designed so that multiple safeguards would need to fail, at both the same location and the same time, for a process safety incident to occur.



- **Management of Change:** We review risks, including unintended consequences, associated with proposed changes to plant components and the production process or with organizational changes. This process helps us identify how potential changes might influence our operating risks and determine any necessary safeguarding measures before authorizing a change.
  - **Emergency preparedness:** Our emergency response plans are developed to address specific emergency scenarios that could occur at our sites. Ongoing training, drills, exercises and follow-up evaluations are a central part of our emergency-response programs in all regions, including our plants and Marketing & Logistics offices.
  - **Performance monitoring:** Our process safety performance is formally monitored by the Global Manufacturing Team (plant managers from each of our manufacturing locations) and the Executive Process Safety Steering Committee. Both groups receive formal briefings on any significant process safety incidents, including the findings from the investigations.
- 3. Competence:** Our senior leaders across the business are expected to continually build their competency in process safety, including adherence to guidance in Methanex's Process Safety Handbook, published in 2017. This is because senior leaders are influential in decisions around project scope, engineering standards, capital allocation and maintenance budgets, all of which can directly impact process safety in our operations.
- 4. Organization, site and team culture:** All team members are required to maintain a disciplined approach to safety-critical operations, and to avoid complacency by adopting a perspective of "chronic unease" – a state of unrelenting watchfulness and healthy skepticism about what people see and do – to protect themselves and those around them. We also provide training to raise hazard awareness and encourage employee and contractor intervention, reporting and follow-up when they have safety concerns.

#### FOSTERING A CULTURE OF CONTINUOUS IMPROVEMENT

A key part of our culture is our willingness to learn from mistakes and find better ways to conduct our work. Being a learning organization is particularly important when it comes to process safety events (i.e., unplanned or uncontrolled loss of containment of a process-related hazard such as flammable gases or pressure). Due to their potential for catastrophic impacts, we consider all process safety events to be significant.

Our manufacturing sites report and investigate all process safety events and monitor the implementation of improvement actions. Lessons learned from these events are shared across the wider Methanex business. For example, in 2020 we had a process safety event at our Chile site when a component of the turbogenerator package unit ruptured, releasing natural gas into an unoccupied building located within the plant area. The investigation of the incident revealed the potential to improve our process hazard analysis (PHA) practices for package units (i.e., units that had been procured and installed as a complete package). This lesson was formally shared with our global process safety team and the practice improvement was embedded into our global procedure for PHA.



Team member taking part in emergency response training session in Medicine Hat



#### Promoting process safety in the Egyptian oil and gas sector

In 2020, Methanex Egypt signed a Memorandum of Understanding (MOU) with the Egyptian Ministry of Petroleum and Mineral Resources to promote process safety management in the Egyptian oil and gas sector.

The MOU created an Egyptian Process Safety Management Steering Committee with the task of establishing and institutionalizing industry-wide best practice standards and guidelines for process safety management. Four Methanex Egypt employees are appointed to this Steering Committee. Details can be found on the Committee's [website](#).

# Product Safety

Methanol is an essential chemical building block used to produce hundreds of everyday industrial and consumer items. It's also a clean-burning fuel. Like many other chemicals and fuels, methanol can be toxic if swallowed, inhaled or absorbed by the skin. It is also flammable. Appropriate safety precautions must be taken when using, handling or working around methanol to keep people and the environment safe.

We promote the safe use and handling of methanol. Our product stewardship programs cover the entire product value chain, starting with product safety programs for our employees and customers, and expanding into how we interact with others in our supply chain through safe product transportation (see [page 35](#)). Through our product safety practices, we provide information about how to manage the risks of methanol and promoting its proper use and safe handling. We do this through:

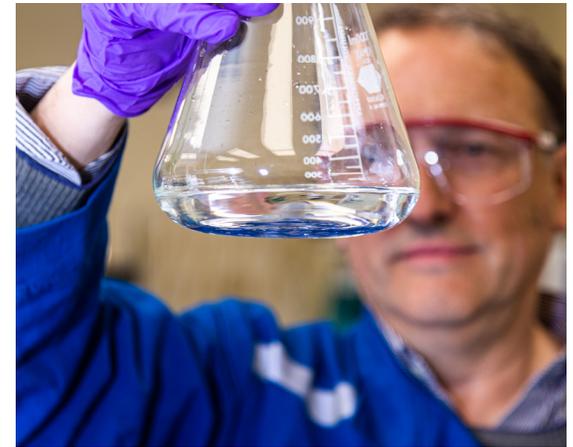
**Supporting safe handling by workers:** At our manufacturing sites, methanol is stored in tanks, transported via pipelines into marine vessels or loaded into rail cars or trucks. For this reason, very few workers come in contact with methanol. The only people who directly handle methanol are individuals who conduct quality testing (such as in our labs) or other procedures. These individuals are required to undergo specialized training and wear adequate personal protective equipment (PPE). To ensure workers and handlers of methanol have the information they need to stay safe, we provide [Safety Data Sheets](#) (SDSs), which are available in different languages. SDSs provide information on the hazards of methanol and contain advice about safety precautions, including minimum PPE to run facilities, undertake quality analysis and provide emergency response. As a global company, we provide SDSs in two formats: Globally Harmonized System (GHS) for use around the globe, and Registration, Evaluation, Authorization and Restrictions of Chemicals (REACH) for countries in the European Union.

**Encouraging safe methanol practices in our supply chain and beyond:** We regularly offer free seminars and webinars to share best practices in the safe handling and distribution of methanol and similar products. These information sessions are offered throughout the year in local languages, and are attended by supply chain partners, customers, terminals, surveyors,

distributors, carriers and emergency services, as well as local and/or regional authorities in all regions where we have sales activities. In 2020, we hosted 35 such seminars or webinars, reaching close to 800 participants.

We provide technical and safety information about methanol in multiple languages on our [website](#), including material SDSs as noted above, a methanol safe handling guide and video, and other educational materials. In 2020, we added new translations of safety materials to our website to increase customer and public access to this important information.

**Product stewardship through the industry:** We are members of various global and regional industry associations, including the [Methanol Institute](#) and [Chemistry Industry Association of Canada](#) among others, that provide information to the public about the safe use and handling of methanol. Our employees attend industry conferences and host open houses around the world to share best practices in the handling and transporting of chemicals, and to support the development of safety standards for methanol when used as a fuel.



# Transportation and Storage Safety

As the world's largest producer and supplier of methanol, it is essential that we use our leadership position to promote methanol safety best practices and set high safety standards for our suppliers. We choose partners that share our values and standards, including responsible carriers to safely transport our product and well-managed storage terminals to safely store it.

## CARRIER ASSESSMENT

We contract sea vessels, barges, trucks and railcars to distribute our product. Depending on the mode of transport, we use different assessments to evaluate and select responsible carriers that align with our values and safety practices.

**Vessels:** Approximately 80 per cent of our production is transported by marine vessels through our wholly owned-subsidiary Waterfront Shipping. For details, see Waterfront Shipping on [page 52](#).

**Railcars:** In North America, 40 per cent of our customers are supplied with methanol by rail. Of this, the majority is shipped using Methanex's 1,144 leased, operated and maintained railcars. In addition to regulatory inspections of those railcars every 10 years, our railcar preventative maintenance program in North America requires Methanex inspections of railcars every five years. Inspections verify that all equipment meets legislated standards.

In 2020, we received a [Grand Slam Award](#) from the Association of American Railroads for our 2019 rail performance in North America – the fifth year in a row receiving this award.

The award recognizes our annual achievement of zero non-accident releases while transporting, loading or unloading product. Our performance is made possible by our robust inspection and maintenance process. In Europe, our rail carriers are required to align with strict Safety & Quality Assessment for Sustainability (SQAS) standards.

**Barges and trucks:** In addition to vessels and rail, our regional offices also contract barges or trucks and conduct assessments appropriate for their jurisdiction. These assessments, which are conducted on a three- to five-year cycle, include criteria to evaluate quality, safety, security, environment and corporate social responsibility. Some assessments include: SQAS in Europe to evaluate the performance of logistics service providers and chemical distributors, the European Barge Inspection Scheme, Department of Transportation in the US, Transport Canada for trucking in North America, and Asociación Gremial de Industriales Químicos in Chile. In China, we developed a barge inspection questionnaire based on in-house shipping experience and use this in the barge vendor selection process.



## Emergency Response During Transportation and Storage

We maintain emergency response plans for transportation incidents involving methanol. An incident refers to any liquid or vapour release involving methanol, or a problem with the loading, unloading or transportation equipment.

Our global transportation emergency-response standards are based on the Chemistry Industry Association of Canada Transportation Emergency Assistance Plan ([TEAP III](#)) and Transportation Community Awareness and Emergency Response program ([TRANSCAER](#)). Methanex has incorporated these programs into internal standards and programs that are applied globally across our organization.

These programs focus on:

- Training and community awareness about the safe handling of methanol for key stakeholders and emergency responders.
- Risk assessments along the routes our product travels.
- Safety assurances on modes of storage and transportation of methanol (and products used for its manufacture).

### LEADING LOADING BEST PRACTICES IN THE INDUSTRY

In addition to providing safety data sheets to all customers and distributors, we share best practices on methanol safe handling and loading procedures throughout our supply chain from our plants to ship, rail or truck. We also offer methanol-handling safety seminars, webinars and workshops to stakeholders throughout our supply chain.

### TERMINAL ASSESSMENT

As part of our marketing and logistics service, we load and distribute methanol at 123 terminals around the world – the majority of which are customer terminals. We lease storage at 31 of these terminals. In 2020, to drive continual improvement, we revised our terminal assessment strategy and approval processes to provide us with an increased understanding of a terminal's quality, health, safety, security and environment practices. We use three types of assessments to assess our terminals:

**Type III:** The [Chemical Distribution Institute](#) - Terminal assessment (CDI-Terminal assessment) is our preferred assessment tool. This independent third-party inspection has more than 2,000 questions and is considered the gold standard for assessment. It forms the basis for further terminal visits by Methanex personnel, including follow-up on improvement plans. This assessment is valid for three years and is required at terminals being contracted or leased by Methanex.

**Type II:** This assessment is used when Methanex is not leasing the terminal and when the terminal does not have the internal resources to complete the CDI-Terminal assessment. At this level, the terminal completes a substantial questionnaire (developed by Methanex) that consists of 400-500 questions. This assessment is typically performed by an appointed Methanex representative during site visits and follow-up discussions. Terminals can also propose the use of alternative assessments that are acceptable to Methanex. The validity of the Type II Assessment is capped at three years.

**Type I:** This consists of a robust 12-page self-assessment questionnaire designed by Methanex, which is completed by the terminal's safety and environment department and evaluated by Methanex. A site visit is not an integral part of this minimum assessment. Type I is typically used for terminals that are lower risk and/or in transition to more in-depth assessments. Typically, the Type I Assessment is valid for one year.



Yeosu tank terminal facility in Yeosu, South Korea

# People Practices

Our team members are central to everything we do, helping us maintain our competitive advantage in the marketplace through their commitment to safely and reliably producing and distributing an essential product to markets worldwide.

We aim to attract and retain the best and the brightest, and we engage our team members by encouraging and supporting them to develop their unique talents and insights. The result is a thriving global [culture](#) that enables us to work together as One Team across functions, regions and disciplines to deliver on our [vision](#) of global methanol leadership. Our diverse geographic profile, yet relatively small headcount, provides our team members with the opportunity to make a [powerful impact](#) while working with a talented team of colleagues across the globe. We create tailored and meaningful experiences to grow and develop our employees with a focus on the specific competencies required to execute on our strategy. To maintain our engaged and talented workforce, we continue to evolve our integrated people and culture programs, with a particular emphasis on strategic workforce and succession planning, learning and development, competitive compensation, and driving diversity and inclusion.

## STRATEGIC WORKFORCE PLANNING:

Strategic workforce planning ensures we have plans in place to access talent with the skills and capabilities we need over the short, medium and long term. To prepare our global and regional strategic workforce plans, we review external trends (e.g., employees seeking greater flexibility in the workplace) along with our knowledge of employee demographics (e.g., gender and age). This review and planning process enables us to develop strategies to fill gaps in capabilities, experience and resourcing, including finding the right balance between internal and external talent both locally and globally.

## ENHANCED SUCCESSION PLANNING:

We have a robust succession and talent management program to build and preserve organizational capability and minimize succession risks. We proactively identify, assess and develop talent at all leadership levels within the organization and tailor development needs accordingly. Our leadership development programs – combined with on-the-job experiences, assignments and projects – help us close identified gaps (see Leadership Development sidebar).

## LEARNING AND DEVELOPMENT:

As a learning organization, our employees are encouraged to consider their development in terms of the 70/20/10 approach: 70 per cent of development happens on the job, 20 per cent is from leadership coaching, mentoring and network interactions, and 10 per cent comes from formal learning. In 2020, due to COVID-19 travel restrictions and constrained resources, we focused on on-the-job learning and other creative ways to approach employee development. Leaders and employees regularly collaborate to define stretch goals for employees within their current roles.

## COMPETITIVE COMPENSATION:

Our global Total Rewards philosophy focuses on rewarding performance and helps us attract and retain a highly skilled and effective workforce. Our competitive compensation programs include a range of benefits and flexible work arrangements that recognize and reward our diverse workforce across our regions.

## Leadership Development

We maintain our industry leadership position by continuously growing and developing our people. Our formal, customized leadership development programs support the development of leaders at all levels of the organization to maximize their potential. Some of these programs include:

- Our Global Leadership Suite is an integrated set of five signature leadership development programs customized for leaders at all levels:
  - » the Executive Leadership Program provides opportunities for senior leaders to explore the specific and complex challenges of leading vision, strategy, teams and culture in our global organization,
  - » the Courageous Leadership Program enables mid-level leaders to explore their leadership style and learn the fundamentals of supporting high-performing teams and change management,
  - » the Centre for Creative Leadership Global Leadership Forum helps participants learn how to unlock their leadership potential and develop key leadership skills,
  - » Methanex Leadership Essentials includes one- or two-day learning modules that introduce the fundamentals of being a people leader and reinforces our Core Values, and
  - » the High-IMPACT Coaching Program empowers participants to see how they can embody leadership that prioritizes the development and empowerment of others.
- Our Global Mobility Program supports our succession planning by offering development opportunities to individuals who have critical skills to support our strategy. Participants are assigned to a role in another geographic region to gain experience and accelerate their development.
- Our Graduates in Training program is a two-year development program designed to foster leadership and professional growth among recent engineering graduates. In 2020, we supported 31 graduates in training at our manufacturing sites.

# Diversity and Inclusion

Our team members span 11 countries, speak different languages, represent different cultures and have different backgrounds, experiences and perspectives. Through our One Team approach, we collaborate across global functions and regions toward our common goals.

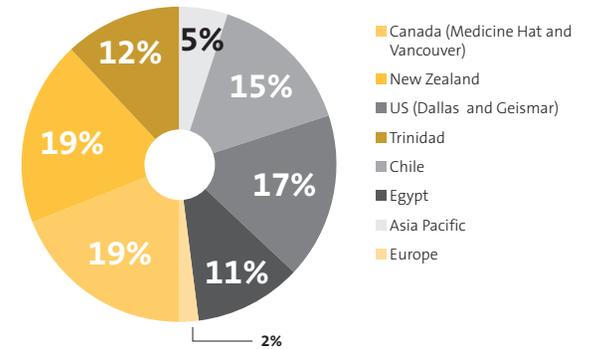
At Methanex, we strive to provide an inclusive work environment where diversity is valued and sought after and all global team members are encouraged and supported to reach their full potential. Valuing diversity & inclusion (D&I) means embracing our differences as strengths and recognizing how this contributes to our competitive advantage. We are committed to listening and hearing from all of our team members to understand how and where we can do more and do better in these important areas.

**Diversity and Inclusion Council:** In 2020, an interim D&I Taskforce was established to put forward recommendations to the Executive Leadership Team on how best to progress our D&I efforts. The Taskforce recommended establishing a D&I Council, to be chaired by a dedicated D&I leader, as well as conducting a baseline D&I assessment to guide our strategy and action plan going forward. In early 2021, we appointed a permanent Director of Diversity and Inclusion who will chair our newly established Global D&I Council and report our progress to the Board and Executive Leadership Team. The Global D&I Council is made up of leaders from around the world who will lead the development and implementation of Methanex's D&I strategy.

For information about diversity on Methanex's Board of Directors, see the Corporate Governance section on [page 43](#).

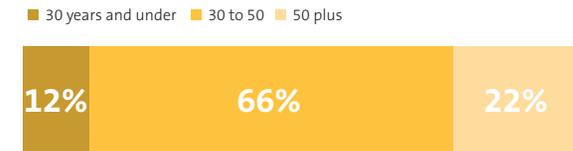


## 2020 Employees by Location

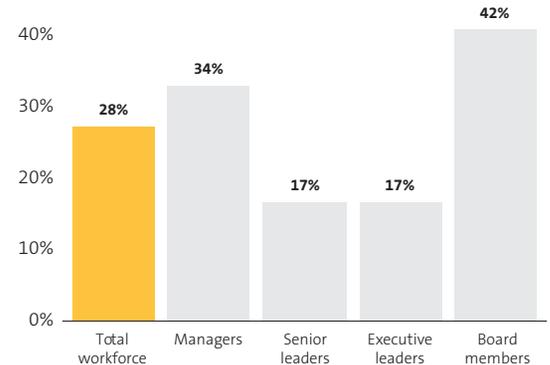


Our employees speak different languages, have different backgrounds and represent different cultures.

## 2020 Employee Age Categories



## 2020 Women at Various Levels



In 2020, five women were part of our 12-member Board, exceeding our Board Diversity Policy target of having 30% gender representation. We will continue to work on our diversity and inclusion practices across the company.

# Relationships with Local and Indigenous Communities

We believe our business should have a positive impact on people’s lives and we aim to be a good neighbour and valued corporate citizen by creating positive and sustainable impacts in our communities. We partner and collaborate with local and Indigenous communities on shared goals that foster healthy, long-term relationships.

## COMMUNITY ENGAGEMENT

We consistently work to understand community interests, communicate information about our product and business activities, and address any community concerns. We do this primarily through Community Advisory Panels, as well as stakeholder associations, open-house days, community projects, seminars, community surveys and public meetings.

**Community Advisory Panels (CAPs)** in our manufacturing locations encourage communication and transparency between Methanex and the community, helping us build and sustain positive, ongoing relationships with our stakeholders. CAP meetings allow us to share information about plant operations, seek input on our community investment programs and address any community questions and concerns related to our product and operations. In 2020, we held 16 CAP meetings across five locations (both in person and virtually). Discussion topics were primarily related to COVID-19, community engagement programs, turnaround planning and our efforts to address climate change.

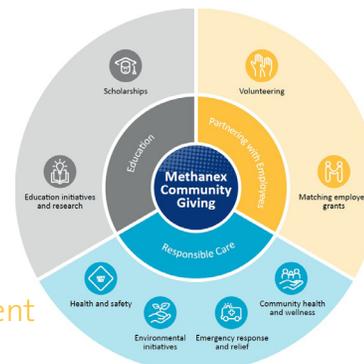
**Internal policies and standards** that guide our engagement and communication with communities include our [Stakeholder Relations Policy](#), which outlines principles for community outreach and involvement, and our Operating Site Community Dialogue Standard, which guides structured community dialogue with neighbouring communities.

**Industry standards for accountability:** We adhere to the Chemistry Industry Association of Canada’s (CIAC) Responsible Care [Accountability Code \(Code\)](#) which outlines expectations for proactive community awareness and dialogue. In early 2020, the CIAC updated the Code, requiring members to engage with Indigenous communities in a manner that respects their unique history, culture and rights. We have modified our internal policies and standards to align with the new Indigenous Communities Code elements.

## COMMUNITY INVESTMENT

In addition to creating jobs and economic opportunities, we are committed to building and supporting healthy communities that are great places to live and work. Our community investments include partnering with employees through a matching grants program; financial assistance for health, safety and environmental initiatives; and support for regional educational development and scholarships. For more details about our community investment efforts around the world in 2020, see our Sustainability Highlights.

In 2020, Methanex donated USD \$1.7 million and almost **7,500 hours** of employee time (together valued at over one per cent of our adjusted net income over the last five years) to community efforts around the world.



## Respecting Indigenous Cultural Heritage

We interact with Indigenous communities in New Zealand and Canada. In our operations and interactions, we aim to respect Indigenous rights and culture, including cultural heritage resources.

Cultural heritage resources refer to objects, sites or locations of cultural, historical or archaeological significance to Indigenous communities. As an example of our commitment, we developed and implemented a Māori engagement strategy in New Zealand. This strategy was created to meaningfully strengthen our relationships with the iwi and hapū in North Taranaki where our Motunui and Waitara Valley plants are located.

In 2020, this work led to the signing of a Memorandum of Understanding with the Ngāti Rahiri hapū and a subsequent land access agreement to provide access to sacred land in the area surrounding our site for the hapū to use for cultural ceremonies. As a result of this work, we have improved our understanding of the Māori people and strengthened our community relationships.

Methanex New Zealand won the New Zealand Energy Excellence Award in recognition of our work to strengthen hapū relationships through learning and understanding.

### COVID-19 EMERGENCY RELIEF EFFORTS IN 2020

Due to the devastating impacts of the COVID-19 pandemic on communities around the world, we focused our 2020 community investments on providing emergency relief to those suffering the most. We engaged in a range of efforts, from providing personal protective equipment and meals for essential front-line workers to donating food boxes and medical supplies in regions with shortages.

#### Medicine Hat

Donations to local food banks to support local families in need, front-line health care workers and front-line truck drivers

#### Vancouver

Donations to the local food bank and to KidSafe to ensure that 450 children in poverty in Vancouver received food and assistance

#### Dallas

Meals for front-line health-care workers

#### Geismar

Donations to provide personal protective equipment and meals for front-line health-care workers



#### Brussels

Triage tents at major hospitals, free meals to the homeless and laptops for students to continue their schooling online

#### Trinidad

Meals for front-line medical workers; supplies and equipment for staff and residents at two cancer hospices, two children's homes, a senior citizens' home and a local COVID-19 recovery unit

#### Chile

Provided tablets and internet service to vulnerable high school students so that they could continue their studies remotely during school closures.

#### Egypt

12,686 food boxes donated to vulnerable residents of Damietta



#### China

Donations to Hubei Charity Federation for epidemic prevention and control, including personal protective equipment and other essential supplies for medical care workers on the front lines



#### New Zealand

Support for children's mental health and front-line teachers and staff at a local school



# Governance

We believe good corporate governance is critical for the effective, efficient and prudent operation of our business. Our governance framework includes processes and structures to ensure we manage our business in the best interests of our stakeholders. Our strong corporate culture and values inform everything we do and are embedded throughout our governance systems, processes and behaviours.

## 2020 Highlights

- Appointed a new director, Leslie O'Donoghue, to the Board, continuing our commitment to diversity, inclusion and regular Board renewal.
- Embedded a target into the Board Diversity Policy that each gender comprises at least 30 per cent of the directors of the Board.
- Completed cybersecurity training for approximately 1,900 global employees and contractors (94 per cent of team members).



# Values & Culture

A thriving global culture is a key driver of our business success. It underpins the governance systems, processes and people that guide Methanex, and ensures we work in the best interests of our stakeholders. For shareholders, this means giving them confidence that Methanex will deliver sustained value through profitable investments and safe, reliable operations. For customers, this means peace of mind: a safe and reliable supply of methanol and responsive, cost-effective operations. For communities, this means upholding our commitment to health and safety, environmental protection and social responsibility. For employees, this means having a culture that aligns with their values, personal well-being and professional development. As we work to continuously improve, innovate and learn, the four elements of our culture – our Core Values, Responsible Care<sup>4</sup>, One Team and Learning & Development – serve as the foundation for everything we do.

Our core values of trust, respect, integrity and professionalism are at the core of our business and are the guiding principles for everything we do.



We believe we do our best work together and we depend on one another for success. We are committed to working together as One Team across functions, regions and disciplines.

We believe our business must have a positive impact on people's lives. Our commitment to Responsible Care is a commitment to the people and the environment in which we live, work and play, and the foundation of everything we do.

We are a learning, innovative organization and we strive for continuous improvement. We believe our employees are our greatest asset and we are committed to their personal and professional growth.



<sup>4</sup>The [Responsible Care](#)<sup>®</sup> Ethic and Principles for Sustainability is a chemical industry sustainability initiative recognized by the United Nations.

# Corporate Governance

We believe good corporate governance is critical for the effective, efficient and prudent operation of Methanex. This means ensuring we have the appropriate processes and structures in place to manage our business in the best interests of our stakeholders.

Our Board's Corporate Governance Principles establish a system of goal setting, effective decision-making and ethical actions, with the objective of sustaining a vital company that creates and protects value for Methanex's shareholders. It is with these principles in mind that the Board provides oversight and guidance to management.

**Board Structure:** In 2020, our Board was composed of 12 directors. Eleven of them were independent. The Board executes its mandate through four committees: Audit, Finance and Risk; Corporate Governance; Human Resources; and Responsible Care. Only independent directors chair or sit on our committees. The Board has identified a set of skills and experience as valuable in the context of Methanex's strategic direction. Annually, the Corporate Governance Committee reviews the current directors' skills and experience against that list, creating a skills matrix. When considering potential nominees, the Corporate Governance Committee considers potential gaps in the skills matrix (current or anticipated through retirement) as well as diversity (as described more fully below). For more details on our Board structure and nomination process, see our Information Circular and the Chair's Message to Shareholders in our [Annual Report](#).

**Board Diversity and Renewal:** At Methanex, we strive to create an inclusive culture in which diversity is valued and differences are embraced (see [page 38](#) for more information on our efforts around diversity and inclusion). We recognize the importance of diversity, including gender diversity, at all levels of Methanex, starting with the Board. Board diversity promotes the inclusion of different perspectives and ideas and ensures Methanex has the opportunity to benefit from all available talent. This enhances and improves our decision-making. Our Board Diversity Policy encourages a diversity of skill sets and perspectives, balancing experience with age, gender, ethnicity, geography and personal attributes. In 2020, five of our 12 directors (42%) were women. In March 2021, the policy embedded a target that each gender comprises at least 30 per cent of the directors of the Board.

We do not have term limits or a formal retirement policy for Board members. It takes many years to acquire in-depth knowledge about Methanex and the cyclical nature of the chemical industry, and we place great value on maintaining a certain amount of institutional knowledge on our Board. We also believe it is critical to have Board renewal. This helps ensure we have a high-performing Board over the long term and brings fresh ideas and new knowledge to the Board. It also provides opportunities to enhance diversity. We seek to achieve an appropriate balance of long-standing and new Board members to ensure the Board functions most effectively.

GOVERNANCE INFORMATION*	
<b>Shareholder rights</b>	
Proxy access	Yes
Say on Pay advisory vote	Yes
<b>Shareholding</b>	
Stock ownership requirements for Directors	Yes
Stock ownership requirements for Executive Officers	Yes
<b>Ethics</b>	
Code of Conduct for Directors, officers and employees	Yes
Policy on share trading and hedging	Yes
<b>Board composition and independence</b>	
Size of Board	12
Number of independent directors	11
Separate Chair and CEO	Yes
Independent chair (required)	Yes
Comprehensive board assessment process	Yes
Board meetings held in 2020	10
Average meeting attendance	100%
<b>Board renewal and diversity</b>	
Annual election of Directors	Yes
Majority voting policy	Yes
Average age of Directors	62
Mandatory retirement age	No
Average Director tenure	5.7 years
Women Board members	42%
Board Diversity Policy	Yes

\*Information as of December 31, 2020.

**Executive compensation:** Methanex’s executive compensation framework is based on a pay-for-performance philosophy to align performance with the interests of shareholders. Executive compensation is closely tied to Methanex’s financial performance. In 2020, more than 80 per cent of our CEO’s total compensation, and approximately 70 per cent of named executive officers’ total compensation, was based on performance (or “at risk”). Since 2011, we have included an advisory “say on pay” vote at our annual meetings. In addition, the Chair of the Board solicits feedback during annual meetings with institutional shareholders. From mid-March to June 30, we also provide a link on the Investor Relations page of our website to enable such feedback. For more details, see our [Information Circular](#).

**Executive compensation linked to environmental and social factors:** Thirty per cent of the CEO and named executive officers’ annual short-term incentive award is tied directly to individual performance goals aligned with Methanex’s strategic and operational goals. In 2020, the CEO’s individual goals related to environmental, social and governance factors included:

- Maintaining a strong focus on health, safety and the environment, including:
  - » Staying focused on preventing injuries to our employees and contractors while at work.
  - » Preventing environmental incidents.
  - » Continuing to implement our process safety management program to reduce risks and enhance assurances around process safety.
  - » Continuing to lead product stewardship and Responsible Care initiatives with our customers and terminal partners.
- Progressing our Cybersecurity Strategy
- Providing regular, clear and consistent two-way communications to all our stakeholders.
- Demonstrating our Core Values and One Team culture.

The Human Resources Committee is responsible for reviewing the CEO’s individual performance and found that his overall individual performance for 2020 exceeded expectations. However, the CEO declined to receive a short-term incentive for 2020.

In 2021, the CEO’s goals relating to environmental, social and governance factors include the above, as well as the following additional goals:

- Ensuring the health and well-being of our team members are protected as we continue to navigate the COVID-19 pandemic.
- Progressing the integration of ESG matters in our decision-making throughout the Company.
- Progressing diversity and inclusion at Methanex through the establishment of a Diversity and Inclusion Council and a Diversity and Inclusion Policy, strategy and related action plan.



# Governance for Sustainability

Our Board oversees risk management at Methanex, ensuring we have an effective process for identifying, monitoring, evaluating and addressing important enterprise-wide strategic and business risks. In addition, the Board oversees our long-term strategy and initiatives that require a long-term view on the evolving landscape of ESG matters, including the impacts of climate change on our business. With oversight from Methanex's Board, our Executive Leadership Team (ELT), including the CEO, is ultimately responsible for sustainability/ESG at Methanex.

## BOARD AND COMMITTEE OVERSIGHT

The Board as a whole has oversight of ESG and is responsible for understanding and addressing emerging trends, regulations, risks and opportunities and the impact they can have on the methanol industry and our business and stakeholders. Annually, the Board reviews our assessment of Methanex's principal strategic risks based on management's formal risk review process. We recognize that stakeholders are placing more emphasis on the impacts of climate change, and the trends and regulations that affect our business increasingly include climate-related risks and opportunities (for more details on our climate-related risks, see the Climate Related Risks and Opportunities section on [page 21](#)). One of the Board's 2021 objectives is to oversee Methanex's development of an overarching ESG strategy and determine the appropriate framework for Board oversight of ESG matters going forward.

Currently, the Board's four standing committees oversee individual aspects of ESG. Each committee has a formal mandate to provide guidance to management and recommendations to the Board on relevant ESG topic areas:

- The *Responsible Care Committee* oversees Methanex's performance in environmental protection (including GHG emissions), health and safety (occupational and process safety) and physical security and product stewardship, including monitoring and reviewing any incidents that occur. It also monitors trends and global legislative initiatives that have the potential to affect Methanex's activities. The Responsible Care Committee reviews our social responsibility program and strategy to ensure our commitment to communities is upheld in all regions. In addition, it reviews our Crisis Management and Crisis Communications Plans. This committee met three times in 2020.
- The *Audit, Finance and Risk Committee* (the "Audit Committee") reviews Methanex's processes for identifying, monitoring, evaluating and addressing important enterprise-wide strategic and business risks, including climate-related issues at least annually. The Audit Committee reviews the status of key strategic risks, their anticipated impacts and significant changes in the assessment of those strategic risks. In addition, the Audit Committee oversees our internal controls, which, among other things, are intended to promote honest and ethical behaviour, in line with our Code of Conduct and our Corrupt Payment Prevention Policy (see [page 47](#)). The Audit Committee is also responsible for the review of our cybersecurity and IT security risks (see Cybersecurity on [page 50](#)). This committee met 10 times in 2020.
- The *Corporate Governance Committee* is responsible for the composition, compensation, and governance of the Board. It assesses Board performance and takes a leadership role in shaping corporate governance practices. The Corporate Governance Committee regularly considers developments in corporate governance best practices and reviews and monitors compliance with our corporate governance related policies, including our Code of Conduct and Corrupt Payment Prevention Policy. It also makes recommendations to the Board where changes may be appropriate. For 2021, the Corporate Governance Committee recommended revisions to the Board Diversity Policy, including embedding a target that each gender comprises at least 30 per cent of the directors of the Board. This was approved by the Board in March 2021. This committee met three times in 2020.
- The *Human Resources Committee* is responsible for approving the CEO's goals and objectives and evaluating the CEO's performance. It also reviews and makes recommendations for all named executive officers' compensation. As part of this responsibility, the Human Resources Committee reviews Methanex's risk-based compensation approach to ensure executive compensation is aligned with shareholder interests. While the Corporate Governance Committee is responsible for the Board Diversity Policy, the Human Resources Committee is responsible for overseeing organizational diversity and inclusion initiatives, talent management, and human resource policies and development programs. This committee met six times in 2020.

For more information regarding our Board and Committee Structure, please refer to our [Information Circular](#) and our [Committee Mandates](#) and [Board Governance Principles](#).

## ROLE OF MANAGEMENT IN IDENTIFYING AND MANAGING ENVIRONMENTAL AND SOCIAL RISKS

We believe that identifying and managing our sustainability risks and opportunities contributes to long-term value creation, protects our reputation, enhances our resilience and helps future-proof our business. One of the Board's primary roles is to oversee our risk management processes, with general oversight delegated to the the Audit Committee. To assist the Board and the Audit Committee, we have in place an enterprise risk management ("ERM") process that is led by the Chief Financial Officer (CFO) and our Director, Internal Audit. As part of the ERM process, the CFO and Director, Internal Audit, in conjunction with the ELT, annually review and update our register of strategic and enterprise-wide risks (the "Strategic Risks Register"), including methods for risk assessment and risk mitigation strategies, and assign responsibility for overseeing those strategies to senior management and/or the Board. As part of that annual process, the Director, Internal Audit also seeks input from the senior leaders for each of our manufacturing and marketing and logistics operations to ensure that any material risks within their operations are included within the Strategic Risks Register, where appropriate. The Strategic Risks Register is reviewed by our ELT and included as part of the materials for the Board's annual strategy process.

In addition to the annual ERM process, management reports to the Audit Committee on the status, anticipated impacts and significant changes in the assessment of our strategic and enterprise-wide risks. Our material environmental and social risks are fully described in the Risk Factors section of our [MD&A](#).

We also review our material ESG topics to ensure they reflect stakeholder expectations and the changing business environment and that prioritized topics inform our organizational priorities and business plans. Foundational to these efforts is the [Responsible Care®](#) Ethic and Principles for Sustainability, a United Nations-recognized chemical industry initiative that informs our governance and management around environment and social topics. In 2020, we undertook a materiality assessment to update and prioritize the sustainability topics that are most relevant to our business and stakeholders (see [page 6](#) for matrix). The results were endorsed by our ELT. Below is an overview of the key governance structures that help us manage our material environmental and social risks and opportunities:

- *Executive Leadership Team (ELT)*: Our ELT has overall responsibility for ensuring a broad range of environmental, social and governance topics are being effectively evaluated and managed – including risks and opportunities associated with our GHG emissions, climate change and transition to a low-carbon economy. The ELT incorporate these topics into our strategic and business planning activities for the long-term sustainability of our business. As set out above in "Executive Compensation linked to environmental and social factors" on [page 44](#), our CEO has several annual goals tied to ESG matters.
- *CO<sub>2</sub> Emissions Management and Transition to a Low-Carbon Economy Leadership teams*: As part of our commitment to play an active role in society's transition to a low-carbon economy, in 2021 we are establishing two leadership teams with responsibilities for updating our strategy related to Methanex's CO<sub>2</sub> emissions and transition to a low-carbon economy. One team will evaluate emissions reduction opportunities, technologies and strategies for our manufacturing plants. A second team will assess potential market-related impacts of a transition to a low-carbon economy and opportunities for low-carbon and renewable methanol. For more information on our CO<sub>2</sub> management efforts and climate risks, see [page 16](#).
- *Methanex Global Integrated Management System*: Our Global Integrated Management System (GIMS) sets a systematic, consistent and proactive management approach for all aspects of our global operations, with the goal of ensuring all Methanex activities are focused on protecting people, environment and our assets while achieving a safe, reliable and sustainable production and supply of methanol. GIMS operationalizes five international management system standards as well as applicable legislation and regulations, with the objective to meet or exceed the standards, legislation and regulations. GIMS guides operating activities through policies, programs, standards, processes, procedures, competencies and qualifications, thereby embedding our commitments around the environment and social responsibility into our operations and business activities. See sidebar for more information on GIMS.

## Methanex's Global Integrated Management System (GIMS)

GIMS is how we operationalize our everyday commitments to a broad range of stakeholders around the environment, occupational safety, process safety, reliability, emergency preparedness, crisis management, product stewardship, stakeholder engagement, social responsibility, quality and security. It outlines requirements for all of our operations and offices and defines minimum expectations. GIMS meets or exceeds the following internationally recognized standards:

- Chemistry Industry Association of Canada [Responsible Care](#) Codes of Practice
- International Organization for Standardization: Quality (ISO 9001:2015), Environment ([ISO 14001:2015](#)), Occupational Health and Safety ([ISO 45001:2018](#))
- Center for Chemical Process Safety (CCPS) process safety management

To ensure compliance, assess performance and drive continual improvement, we audit our management system in two ways:

- Our internal, global, risk-based audit program reviews management practices through regional self-audits and global-level audits conducted by Methanex subject matter experts.
- Third-party assessments, such as Responsible Care [verification](#) and ISO audits, are conducted globally on a regular audit schedule. They provide external benchmarking and verify the integrity of our systems. Audit results are communicated to leadership who report regularly to the Responsible Care Committee of the Board on work to close identified gaps.

# Ethics and Anti-Corruption

Ethical behaviour is essential at Methanex for building trusting relationships with stakeholders, protecting our reputation and reducing our legal and financial risk. Our culture is centred around ethical and honest behaviour, which is reinforced through our corporate policies.

## SETTING EXPECTATIONS

**Code of Business Conduct:** Our [Code of Business Conduct](#) (Code) reinforces our core values of trust, respect, integrity and professionalism. It is an important element of how we do business and drives our success as a company. The Code outlines our expectations for ethical behaviour and applies to directors, officers and employees. The Code is available in several languages. Our directors, ELT and other senior leaders are required to confirm, on an annual basis, that they have read, understood and agree to comply with the Code, and acknowledge that they are responsible for communicating Code expectations to employees. As part of our hiring and onboarding process, all new employees must read and acknowledge our Code.

**Anti-Harassment Policy:** Our Anti-Harassment Policy sets out our commitment to providing a workplace that is free from all forms of harassment and guides how we investigate and respond to allegations of harassment. Our global onboarding process covers the Code of Conduct and Anti-Harassment Policy. In 2021, to strengthen our training processes, we intend to develop a Respectful Workplace Awareness training program for rollout to all employees in 2022.

**Corrupt Payments Prevention Policy:** At Methanex, we do not tolerate bribery or corruption and we are committed to acting professionally, honourably and with integrity in all business dealings and relationships. Our [Corrupt Payments Prevention Policy](#) prohibits the negotiation, payment or receipt of bribes, facilitation payments or kickbacks by employees, contractors or agents acting on our behalf. To address risks around facilitation payments in international shipping, we contractually prohibit our ship management companies (who operate the vessels that Waterfront Shipping charters) from accepting or offering

facilitation payments in their charter contracts with us. Our Corrupt Payments Prevention Policy also includes guidance for third-party gifts and entertainment expenditures to ensure a gift would not be viewed as a bribe, facilitation payment or kickback. Our Corporate Gifts and Entertainment Policy provides additional detail around the appropriateness of gifts and entertainment that employees may be offered or accept.

**Confidential Information and Trading in Securities Policy:** This policy provides guidelines to employees with respect to the treatment of confidential information and advises insiders as to when they may trade in Methanex shares. This policy also prohibits insiders, including all Methanex's executive officers and directors, from purchasing financial instruments designed to hedge or offset a decrease in the market value of our common shares or equity-based incentive awards that they hold. Insiders are also prohibited from short selling the company's securities, trading in put or call options on the company's securities, or entering into equity monetization arrangements related to the company's securities.

Employees regularly receive either web-based or in-person compliance training that focuses on ethical business conduct and the foregoing policies. In addition, employees and directors who are considered "insiders" under Canadian securities laws have been provided with training concerning their obligations and responsibilities under Canadian securities laws.



## Training for ethical business behaviour

Our onboarding process for new employees includes an online or in-person training module on the Code of Business Conduct (Code).

Senior leaders must sign off to indicate that they understand and will comply with the Code, and that they will communicate the same expectations to their teams. All senior leaders are required to acknowledge this responsibility annually.

We also provide in-person or virtual anti-competition training for our employees in Marketing and Logistics regions as well as individuals who work with industry associations due to the heightened risk associated with their interactions.

Every year, employees watch a video presentation by our general counsel reminding everyone of the expectations contained in the Code. The video also highlights ways that employees can raise concerns (e.g., through our Ethics Hotline) about a potential breach of the Code.

## ASSESSING RISKS

Each year, as part of the planning process for our Sarbanes-Oxley (SOX) compliance testing, our internal audit team conducts a global fraud risk assessment. Our Internal Audit Team evaluates fraud risks and determines if the organization has controls in place to address these risks and if additional testing is required. In particular, this assessment considers different fraud-related risks such as kickbacks, theft (e.g., misappropriation of inventory, petty cash, false expense claims, equipment theft, securities fraud, creation of fictitious vendors), illegal payments/inappropriate gifts, securities fraud and conflicts of interest. In 2020, internal controls testing was completed for all manufacturing and marketing and logistics operations.<sup>4</sup>

## REPORTING VIA OUR ETHICS HOTLINE

Employees must report any conduct or proposed conduct that they reasonably believe to be a violation of the Code. They can do so through their supervisor, human resources, our legal department or the confidential whistleblower Ethics Hotline. The Hotline is available through our intranet, our [company website](#) or by phone. Employees who report Code violations in good faith will not be disciplined, demoted, fired, threatened, harassed or discriminated against in any way. We take allegations regarding breaches of the Code very seriously and all reports of Code violations received through the Ethics Hotline are investigated by Methanex's general counsel and forwarded to appropriate members of management for follow-up. In the case of an alleged violation by an executive officer or director, the Chair and/or CEO and the Board of Directors are responsible for determining whether a violation has occurred and, if so, what disciplinary measures are appropriate. Reported violations of the Code are handled promptly, professionally and with as much confidentiality as possible. Concerns regarding financial or accounting-related matters are immediately reported to the Chair of the Audit Committee and together with the general counsel, they determine how best to investigate the reported concerns. In addition, the general counsel annually provides the Corporate Governance Committee with a summary of any reports of breaches of the Code.

<sup>4</sup>These include our head office in Vancouver, Canada; our manufacturing operations in Canada, the US, Chile, Trinidad, Egypt and New Zealand; and our marketing & logistics operations in the US, Chile, China, Asia Pacific (includes our offices in Hong Kong, Korea and Japan) and Belgium.

# Anti-Competition

As the leader in the global methanol industry, we believe it is critically important for our employees to be able to identify what is considered anti-competitive behaviour and to know how to prevent or respond to anti-competitive behaviour, real or perceived, that they may encounter. As a global company we have many different relationships with third parties, including customers, distributors, gas suppliers and competitors with whom we have methanol “swap” agreements or from whom we purchase methanol, as well as memberships in industry associations such as the Methanol Institute. Anti-competitive behaviour is harmful to the vitality of our industry and it can expose our business to significant penalties and impair our reputation. In all our relationships, we abide by the principles of fair competition and comply with all antitrust and competition laws applicable in the jurisdictions in which Methanex does business. In addition to highlighting the importance of fair dealing with third parties and compliance with competition laws in the Code, we have a Competition Law Policy that outlines prohibited anti-competitive behaviours with competitors, customers or other third parties, as well as the behaviours and practices to follow to avoid inadvertent or perceived anti-competitive behaviour. Employees throughout our organization who may encounter competitors through commercial negotiations or transactions or industry associations must acknowledge our Competition Law Policy annually. In addition, the legal department, often with the support of external counsel, regularly provides competition law training to our marketing and logistics teams across our regions.

# Tax Transparency

Through our business activities, we contribute to local economies through employment, the purchase of goods and services, tax payments and community investments. In accordance with our Tax Governance Guidelines, we ensure our tax procedures and interactions are compliant, co-operative, transparent and ethical. We undertake tax planning in accordance with applicable local laws and international transfer pricing standards such as the Organisation for Economic Co-operation and Development guidelines, with the goal of supporting the development of Methanex’s business in a way that reflects its legal obligations and its commitments to its people, its shareholders and the communities in which it operates. Our financial statements and [MD&A](#) provide detailed information on income taxes.

# Responsible Procurement

Maintaining an ethical and responsible approach to our procurement processes helps us uphold our company standards for social and labour practices, and builds resilience to environmental, political and other disruptive events. The majority of our procurement budget is used to purchase natural gas and other feedstocks, followed by the procurement of services such as transportation for our product and labour, including contractors. We seek to work with suppliers and contractors that align with Methanex’s values and responsible practices.

**Natural gas procurement:** Methanex requires natural gas to manufacture methanol and we aim to locate our production facilities in regions where there is excess natural gas after meeting local basic population needs. The supply and demand balance in a region can change over time, and in the event of a supply shortfall, our goal is to work with local authorities to ensure basic population needs are met while ensuring we are treated fairly versus other industrial natural gas users in the region. For further details on the security of natural gas for our operations please see our [Annual Report](#).

**Contractor selection:** A contractor’s environmental, health and safety performance is an important consideration during the vendor qualification and vendor selection process. For additional details on how we select responsible carriers and contractors, see Transportation and Storage Safety ([page 35](#)), Waterfront Shipping ([page 52](#)) and Contractor Management ([page 30](#)). In 2020, we conducted a pilot for a Supplier Code of Conduct (Supplier Code) by embedding it into our contracting process in New Zealand. The Supplier Code outlines three key principles that Methanex expects the service provider to adhere to: respect for people, environmental stewardship and corporate governance. We are evaluating applying this Supplier Code to our global contracting processes.

# Cybersecurity

The use of digital technologies is revolutionizing our industry, providing significant business opportunities and enabling efficiencies. However, the reliance on digital systems also exposes us to the potential for digital piracy, cyber-ransom and other threats. Methanex is focused on resilience against cyberattacks to protect our data, systems, assets and identities. When employees began working remotely in 2020 due to COVID-19, it became even more important to apply cybersecurity measures and ensure our team members are equipped to play a key role in helping to mitigate cybercrime. We use the following processes and systems to manage cybersecurity-related risks:

**Comprehensive system:** We protect our systems, information and physical assets through a cybersecurity system that aligns with the [National Institute of Standards and Technology Cybersecurity Framework](#), and includes people, process and technology elements. The system is reviewed annually internally and assessed by an independent third party every three years. The most recent independent review was in 2019.

**Critical assets in separate networks:** Our network is divided into smaller segments (zones) to ensure our critical systems and assets are protected from malware and malicious actors. Each zone is classified based on how critical it is to the organization, with appropriate security controls or rules in place to manage access and traffic flow. We protect our most critical zones, such as our plant systems, from the Internet and the corporate network, minimizing the risk of breach.

**Risk assessment:** We work with our business units to identify risks by conducting cybersecurity reviews of emerging threats, cyber process hazard assessments at our manufacturing sites, and threat modelling to simulate potential threats. The results inform changes to make business processes more resilient to cyberattacks.

**Training:** We provide annual, mandatory cybersecurity awareness training sessions for all employees. In 2020, approximately 1,900 employees and contractors completed cybersecurity training (approximately 94 per cent of team members). We also provide specific training for Human Resources and IT employees to help them manage the increased data privacy risks related to their roles.

**Awareness campaigns:** We provide information to make employees aware of their critical role in preventing unauthorized access to Methanex's network. Our CEO publishes a quarterly cybersecurity blog to reinforce the importance of cyber awareness, highlight best practices in digital hygiene and to direct employees to resources for questions or support. On our intranet, we provide a list of best practices to prevent common attacks such as phishing scams and social engineering. We also hold awareness events such as International Cybersecurity Awareness Month and International Privacy Awareness Day.

**Testing:** We regularly test employees' cybersecurity awareness through phishing campaigns, and the results inform our cybersecurity training strategy for the year. In 2021, business leaders will receive testing results for their teams and, where needed, coaching to improve team awareness and compliance.



# Crisis Management

Our ability to respond effectively to disruptions is essential for safe, continuous operations during a crisis or disaster. We have crisis management plans and crisis management teams in all regions. These regional teams collaborate with our Global Crisis Management Team to support business continuity during a crisis or disaster. We hold regular exercises to test our crisis management response both at a global and regional level, including regional crisis management simulations and exercises with external emergency response agencies.

When COVID-19 emerged in early 2020, we activated our Global Infectious Disease Contingency Plan (developed in response to the SARS epidemic in 2003) and our Global Crisis Management Plan. Key elements of these plans included:

- Reducing exposure to protect employee and contractor safety and health while ensuring ongoing safe and reliable manufacturing operations.
- Mitigating supply chain risks.
- Mitigating IT and occupational health risks associated with working remotely.
- Transparently communicating information through multiple channels in a timely manner to employees and their families, customers, shareholders and other key stakeholders.

To address the unfolding crisis, our Global Crisis Management team met more than 60 times during 2020 (in addition to the regional crisis teams that were also meeting on a regular basis). As a result of the agility and resilience of our teams, we were able to respond to events as they occurred and adjust our plans as needed to mitigate exposure and maximize the safety of our employees and communities. To learn more about our COVID-19 response please see [page 31](#).

# Waterfront Shipping

Our wholly owned subsidiary Waterfront Shipping is at the forefront of safe and reliable marine transport solutions. In alignment with Methanex's values, Waterfront strives to achieve high standards of health, safety and environmental protection. We are also a leader in demonstrating methanol as a viable, low-emissions alternative marine fuel for the shipping industry.

## 2020 Highlights

- Waterfront **ordered eight new lower-emission, methanol dual-fuel vessels** to add to the fleet.
- At the end of 2020, Waterfront's use of methanol marine fuel resulted in **emissions reductions** of 23,364 MT (million tonnes) of CO<sub>2</sub>, 6,603 MT of NO<sub>x</sub>, 3,664 MT of SO<sub>x</sub> and 505 MT of PM (particulate matter) since the methanol-fuelled vessels began operating in our fleet in 2016.
- **22 on-board vessel safety visits** to review more than 500 health and safety items with all levels of officers and crew.
- **29 third-party** Chemical Distribution Institute - Marine **inspections** of our vessels.
- **160** methanol and nitrogen **safety training sessions**.



# About Waterfront Shipping

Waterfront Shipping (Waterfront) is a wholly owned subsidiary of Methanex Corporation and plays a unique role in our global supply chain. As a global marine transportation company, Waterfront specializes in the safe, reliable transport of bulk chemicals and clean petroleum products such as gasoline and ultra low sulphur diesel oil. Waterfront transports approximately 80 per cent of Methanex's produced methanol to customers around the world and is a key component of our extensive global supply chain. Waterfront is also a key innovator in marine fuel technology, developing and globally promoting methanol as marine fuel.

With a fleet of 29 deep sea tankers, Waterfront services major international markets in North America, Asia, Europe and Latin America. For fleet details, including vessel, age, size and capacity, please visit [Waterfront Shipping](#).

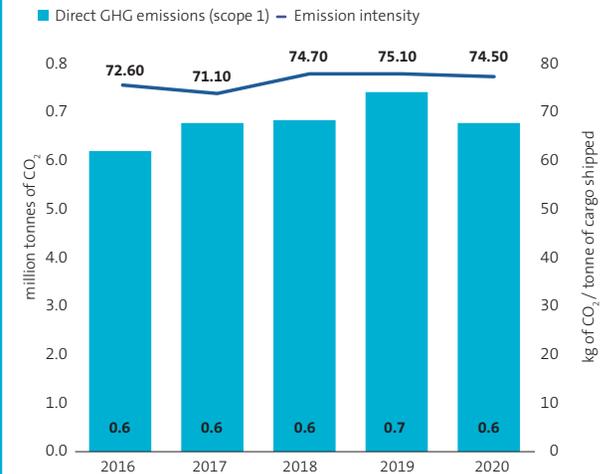
## GHG Emissions

When Waterfront transports methanol to our customers worldwide, the vessels generate CO<sub>2</sub> emissions. Marine transport intensity (CO<sub>2</sub> emissions per tonne of cargo shipped) is influenced by numerous factors, including the distance of trade routes for our methanol cargo, as well as ship technology and operating efficiency. To reduce emissions, Waterfront's initiatives include:

**Methanol-fuelled vessels that exceed stringent emission regulations:** As part of our ongoing vessel replacement program, we regularly replace older vessels with newer, more fuel-efficient vessels. As society transitions to the low-carbon economy, we are also prioritizing innovation in methanol marine fuel. Today, Waterfront's fleet includes 11 dual-fuel vessels that can run on either diesel or methanol and we anticipate that approximately 60 per cent of Waterfront Shipping's vessel fleet will be powered by methanol by 2023. As a marine fuel, methanol reduces CO<sub>2</sub> emissions by [up to 15 per cent](#) during combustion when compared to conventional marine fuels. Methanol can also be made from renewable sources which can reduce CO<sub>2</sub> emissions by up to 95 per cent compared to conventional fuels and help us comply with future IMO [standards](#) for the CO<sub>2</sub> intensity of ships by 2050. To read more about the benefits of methanol as a marine fuel see [page 10](#) of this report.

**Optimizing shipping by carrying backhaul cargo:** After delivering methanol to its intended destination, our ships can also carry "backhaul" cargo (e.g., petroleum products such as gasoline or diesel) on their return voyage, rather than returning empty. By carrying cargo during both legs of the voyage and using fuel as efficiently as possible, we reduce our CO<sub>2</sub> emissions intensity.

## GHG Emissions from Shipping



In the last five years, waterfront's CO<sub>2</sub> emissions intensity has increased by 3%. This is due to a combination of factors, but primarily an increase in the average distance to move our cargo.

### Measuring Emissions

We use the control approach to calculate our CO<sub>2</sub> emissions from Waterfront. In other words, we account for 100% of the emissions from commercially operated vessels as Scope 1.

The 29 vessels in the fleet are commercially operated by Waterfront. This means that Waterfront:

- Approves the vessel's captain and technical operator (both of whom work on behalf of the ship owner)
- Instructs the vessel's captain and operator on destination, speed, cargo to load/unload at each port, as well as pertinent information to ensure Waterfront fulfils its commitment to Methanex and our customers
- Schedules, orders and pays for the ship's fuel
- Arranges appropriate disposal of cleaning residues from tank cleaning between cargo loads

# Air Emissions

Nitrogen oxides (NOx), sulphur oxides (SOx) and particulate matter (PM) are byproducts of combustion from ship engines and a source of air pollution in heavily trafficked shipping lanes. In a study by [Stena Lines](#), 100 per cent methanol-fuelled vessels produced 99 per cent less SOx, 80 per cent less NOx and 95 per cent less PM per unit of energy of fuel consumed, compared to conventional marine fuel. By using methanol-fuel technology for marine vessels in Waterfront's fleet, we can meet increasingly stringent air emissions [regulations](#) established by the IMO.

# Safety

To achieve reliable transport and safe operations, Waterfront works closely with ship owners and ship management companies who are responsible for the technical operation of Waterfront vessels. These technical operations include all crew-related matters (e.g., hiring, training, assigning to vessels, well-being), vessel maintenance (e.g., dry docks, repairs, upgrades) and compliance with applicable regulations. Waterfront aims to select responsible carriers and provide appropriate training, and regularly engages with ship management companies.

## SAFETY ASSESSMENTS

**Internal assessments:** Waterfront sets a target to conduct an annual on-board safety visit of each vessel to evaluate safety management and people practices. We developed the safety visit program to validate that ship owners' programs are translating into a culture of safety and enhanced experience for those on board the vessels. In 2020, we completed 22 out of 29 planned visits, with COVID-19 restrictions preventing completion of the final seven visits. Safety visit findings for individual vessels are shared with the vessel and owners, with corrective actions and remedy of findings required and tracked. Fleet findings are consolidated to produce a fleet safety rating that serves as a benchmark for continual improvement efforts. See sidebar for details.

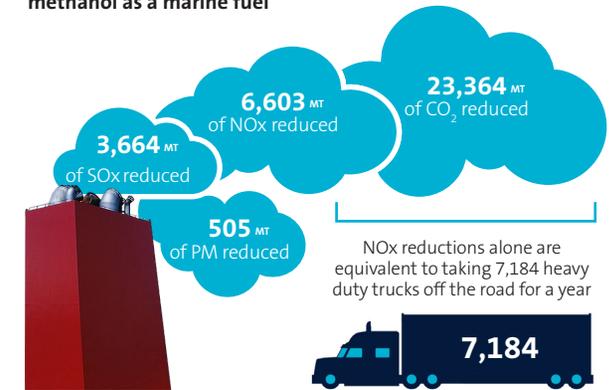
**External assessments:** We require each vessel to undergo an annual Chemical Distribution Institute - Marine inspection. Additionally, we review ship inspection reports using [SIRE](#) (Ship Inspection Report Exchange), a database of vessel inspection reports from major international oil and gas companies. We access the database throughout the year to ensure vessels are maintained and technically managed in a safe manner that will allow us to commercially operate the vessel without restrictions.

## SAFETY TRAINING

In addition to safety training required by the ship management companies, we develop targeted training programs for crews on Waterfront vessels, including training on key safety hazards. These include:

- **Methanol safety:** Crews receive customized methanol safety training twice a year, including a [safe handling video](#), a presentation with Q&A and an assessment.
- **Nitrogen safety:** Crews receive training on nitrogen safety to mitigate asphyxiation risk. (Nitrogen is used on board to remove the risk of fire and explosion in the cargo tank.) The training includes a nitrogen safety video, a presentation with Q&A and an assessment.

## Waterfront Shipping's emissions reduced from using methanol as a marine fuel



Above is based on data from April 2016 to the end of December 2020 based on the performance of eleven dual-fuel vessels in Waterfront's fleet. Emissions reduction data is based on 96,915 hours running on methanol and 140,256 MT of methanol fuel consumed. Emissions reductions are compared to traditional marine fuels (i.e., heavy fuel oil).

## Annual Marine Safety Visits

We target that every year a Waterfront Shipping marine safety expert spends 1.5 days on each of the vessels in the Waterfront fleet. The visit entails a review of more than 500 health and safety items, and significant interaction with all levels of the officers and crew on board. Some examples of review items include:

**Vessel-related:** Maintenance is up to date, vessel is clean and organized, efforts are being made to use energy-efficient practices.

**Procedural:** Record keeping is up to date, crew work-rest balance is being monitored.

**Programs:** Stop Work authorization is being reinforced, crews are encouraged to report near misses and raise concerns about safety, and methanol and nitrogen safety training is being provided.

**People:** Atmosphere on board the vessel is respectful, efforts are made to promote mental health awareness and monitoring.

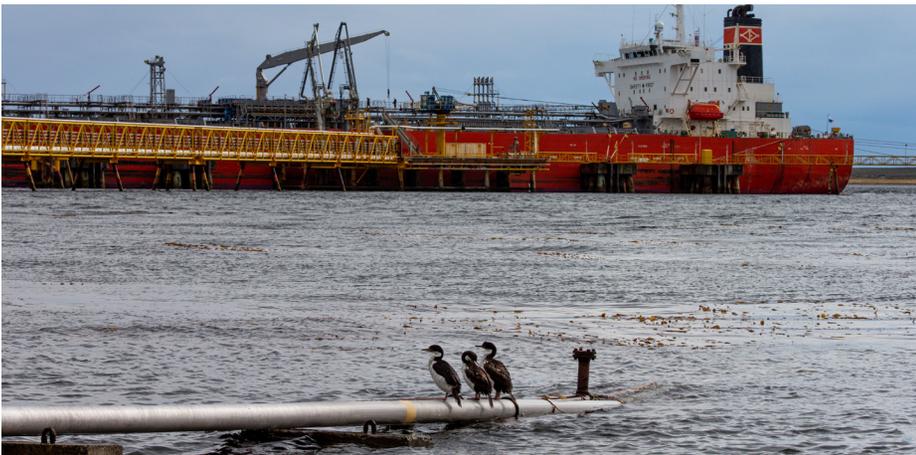
This year our focus was on Mental Health and Navigational Safety. In 2020, we completed 22 out of 29 planned visits, with COVID-19 restrictions preventing completion of the final seven visits.

# Ecological Impacts of Shipping

We work to reduce the environmental impacts associated with transporting product by vessel. Precautions range from choosing new vessels with best-in-class technology to retrofitting existing ships to improve their emissions performance.

**Preventing spills:** Methanol is a more environmentally benign fuel than any of the bunker fuels widely used today because it dissolves in water and biodegrades rapidly. In the unlikely event of an accident, all vessels have double hulls and secondary deck containment to prevent product from impacting the environment and marine life. To prevent spills during loading and unloading, we have strict vessel-loading guidelines and use best practices when loading and discharging. Because we load petroleum-based products on our backhaul voyages, we also have tank cleaning guidelines to ensure petroleum-based products are removed prior to loading methanol.

**Managing ballast water:** When an empty ship is en route to a loading destination, it uses vast amounts of ballast water to provide stability and maneuverability. This ballast water is then discharged during loading operations. However, ballast water contains biological materials (e.g., bacteria, microbes) from the region in which it originated. When ballast water is discharged at a different location, these foreign materials can adversely impact the local aquatic ecosystem. All vessels in the Waterfront fleet have ballast water exchange plans that significantly reduce the risk of harmful aquatic organisms or pathogens. In 2017, the IMO implemented a code for ballast water management systems. To comply with this code, we are currently retrofitting our ballast water treatment systems and anticipate completing this work in 2021, well before the 2024 compliance deadline.



## Supporting Mental Health at Sea

Seafaring can be an isolating career. To raise awareness of the mental health impacts of long periods at sea, we are strongly promoting mental health awareness training to senior officers in the fleet. We are proud to report that in 2020 all ship management companies in our fleet completed implementation of this training.

In 2020, due to COVID-19 travel restrictions such as the closure of ports and airports, officers and crew were often prevented from travelling to their homes to be with family and had to spend more time on board vessels.

In response, we:

- Increased discussions with ship managers about safety and mental health awareness
- Provided bonuses to crew members who were on board for extended periods of time
- When appropriate, we co-operated fully with the ship owner and deviated vessels from their schedules and chart paths to ports that could enable a changeover of crew
- Encouraged ship owners to provide extra mental health support for crew members who requested assistance
- Where possible, provided extra benefits such as improved quarters, better Internet access and socialization opportunities

# Appendix



# Other ESG-Related Questions

## How do we protect labour rights and human rights in our workforce?

We support and adhere to all international and local human rights, general labour, and employment standards and regulations in jurisdictions in which we do business. This includes regulations relating to unlawful child labour, forced labour and modern slavery. We operate in regions that have large numbers of undocumented workers (e.g., Chile, Egypt, Asia-Pacific). A documentation/identification process is built into all of our recruitment and hiring processes, and includes confirming citizenship status, standard regional background checks such as criminal records, and specific role-required security clearances prior to finalizing employment confirmation. For more information, see our [Stakeholder Relations Policy](#) and Human Resources Policy.

## Are our workers represented by unions?

We align with all government labour legislation in the regions in which we operate. Less than one per cent of our employees are represented by unions. Our employees can join an employee association or trade union, consistent with national or regional laws and practices. New Zealand is our only location with an active union. We strive for productive relationships with the union representing our employees.

## How do we engage with governments?

To build awareness and understanding about our product and our business, we proactively engage with public policy officials to share information about our company and industry. We also have a policy against making donations to political partners. See our [Stakeholder Relations Policy](#) and Political Donations Policy for details. We are also members of various global and regional industry associations that engage with governments on a variety of topics impacting our business. Some examples of these associations include the Methanol Institute, European Chemical Industry Council (CEFIC), Chemistry Industry Association of Canada (CIAC), Association of International Chemical Manufacturers (AICM – China) and Asociación Gremial de Industriales Químicos de Chile (ASIQUM) in Chile.

# Methanex Performance Table

(EXCLUDES WATERFRONT SHIPPING)

	UNIT	2016	2017	2018	2019	2020
<b>OPERATIONS</b>						
<b>Manufacturing</b>						
Methanol produced (total tonnes)	tonnes	7,822,306	8,343,996	8,401,087	8,579,766	7,666,550
Methanol produced (equity share)	tonnes	7,017,000	7,187,000	7,211,000	7,589,000	6,613,578
<b>ENVIRONMENT</b>						
<b>GHG emissions</b>						
Direct GHG emissions (scope 1) <sup>1</sup>	tonnes CO <sub>2</sub>	4,118,285	4,171,421	4,093,573	4,485,902	3,830,918
Energy indirect GHG emissions (scope 2)	tonnes CO <sub>2</sub>	177,372	204,597	206,596	227,825	123,679
Total GHG emissions	tonnes CO <sub>2</sub>	4,295,657	4,376,018	4,300,169	4,713,727	3,954,597
Intensity (scope 1)	tonnes CO <sub>2</sub> /tonnes methanol	0.59	0.58	0.57	0.59	0.58
Intensity (scope 1 + scope 2)	tonnes CO <sub>2</sub> /tonnes methanol	0.61	0.61	0.60	0.62	0.60
<b>Energy use</b>						
Total energy consumed from natural gas (excluding electricity)	GJ	292,556,200	315,532,499	318,852,561	329,066,971	293,110,258
Total electricity use	MWh	411,800	452,546	463,873	454,493	465,233
Total self-generated electricity	MWh	85,717	116,020	140,412	127,441	142,261
Self-generated electricity - non-renewable	MWh	85,717	116,020	140,412	127,441	142,261
Self-generated electricity - renewable	MWh	0	0	0	0	0
Total purchased electricity	MWh	328,088	336,526	323,460	327,052	322,972
Purchased electricity - non-renewable	MWh	269,592	277,563	281,715	272,093	262,601
Purchased electricity - renewable	MWh	58,496	58,963	41,745	54,959	60,371
<b>Air Emissions</b>						
NOx (excluding N <sub>2</sub> O)	tonnes	NR	6,834	6,922	7,051	7,157
VOCs <sup>2</sup>	tonnes	NR	4,210	4,253	3,315	2,807
SOx <sup>3</sup>	tonnes	NR	40	37	40	24
<b>Water protection and water use<sup>4</sup></b>						
Fresh water consumption	m <sup>3</sup>	12,624,989	14,848,502	14,737,143	14,297,518	13,620,835
Seawater consumption	m <sup>3</sup>	NR	NR	NR	NR	8,532,583
Water withdrawal (by source) <sup>4</sup>	m <sup>3</sup>	16,801,688	18,910,024	18,505,447	18,214,553	115,220,235
Non-fresh (seawater, saline, grey water)	m <sup>3</sup>	NR	NR	NR	NR	96,701,709
Rivers, creeks, etc.	m <sup>3</sup>	12,015,393	12,687,541	12,189,793	11,709,940	11,636,988
Purchased	m <sup>3</sup>	3,136,195	4,477,033	4,679,004	4,759,016	4,846,290
Municipal system	m <sup>3</sup>	1,252,200	1,745,450	1,636,650	1,745,597	2,035,248
Groundwater (aquifer)	m <sup>3</sup>	397,900	0	0	0	0
Total water discharge (by destination) <sup>4</sup>	m <sup>3</sup>	4,176,699	4,061,522	3,768,304	3,917,035	93,066,817
Water returned to sea	m <sup>3</sup>	NR	NR	NR	NR	92,049,159
Water discharged to rivers, creeks, etc.	m <sup>3</sup>	691,970	775,423	686,991	679,581	612,155
Water disposed to municipal systems	m <sup>3</sup>	435,386	364,644	445,087	447,102	404,138

<sup>1</sup> We report our GHG emissions using equity share.

<sup>2</sup> VOCs values for 2017 and 2018 have been restated since the publication of our 2019 sustainability report to reflect consistent data collection across multiple sites.

<sup>3</sup> SOx emissions values for 2017 and 2018 have been restated since the publication of our 2019 sustainability report to fix an inconsistency in calculation methodology.

<sup>4</sup> Our water consumption, withdrawal and discharge in 2020 are materially different than in previous years because the data now includes seawater withdrawal and discharges to sea. Going forward, we will include seawater in our calculations.

NR = NR

# Methanex Performance Table

(EXCLUDES WATERFRONT SHIPPING)

	UNIT	2016	2017	2018	2019	2020
Water disposed via third parties (for treatment)	m <sup>3</sup>	NR	NR	NR	NR	1,365
Fresh water intensity (fresh water consumption/tonnes methanol)*	m <sup>3</sup> water/ tonnes methanol	2.38	2.68	2.68	2.75	2.54
<b>Spills</b>						
Methanol spill (serious)	count	0	0	0	0	0
Methanol spill (major)	count	0	1	0	0	0
Other spill – petroleum products or treatment chemicals (serious)	count	0	0	0	0	0
Other spill – petroleum products or treatment chemicals (major)	count	0	0	0	0	0
<b>Waste</b>						
Hazardous waste						
Total generated	tonnes	108	510	372	342	790
Sent for disposal	tonnes	49	179	362	263	102
Sent to recycling	tonnes	60	331	10	79	687
Non-hazardous waste						
Total generated including special waste	tonnes	3,275	2,409	2,513	4,426	4,493
Sent for disposal	tonnes	1,810	1,735	1,803	2,974	3,302
Sent to recycling	tonnes	1,465	674	710	1,453	1,190
Non-hazardous waste recycled (% of total waste disposed)	per cent	81%	39%	39%	49%	26%
Hazardous waste recycled (% of total waste disposed)	per cent	55%	65%	3%	23%	87%
<b>SOCIAL</b>						
<b>Safety</b>						
<b>Employee and contractor safety</b>						
Recordable injury rate, employees <sup>5</sup>	injuries per 200K hours	0.09	0.58	0.48	0.07	0.34
Recordable injury rate, contractors	injuries per 200K hours	0.79	0.68	1.37	0.41	0.52
Recordable injury rate, combined	injuries per 200K hours	0.47	0.64	1.02	0.27	0.44
Recordable injury rate, employees (non major capital) <sup>6</sup>	injuries per 200K hours	0.09	0.58	0.48	0.07	0.35
Recordable injury rate, contractors (non major capital)	injuries per 200K hours	0.79	0.68	1.39	0.44	0.60
Recordable injury rate, combined (non major capital)	injuries per 200K hours	0.47	0.64	1.03	0.29	0.48
Days away from work rate, employees	injuries per 200K hours	0.00	0.10	0.10	0.00	0.14
Days away from work rate, contractors	injuries per 200K hours	0.14	0.26	0.50	0.21	0.21
Days away from work rate, combined	injuries per 200K hours	0.08	0.20	0.34	0.14	0.18
<b>Employee and contractor safety</b>						
Fatalities, employees	count	0	0	0	0	0
Fatalities, contractors	count	0	0	0	0	0
<b>Leading indicators</b>						
Near misses	count	NR	NR	NR	NR	983
Hazard identification	count	NR	NR	NR	NR	2,143
Behaviour-based safety observations	count	NR	NR	NR	NR	9,843

<sup>5</sup> Recordable injury rate combined for 2019 has been restated since the publication of our 2019 sustainability report to include worked hours from major capital project work. The 2018 value has also been restated to reflect better data collection.

<sup>6</sup> This injury rate excludes worked hours in major capital projects to provide better comparability year over year.

# Methanex Performance Table

(EXCLUDES WATERFRONT SHIPPING)

	UNIT	2016	2017	2018	2019	2020
<b>Process safety rates</b>						
Process Safety Total Incident Rate (PSTIR) <sup>7</sup>	incidents/200K hours	0.08	0.10	0.03	0.03	0.03
Process Safety Incident Severity Rate (PSISR) <sup>8</sup>		0.08	0.24	0.03	0.26	0.03
<b>Process Safety</b>						
Tier 1 Process Safety Incidents Count (PSIC)	number of incidents	2	3	1	1	1
<b>Product Safety</b>						
Percentage of products that contain Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Category 1 and 2 Health and Environmental Hazardous Substances	per cent	NR	NR	NR	NR	100%
Percentage of such products (above) that have undergone a hazard assessment	per cent	NR	NR	NR	NR	100%
<b>Transportation Safety</b>						
Number of reportable transport incidents	count	NR	NR	NR	NR	0
Non Accidental Release (NARS) (for rail transportation)	count	NR	NR	NR	NR	0
<b>Methanex indicators</b>						
Terminal audits (level I, II and III) <sup>9</sup>	count	30	36	28	32	36
Responsible Care seminars held	count	49	75	80	75	35
Responsible Care seminar attendees	# individual	1,340	1,100	2,739	2,603	798
Organizations reached	# organizations	300	300	747	798	144
<b>Human resources</b>						
<b>Employee numbers</b>						
Total number of employees	count	1,275	1,357	1,426	1,544	1,489
Full-time	count	1,237	1,317	1,390	1,512	1464
Part-time	count	38	40	36	32	25
<b>Employees by location</b>						
Asia Pacific	per cent	4%	4%	5%	5%	5%
Chile	per cent	10%	12%	12%	14%	15%
US (Dallas and Geismar)	per cent	16%	15%	16%	16%	17%
Egypt	per cent	11%	12%	11%	11%	11%
Europe	per cent	3%	2%	3%	2%	2%
Canada (Medicine Hat and Vancouver)	per cent	20%	19%	20%	20%	19%
New Zealand	per cent	22%	22%	21%	19%	19%
Trinidad	per cent	15%	13%	13%	13%	12%
<b>Diversity</b>						
<b>% of women</b>						
Total workforce	per cent	27%	27%	28%	29%	28%
Managers	per cent	31%	35%	34%	36%	34%
Senior leaders	per cent	9%	10%	16%	16%	17%
Executive leaders	per cent	33%	33%	17%	17%	17%
Board members	per cent	25%	25%	31%	33%	42%

<sup>7</sup> Worked hours for PSTIR include hours worked by employees, contractors and subcontractors, but exclude hours associated with major construction projects.

<sup>8</sup> Process Safety Incident Severity Rate (PSISR) is calculated using the American Petroleum Institute (API) recommended practice 754 from 2016. This aligns with SASB recommendations.

<sup>9</sup> Terminal audits include all three levels (level I, II and III) of terminal audits.

# Methanex Performance Table

(EXCLUDES WATERFRONT SHIPPING)

	UNIT	2016	2017	2018	2019	2020
<b>Employee age categories</b>						
30 years and under	per cent	16%	16%	15%	15%	12%
30 to 50	per cent	63%	63%	64%	64%	66%
50 Plus	per cent	21%	21%	21%	21%	22%
<b>Length of employee service</b>						
< 5 yr	per cent	56%	56%	56%	55%	48%
5-10 yrs	per cent	21%	21%	21%	21%	26%
11-20 yrs	per cent	16%	15%	16%	16%	16%
20+ yrs	per cent	7%	7%	8%	9%	9%
<b>Retention</b>						
Turnover rate, voluntary and involuntary	per cent	8.2%	7.1%	7.3%	7.2%	7.5%
Turnover rate, voluntary	per cent	5.0%	5.1%	4.6%	5.3%	3.6%
<b>Communities</b>						
Community investment	USD	\$1,062,373	\$1,112,679	\$1,467,193	\$1,688,514	\$1,740,147
Total hours contributed to community	hours	N/R	13,069	12,474	12,619	7,436
Volunteer hour inputs (on company time)	hours	7,736	4,185	4,271	5,315	2,705
Volunteer hour outputs (off company time)	hours	N/R	2,933	2,522	2,176	3,819
Program management hours	hours	N/R	5,949	5,680	5,128	912
Total value of hours contributed to the community	USD	N/R	\$261,447	\$237,982	\$222,669	\$101,000
Number of organizations receiving our support	count	235	369	302	304	310
Internships	count	17	49	64	61	79
Scholarships	count	41	69	101	53	98
Community advisory panel (CAP) meetings	count	23	23	23	22	16
<b>GOVERNANCE</b>						
<b>Cybersecurity</b>						
Team members who received mandatory cybersecurity training	number	NR	NR	NR	NR	1,824
<b>Ethics training/awareness</b>						
New employees who received ethics onboarding	count	NR	NR	NR	NR	55
Number of senior leaders who acknowledged the Code of Conduct	count	NR	NR	NR	NR	43
<b>Legal actions</b>						
Total amount of monetary losses as a result of legal proceedings associated with bribery or corruption	\$	NR	NR	NR	NR	0
Fines or settlements paid in the fiscal year related to anti-competitive business practices	\$	NR	NR	NR	NR	0
Number of legal actions (completed or pending) for anti-competitive behaviour, anti-trust and monopoly practices	number	NR	NR	NR	NR	0

# Waterfront Shipping Performance Table

INDICATOR	UNIT	2016	2017	2018	2019	2020
<b>Operations</b>						
Total distance travelled by vessels	nautical miles	NR	NR	NR	NR	2,050,638
Operating days	days	NR	NR	NR	NR	10,550
Deadweight tonnage	thousand deadweight tons	NR	NR	NR	NR	1,256
Number of vessels in total shipping fleet	count	NR	NR	NR	NR	29
Number of vessel port calls	count	NR	NR	NR	NR	1,152
Number of vessel port calls	count	NR	NR	NR	NR	1,152
<b>GHG emissions</b>						
Direct GHG emissions (scope 1) <sup>1</sup>	tonnes CO <sub>2</sub>	567,579	619,834	625,314	678,154	622,866
Emissions intensity (marine transportation)	kg of CO <sub>2</sub> /tonne of cargo shipped	72.6	71.1	74.7	75.1	74.5
<b>Safety</b>						
Marine vessel safety visits	count	23	25	25	30	22
Marine vessel inspections (CDI-Marine)	count	28	28	25	31	29
Marine safety training sessions	count	117	100	100	118	160

<sup>1</sup> Direct GHG emissions (scope 1) are calculated using operational control.

# SASB Chemicals

Below are the quantitative metrics and references to qualitative descriptions in this report that align with the Sustainability Accounting Standards Board (SASB) standards for the chemicals industry. The SASB is a non-profit organization with the goal of enabling businesses around the world to identify, manage and communicate financially material sustainability information to their investors.

SASB REF	SASB SUGGESTED DISCLOSURES	2020 DATA	OR PAGE #
	<b>Activity metrics</b>		
RT-CH-000.A	Methanol produced (total tonnes)	7,666,550	tonnes
RT-CH-000.A	Methanol produced (equity share)	6,613,578	tonnes
	<b>GHG emissions</b>		
RT-CH-110a.1	Gross global scope 1 emissions	3,830,918	tonnes CO <sub>2</sub> e
RT-CH-110a.1	Percentage of scope 1 emissions covered under emissions-limiting regulations	NR	
RT-CH-110a.2	Discussion of long-term and short-term strategy or plan to manage scope 1 emissions, emissions reduction targets and an analysis of performance against those targets		pages 13-20
	<b>Air quality</b>		
RT-CH-110a.3	NOX (excluding N <sub>2</sub> O)	7,157	tonnes
RT-CH-110a.3	SOX	24	tonnes
RT-CH-110a.3	Volatile organic compounds (VOCs)	2,807	tonnes
RT-CH-110a.3	Hazardous air pollutants (HAPs)	NR	
	<b>Energy management</b>		
RT-CH-130a.1	Total energy consumed from natural gas (excluding electricity)	293,110,258	GJ
RT-CH-130a.1	Total purchased electricity	322,972	MWh
RT-CH-130a.1	Percentage renewable electricity purchased	19%	
RT-CH-130a.1	Electricity generated onsite using natural gas*	142,261	MWh
	<b>Water management</b>		
RT-CH-140a.1	Total water withdrawn (fresh water and seawater)	115,220,235	m <sup>3</sup>
RT-CH-140a.1	Total water consumed	22,153,418	m <sup>3</sup>
RT-CH-140a.1	Percentage water withdrawn in regions with high or extremely high baseline water stress	NR	
RT-CH-140a.1	Percentage water consumed in regions with high or extremely high baseline water stress	NR	
RT-CH-140a.2	Number of incidents of non-compliance associated with water quality permits, standards and regulations	0	
RT-CH-140a.3	Description of water management risks and discussion of strategies and practices to mitigate those risks		pages 23-24
	<b>Hazardous waste management</b>		
RT-CH-150a.1	Amount of hazardous waste generated	790	tonnes
RT-CH-150a.1	Percentage of hazardous waste recycled	87%	
	<b>Community relations</b>		
RT-CH-210a.1	Discussion of engagement processes to manage risks and opportunities associated with community interests		page 39

\*This figure reflects renewable energy purchased at our New Zealand plant location.

# SASB Chemicals

SASB REF	SASB SUGGESTED DISCLOSURES	2020 DATA	OR PAGE #
	<b>Workforce health &amp; safety</b>		
RT-CH-320a.1	Total recordable incident rate (TRIR) (incidents per 200,000 hours worked)	0.44	
RT-CH-320a.1	Fatalities	0	
RT-CH-320a.1	Near misses (count not rate)	983	near misses
RT-CH-320a.2	Description of efforts to assess, monitor and reduce exposure of employees and contract workers to long-term (chronic) health risks		page 29
	<b>Product design for use-phase efficiency</b>		
RT-CH-410a.1	Revenue from products designed for use-phase resource efficiency	NR	
	Safety & Environmental Stewardship of Chemicals		
RT-CH-410b.1	Percentage of revenue from products that contain Globally Harmonized System (GHS) of Classification and Labeling of Chemicals (GHS) Category 1 and 2 Health and Environmental Hazardous Substances	100%	
RT-CH-410b.1	Percentage of GHS 1 and 2 products that have undergone a hazard assessment	100%	
RT-CH-410b.2	Discussion of strategy to (1) manage chemicals of concern and (2) develop alternatives with reduced human and/or environmental impact	Not applicable	
	<b>Genetically modified organisms</b>		
RT-CH-410c.1	Percentage of products by revenue that contain genetically modified organisms (GMOs)	Not applicable	
	<b>Management of the legal &amp; regulatory environment</b>		
RT-CH-530a.1	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry		pages 21-22, 57
	<b>Operational safety, emergency preparedness &amp; response</b>		
RT-CH-540a.1	Process Safety Total Incident Rate (PSTIR) (incidents per 200,000 hours worked)	0.03	
RT-CH-540a.1	Process Safety Incident Severity Rate (PSISR)	0.03	
RT-CH-540a.2	Number of transport incidents	0	incidents

# SASB Marine

Below are the quantitative metrics and references to qualitative descriptions in this report that align with the SASB standards for the Chemicals and marine industry. The Sustainability Accounting Standards Board is a non-profit organization with the goal of enabling businesses around the world to identify, manage and communicate financially material sustainability information to their investors.

SASB REF	SASB SUGGESTED DISCLOSURES	2020 DATA	OR PAGE #
	<b>Activity metrics</b>		
TR-MT-000.A	Number of shipboard employees	does not apply	
TR-MT-000.B	Total distance travelled by vessels	2,050,638	nautical miles
TR-MT-000.C	Operating days	10,550	days
TR-MT-000.D	Deadweight tonnage	1,256	thousand deadweight tons
TR-MT-000.E	Number of vessels in total shipping fleet	29	count
TR-MT-000.F	Number of vessel port calls	1,152	count
TR-MT-000.G	Twenty-foot equivalent unit (TEU) capacity	does not apply	
	<b>Greenhouse gas emissions</b>		
TR-MT-110a.1	Gross global scope 1 emissions	622,866	tonnes CO <sub>2</sub> e
TR-MT-110a.2	Discussion of long-term and short-term strategy or plan to manage scope 1 emissions, emissions reduction targets and an analysis of performance against those targets	page 53	
TR-MT-110a.3	Total energy consumed	8,268,940	GJ
TR-MT-110a.3	Percentage heavy fuel oil	1%	
TR-MT-110a.3	Percentage renewable	0%	
TR-MT-110a.3	Percentage methanol as fuel	12%	
TR-MT-110a.4	Average Energy Efficiency Design Index (EEDI) for new ships	4.32	index
	<b>Air quality</b>		
TR-MT-120a.1	NOx (excluding N <sub>2</sub> O)	16,141	tonnes
TR-MT-120a.1	SOx	9,462	tonnes
TR-MT-120a.1	Particulate matter (PM10)	1,305	tonnes
	<b>Ecological impacts</b>		
TR-MT-160a.1	Shipping duration in marine protected areas or areas of protected conservation status	NA	
TR-MT-160a.2	Percentage of fleet implementing ballast water exchange	31	per cent
TR-MT-160a.2	Percentage of fleet implementing ballast water treatment	69	per cent
TR-MT-160a.3	Number of spills and releases to the environment	1	
TR-MT-160a.3	Aggregate volume of spills and releases to the environment	0.001	m <sup>3</sup>
	<b>Employee health and safety</b>		
TR-MT-320a.1	Lost-time incident rate (LTIR)	0	cases/200,000 hours worked
	<b>Business ethics</b>		
TR-MT-510a.1	Number of calls at ports in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	0	
TR-MT-510a.2	Total amount of monetary losses as a result of legal proceedings associated with bribery or corruption	0	
	<b>Accident &amp; safety management</b>		
TR-MT-540a.1	Number of marine casualties	0	
TR-MT-540a.1	Percentage classified as very serious	0	
TR-MT-540a.2	Number of Conditions of Class or Recommendations	5	
TR-MT-540a.3	Number of port state control deficiencies	21	
TR-MT-540a.3	Number of port state control detentions	0	

# TCFD Index

The Task Force on Climate-related Financial Disclosures (TCFD) provides recommendations for more effective climate-related disclosures that can promote more informed investment, credit and insurance underwriting decisions. Below are references to TCFD-related disclosures in this document.

TCFD INDEX		
Category	Disclosure	Page
Governance (a)	Board oversight	45
Governance (b)	Management's role	46
Strategy (a)	Risks and opportunities	19, 21-22
Strategy (b)	Impact of risks and opportunities	19, 21-22
Strategy (c)	Resilience scenarios	n/a
Risk Management (a)	Risk identification process	46
Risk Management (b)	Risk management process	46
Risk Management (c)	Risk integration	46
Metrics and Targets (a)	Metrics used to measure risks/opportunities	n/a
Metrics and Targets (b)	GHG emissions (scope 1-3)	17, 58
Metrics and Targets (c)	Targets and performance	n/a

# GRI Index

This report provides information on the following GRI topics and indicators. We provide information related to our management approach for each of our material topics in the body of this report.

GENERAL DISCLOSURES		PAGE
102-1	Company name	4
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102-4	Locations	4
102-5	Legal form	4
102-6	Markets served	4
102-7	Scale of the company	5
102-8	Employee numbers	5
102-9	Supply chain description	5
102-10	Changes to company or supply chain	n/a
102-11	Precautionary principle or approach	Note 1
102-12	External initiatives	57
102-13	Memberships	57
102-14	CEO message	3
102-16	Values, principles and norms of behaviour	42
102-18	Governance structure, board committees	43
102-41	Collective bargaining agreements	57
102-45	Entities included in financial statements	11
102-46	Process to determine report content	10
102-47	List of material topics and their boundaries	10
102-48	Restatement of information from previous reports	n/a
102-49	Changes in reporting	11
102-50	Reporting period	11
102-51	Most recent sustainability report	n/a
102-52	Reporting cycle	n/a
102-53	Contact person for report	n/a
102-54	Claims of reporting according to GRI	11
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102-56	External assurance	11

TOPIC-SPECIFIC DISCLOSURES		PAGE
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<b>Environment</b>		
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303-1	Interactions with water as a shared resource	23
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303-3	Water withdrawal, by source	23
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305-4	GHG emissions intensity	17, 59
305-5	Reduction of GHG emissions	17
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306-2	Waste by type and disposal method	27
<b>Social</b>		
403-1	Occupational health and safety management system	46
403-2	Description of processes for hazard identification, risk assessment and incident investigation	29, 32-33
403-3	Description of occupational health services	29
403-4	Description of processes for worker communication on safety	29
403-5	Description of worker training on safety	29
403-6	Initiatives to promote employee health	31
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405-1	Diversity of governance bodies and employees	37
<b>Product Safety</b>		
416-1	Percentage of significant products for which health and safety impacts are assessed for improvement	60
417-1	Percentage of products/services subject to information requirements	60, Note 2

**NOTES:**

**Note 1:** Although Methanex has not formally adopted the precautionary principle, our consistent implementation of Responsible Care demonstrates a commitment to proactively identify and prevent or mitigate negative impacts.

**Note 2:** Aligned with SASB metric “percentage of products classified as GHS level 1 and level 2 that have undergone assessments”.

# Forward-Looking Statements

This report contains forward-looking statements with respect to us and our industry. These statements relate to future events or our future performance. All statements other than statements of historical fact are forward-looking statements. Statements that include the words “believe,” “expect,” “may,” “will,” “can,” “should,” “potential,” “estimate,” “strive,” “anticipate,” “aim,” “goal,” “target,” “plan,” “predict” or other comparable terminology and similar statements of a future or forward-looking nature identify forward-looking statements.

More particularly, and without limitation, any statements regarding the following are forward-looking statements: Methanex’s business strategies, plans, prospects, opportunities and its sustainability, climate change and ESG initiatives and strategies; expected demand for methanol (including low-carbon, renewable or biomethanol) and its derivatives; the ability for low-carbon, renewable or biomethanol to become commercially viable; expectations around our ability to reduce CO<sub>2</sub> emissions intensity, including the availability of new technology and our ability to invest in such technology; the reliability of our plants; our expected capital expenditures; the establishment of new fuel standards, including the ability for methanol to meet such standards; the establishment of future or increased carbon taxes in the regions where we manufacture methanol and where our competitors manufacture methanol; the impacts of significant weather events; expectations regarding our ability to improve water efficiency; and expectations regarding our diversity and inclusion initiatives.

All of the forward-looking statements are qualified by the assumptions that are stated or inherent in such forward-looking statements, including the assumptions referred to in the report. Although we believe that we have a reasonable basis for making such forward-looking statements, including our experience, our perception of trends, current conditions and expected future developments as well as other factors, certain material factors or assumptions were applied in drawing the conclusions or making the forecasts or projections that are included in these forward-looking statements, including, without limitation, future expectations and assumptions concerning the following: the supply of, demand for and price of methanol (including low-carbon, renewable or biomethanol) and methanol derivatives; our ability to procure natural gas feedstock (or renewable gas feedstock) on commercially acceptable terms; operating rates of our facilities; the establishment of new fuel standards and methanol meeting current standards; the availability of committed credit facilities and other financing; the commercial viability of low-carbon, renewable or biomethanol technology and capital cost thereof; and absence of a material negative impact from changes in laws or regulations, including carbon taxes.

However, forward-looking statements, by their nature, involve risks and uncertainties that could cause actual results to differ materially from those contemplated by the forward-looking statements. The risks and uncertainties primarily include those attendant with the ability to produce and market low-carbon, green or biomethanol and our ability to deploy sufficient capital to fund the necessary expenditures to implement the necessary operational changes to achieve the goals, strategies and plans set out in the report, including, without limitation: conditions in the methanol and other industries including fluctuations in the demand and price for low-carbon, green or biomethanol; the ability to carry out ESG initiatives and strategies; actions of competitors, suppliers and financial institutions; our ability to obtain natural gas feedstock on commercially acceptable terms to underpin current operations; conditions within the natural gas delivery systems that may prevent delivery of our natural gas supply requirements; the availability and price of renewable natural gas; the availability and commercial viability of technology to reduce our CO<sub>2</sub> emissions intensity; actions of governments and governmental authorities, including, without limitation, implementation of policies or other measures that could impact the supply of or demand for methanol (including low-carbon, green or biomethanol) or its derivatives; changes in laws or regulations; worldwide economic conditions; the impacts of the COVID-19 pandemic; and other risks described in our 2020 Sustainability Report and our 2020 Annual Management’s Discussion and Analysis.

Having in mind these and other factors, investors and other readers are cautioned not to place undue reliance on forward-looking statements. They are not a substitute for the exercise of one’s own due diligence and judgment. The outcomes implied by forward-looking statements may not occur and we do not undertake to update forward-looking statements except as required by applicable securities laws.

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Methanex is the world's largest producer and supplier of methanol to major international markets in North America, Asia Pacific, Europe and South America. Headquartered in Vancouver, Canada, Methanex currently operates production sites in Canada, Chile, Egypt, New Zealand, the United States, and Trinidad and Tobago. The company's global operations are supported by an extensive global supply chain of terminals, storage facilities and the world's largest dedicated fleet of methanol ocean tankers. To learn more, visit us at [www.methanex.com](http://www.methanex.com).

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