2018 Responsible Care and Sustainability Report

methanex
the power of agility

A RESPONSIBLE CARE® COMPANY

ABOUT THIS REPORT

Welcome to our 2018 Responsible Care® and Sustainability Report.

This report covers the period from January 1 to December 31, 2018. It focuses on Methanex's performance and impact in five key areas: Sustainable Energy and Methanol, Environment, Workplace, Community, and Product Stewardship.

We report on our activities and achievements as part of our commitment to Responsible Care and sustainability, our accountability to the public, and our pursuit of continual improvement.

This report includes descriptions of how we manage our material aspects. For some aspects, it also includes our quantitative measures, or key performance indicators (KPIs).

These KPIs help us drive progress and measure performance in key areas of Responsible Care and sustainability. They also reveal trends and help us identify issues that require further action.

Our reporting scope includes assets over which Methanex has direct or part ownership and full operational control. In the case of our wholly owned subsidiary Waterfront Shipping Ltd., our reporting boundary includes time- or spot-chartered vessels to the extent that Waterfront has commercial control through charter party contracts.

A printable, summary version of this report is available at **https://www.methanex.com/responsible-care/responsible-care-sustainability-reports**. Please visit our website for a web version of this report, past reports, and more information about Methanex, our product, and Responsible Care.

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This report may contain forward-looking statements. By their nature, such forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from those contemplated by the forward-looking statements. For a discussion of these risks and uncertainties, please refer to the Risk Factors section of the Management's Discussion and Analysis, which can be found in our most recent Annual Report or on our website at www.methanex.com.

Message From The CEO

In 2018, Methanex saw improvements in many aspects of our Responsible Care and sustainability performance. These achievements were the result of well-established Responsible Care governance, strategies, and management systems.

Our seventh successful verification by the Chemical Industry Association of Canada (the most comprehensive review of our global Responsible Care program to date) soundly affirmed the strength of our Responsible Care ethic and management system. The verification team's praise for the level of knowledge, support, and enthusiasm for the Responsible Care Ethic and Principles for Sustainability they found throughout our regions is reflected in our performance. We still have work to do in some areas, but we're on the right track.

Last year we had very good results and solid progress in process safety, environmental performance, and social responsibility. We have achieved these results by continuously staying focused on our strategies for operational excellence, which include running safe and reliable plants. However, even with our steadfast commitment to a zero-injury workplace, we experienced a higher injury-frequency rate in 2018 than in 2017, and we realize we have more work to do to meet our occupational safety goals. We are confident that continuing to focus on Responsible Care leadership and cultivate a learning culture in our workforce will produce the results we're aiming for and have lasting effects on our team members.

We had zero significant spills in 2018. We have enhanced process-safety management systems and effective application of lessons learned to prevent spills to the environment. A focus on plant reliability, use of the latest technologies in our newer plants, and refurbishment of our older plants are measures contributing to sustained improvements in emissions intensity across our sites. We continue to incrementally improve our energy efficiency, minimize emissions, and conserve natural resources in manufacturing methanol while exploring opportunities to bring methanol into cleaner fuel and energy applications.

We also continue to identify, develop, and support emerging opportunities for methanol as cleaner energy and work closely with industry stakeholders in the areas of marine fuel, automotive fuel blending, and methanol to power. Through our wholly owned subsidiary, Waterfront Shipping, we operate a growing fleet of vessels capable of running on methanol and reducing emissions, in compliance with the International Marine Organization's (IMO) new requirements for low-sulphur fuels taking effect on January 1, 2020. Our work with partners in China to pilot the use of high-level blends of methanol as an automotive fuel is producing significant results. Two cities in China have recently converted the majority of their taxis to operate on 100% methanol fuel, and interest is growing for use of methanol as a clean-burning fuel to replace coal in the industrial boiler and kiln industries.

Methanex's global team and system of integrated capabilities enable us to deliver on our promise of unmatched, secure supply of methanol and Responsible Care leadership.

As the market for methanol continues to grow, so does the importance of our work in product stewardship. In 2018, we reached record numbers of people with information about methanol and Responsible Care, one part of our multi-pronged approach to making sure methanol travels safely from origin to destination. Through well-established and industry-leading programs involving industry partnerships, inspection programs, Responsible Care seminars, collaboration with government, and coordination of emergency planning with community partners, we continue to evolve our Product Stewardship program to address changing needs. See our Product Stewardship chapter for many stories about our work in this area.

A network of global production sites, a fleet of dedicated ocean vessels, an integrated global supply chain, and highly responsive local customer service support allow us to carry out our business.

This network also allows us to create meaningful impacts in the world, both through the role that our product plays in everyday lives and in the many ways that we contribute to the communities where we operate and live.

Continuously developing our people is how we maintain our leadership position. In 2018, 185 team members spent approximately 7300 hours in leadership training, and even more engaged in our learning and development programs, a key pillar of our culture and one that we are continually improving. Every story in this report—from partnerships in Egypt and China to safety efforts for turnarounds, health promotion programs, collaborations with universities, and burgeoning seminars about Responsible Care—is evidence of the skill, innovation, and commitment our people bring to their work.

The consistent execution of our strategy happens at every level of our organization, from management to the teams in each of our regions—a far-reaching group united by our commitment to Responsible Care and to working together as One Team. Each year, I take pride in the ongoing dedication of our people and teams, not just at work but in the efforts they devote to giving back to the communities where they live. In 2018, we again made significant contributions in all of our locations around the globe, through corporate investments and the volunteer efforts of our people. Across these regions, nearly USD $1.5 million and over 12,000 hours were spent supporting our communities. Giving back to our communities and being a good neighbour are expressions of our values and are fundamental to our culture.

Collaboration—within the company, and with our stakeholders—is essential to advancing our strategy. With talented, committed teams, sound practices based on the Responsible Care Ethic and Principles for Sustainability, and a firm commitment to operational excellence and Responsible Care leadership, we are creating a bright future, together.

John Floren
President and
Chief Executive Officer

Responsible Care and Sustainability

At Methanex, Responsible Care and sustainability mean that we adhere to the highest principles of health, safety, environmental stewardship, and social responsibility. We are committed to having a positive impact on the communities and environments in which we live and work, and to acting responsibly in everything we do.

OUR BUSINESS

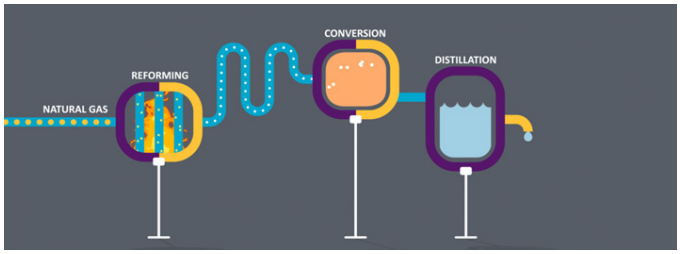
We are the world's largest producer and supplier of methanol to major international markets in North America, Asia Pacific, Europe, and South America.

1426 team members	**6** manufacturing sites	**12** global office locations
11 methanol plants	**9.4 million tonnes** production capacity in 2018	**USD $3.9 billion** in revenue

What is methanol?

Methanol (CH_3OH) is a commodity chemical that is a key ingredient in a variety of chemical derivatives and serves as a building block to produce a multitude of everyday consumer and industrial items. Made of hydrogen, oxygen, and carbon, methanol can be produced from a variety of sources, including natural gas and coal, as well as renewable sources such as municipal waste, landfill gas, biomass, and captured carbon dioxide (CO_2).

On an industrial scale, methanol is predominantly produced from natural gas by reforming the gas with steam and then converting and distilling the resulting synthesized gas mixture to create pure methanol. The result is a clear, liquid, organic chemical that is water soluble and readily biodegradable.



What is methanol used for?

Approximately 55% of all methanol is used to produce traditional chemical derivatives, including formaldehyde, acetic acid, and a variety of other chemicals. Demand for traditional chemical applications is influenced by global economic activities. Methanol is also used in an increasing number of energy-related applications, including the methanol-to-olefin (MTO) sector.

As an innovative, clean-burning fuel, methanol is an economically viable alternative that can provide fuel diversity and reduce emissions. Methanol can be produced from renewable resources like biomass, landfill gas, and CO_2.

THE RESPONSIBLE CARE ETHIC AND PRINCIPLES FOR SUSTAINABILITY

Our Responsible Care Program is founded on the Responsible Care Ethic and Principles for Sustainability, a sustainability initiative recognized by the United Nations and adopted by the global chemical industry. It is based on the Chemistry Industry Association of Canada's (CIAC) Responsible Care® ethic, principles for sustainability, and codes of practice, and follows a "Plan, Do, Check, Act" cycle to enable continual improvement.

Our commitment to Responsible Care and sustainability compels us to:

- Work for the improvement of people's lives and the environment, while striving to do no harm
- Be accountable and responsive to the public, especially our local communities, who have the right to understand the risks and benefits of what we do
- Take preventative action to protect health and the environment
- Innovate for safer products and processes that conserve resources and provide enhanced value
- Engage with our business partners to ensure the stewardship and security of our products, services, and raw materials throughout their life cycles
- Understand and meet expectations for social responsibility
- Work with all stakeholders for public policy and standards that enhance sustainability, and act to advance legal requirements and to meet or exceed their letter and spirit
- Promote awareness of Responsible Care, and inspire others to commit to these principles

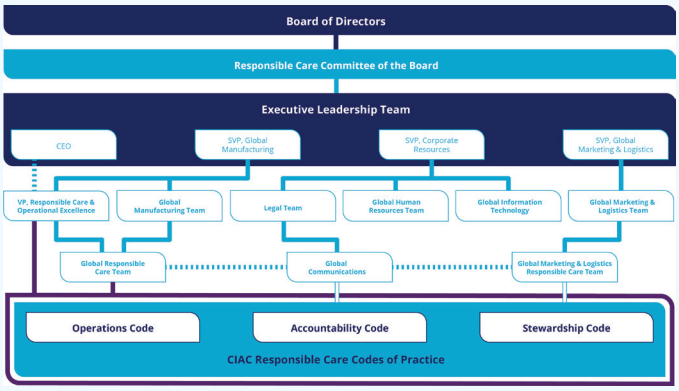
Our Approach to Responsible Care and Sustainability

Leadership and accountability

To guide and implement our Responsible Care and sustainability practices, we employ a structured approach that starts with clear organizational accountability.

Our corporate governance policies ensure that business decisions and practices achieve the highest standards of accountability, ethical behaviour, and Responsible Care.

Our Responsible Care and Social Responsibility policies and practices are established by our Executive Leadership Team and endorsed by our Board of Directors. Through the Responsible Care Committee of the Board, the Board monitors Responsible Care matters related to ethics, accountability, governance, operations, stewardship, community involvement, and safety of people and the environment.



These Responsible Care policies and practices are then embedded throughout the entire organization, from the Board of Directors all the way to individual team members. The most senior position in Responsible Care, the Vice President of Responsible Care and Operational Excellence, is directly accountable to the CEO in matters related to Responsible Care and also reports to the Senior Vice President, Global Manufacturing. Both the CEO and Executive Leadership Team have aligned performance goals and incentives linked to Responsible Care key performance indicators (KPIs). The KPIs reflect all the main elements of our Responsible Care programs and are stretch targets to drive continual improvement throughout the organization.

Global Integrated Management System

Our Global Integrated Management System (GIMS) guides us in implementing the CIAC Responsible Care Ethic and Principles for Sustainability. It also guides implementation of our Health, Safety, Security, Environment, and Quality (HSSEQ) Policy, and the Responsible Care Codes for Operations, Stewardship, and Accountability.

The GIMS defines integrated requirements for all aspects of our operations, incorporating the latest management system standards for Responsible Care management (CIAC), quality (ISO 9001:2015), environment (ISO 14001:2015), occupational health and safety (OHSAS 18001:2007), and process safety (Center for Chemical Process Safety). The requirements meet or exceed the latest standards for health, safety, environment, security, process safety, reliability, emergency preparedness, crisis management, social responsibility, sustainability, product stewardship, and quality.

A global, risk-based internal audit program reviews management practices to ensure compliance, assess performance, and drive continual improvement. Third-party assessments provide external benchmarking and verify the integrity of our systems. We communicate regularly to the Board about the overall health of our integrated management system, and a Responsible Care verification is conducted by the CIAC (or, in Trinidad and the U.S., the American Chemistry Council).

Stakeholder engagement

Our Responsible Care Policy directs us to recognize and respond to stakeholder concerns about our operations and products, and to provide information concerning any potential health or environmental hazard to the appropriate authorities, employees, and stakeholders.

Community advisory panels (CAPs) composed of a cross-section of independent community representatives function in each of our manufacturing regions to promote communication between Methanex and our fence-line communities. The CAPs provide a valuable forum for open, honest, two-way communications.

Material aspects

Material aspects refer to topics that are of significant interest to our stakeholders or that have economic, environmental, or social impacts on Methanex, our stakeholders, or society at large. We identify our top material aspects through an internal assessment of topics that are important to our key stakeholders and that influence Methanex's success in the long term.

The material aspects emphasized for this report are below:

Sustainable Energy and Methanol

- Methanol as marine fuel
- Methanol as vehicle fuel
- Methanol as power source
- Renewable methanol

Environment

- CO_2 emissions from manufacturing
- CO_2 emissions from marine shipping
- Water management
- Waste management
- Spill prevention and response

Workplace

- Health and safety
- Building our culture
- Talent management

Community

- Community dialogue and engagement
- Community investment and volunteering

Product Stewardship

- Safe distribution and handling
- Methanol user safety

Engaging our Stakeholders

We are committed to having an open, honest, and proactive relationship with each community in which we operate. This includes:

- Being accountable and responsive to the public
- Having effective processes to identify and respond to community concerns
- Informing the community about risks associated with our operations

Our key stakeholders include:

- Team members
- Customers and methanol end-users
- Shareholders
- Industry partners, suppliers, and contractors
- Community members and industry associations
- Government and regulatory agencies

We engage with our stakeholders in a variety of ways:

- Customer surveys
- Quarterly updates
- Reputation audits
- Product stewardship outreach efforts and public-policy engagement initiatives
- Community advisory panels (CAPs)
- Methanex Community Days (which help educate the public about methanol production)
- Team surveys
- Collaboration with the Methanol Group (a consortium of ship owners and ship-management companies) about the marine transportation of methanol
- Collaboration/consultation on labour, community, and environmental practices
- Advocacy work relating to environmental policies, health and safety regulations, international trade, and taxation issues
- Industry associations (e.g., the Methanol Institute)

>50,000
hours

logged by vessels operating on methanol to date

40%

of Waterfront Shipping's fleet to be powered by methanol in 2019

23,000
taxis

running on methanol in China by the end of 2019

Sustainable Energy and Methanol

We support the development of new, innovative methanol applications. Global demand for energy and focus on improving the environment are driving methanol demand for energy applications. We are the global leader in the methanol industry and are committed to supporting the development of these applications for the long term.

METHANOL AS A MARINE FUEL

In 2018, Waterfront Shipping won Lloyd's List 2018 Best Fuel Solution Award in recognition of its dual-fuel technology.

Waterfront Shipping, a wholly owned subsidiary of Methanex that operates the world's largest methanol ocean tanker fleet, was honoured to receive the Lloyd's List Americas Award for Best Fuel Solution. This award was given in recognition of the fuel efficiency and environmental performance achieved by the company's seven ships with dual-fuel technology, which allows them to run on methanol. Waterfront's ships have accumulated over 50,000 operating hours on methanol to date. When used as a marine fuel instead of heavy fuel oil, methanol significantly reduces emissions of sulphur oxides, nitrogen oxides, and particulate matter.

Emission reductions when compared to heavy fuel oil
Source: Stena Lines

Finding new fuel solutions is becoming increasingly important. In January 2020, new regulations by the International Marine Organization (IMO) will take effect, requiring all ocean-going vessels to lower sulphur oxide emissions. This regulatory change has created a growing market for methanol and other clean-burning fuels because they meet the new IMO standards and can replace marine fuels that do not. Methanex and Waterfront Shipping are playing a leading role in establishing methanol as a viable and beneficial option for the marine sector.

Paul Hexter (right), president of Waterfront Shipping, accepts Lloyd's List 2018 Best Fuel Solution Award

By the end of 2019, 40% of Waterfront Shipping's fleet will be capable of running on methanol

In 2016, Waterfront Shipping launched the world's first two-stroke, dual-fuel vessels. In 2018, the company invested in four more ships, which will be added to its methanol fleet by the end of 2019. The vessels have received accolades and awards from the marine industry for their use of clean-burning methanol as an alternative fuel, including Ship of the Year (2017) from Japan's Society of Naval Architects and Ocean Engineers and Lloyd's List 2018 Best Fuel Solution Award.

Helping to meet the IMO's sulphur fuel standards

In 2020, new IMO regulations will require reductions in sulphur oxide emissions. The increasingly stringent international marine fuel regulations are giving momentum to the growth and commercialization of methanol as a marine fuel. Methanol emits no sulphur, and significantly reduces NOx and particulate-matter emissions compared to traditional marine fuels.

In addition to investing in our own methanol-fueled vessels, Methanex supports global projects that demonstrate the potential of methanol in the smaller marine engine market. Some initiatives in this area include the following:

- Methanex has partnered in the conversion of a fishing vessel in China to run on methanol. (See highlight story "A methanol-fueled fishing vessel pilot..." in this section.)
- Methanex is a partner in LeanShips, a European project involving the conversion of a high-speed diesel engine to methanol-diesel dual fuel, for use in smaller vessels.
- As a member of the Methanol Institute, Methanex supported the Sustainable Marine Methanol (SUMMETH) and GreenPilot projects in Sweden, which completed in 2018. These projects verified the feasibility and environmental benefits of methanol in several engine technologies. They also confirmed the feasibility of converting smaller vessels to methanol.

A methanol-fueled fishing vessel pilot was successfully completed in China, demonstrating the improved performance of diesel/methanol technology.

In recent years, Methanex has been partnering in a pilot demonstration project in Jiangsu province involving the conversion of a fishing administration vessel to run on methanol.

In 2018, the project was reviewed by a panel of experts from the Marine Safety Administration (MSA) of the Ministry of Transport (MOT). The MSA concluded that, compared to diesel, the diesel/methanol compound combustion (DMCC) technology used in the pilot demonstrated better engine performance, lower emissions, and competitive fuel costs. Furthermore, the MSA panel determined that the DMCC technology is an innovative and feasible new application for use on commercial vessels in China.

The pilot began in 2017 as a partnership between MSA/MOT, Tianjin University in China, and Methanex. It went through an extensive review process that included engine and emissions testing, a safety review, and a sea trial, all to demonstrate the vessel's operation in a real-world environment.

Methanex will continue working closely with our partners to support commercialization by helping with the development of relevant regulations, safety guidelines, and infrastructure development.

We've been partnering with the Methanol Institute to support the inclusion of methanol in IMO codes. In 2018, the IMO endorsed draft guidelines for using methanol as a marine fuel.

Methanex has been collaborating with the Methanol Institute and other partners to support inclusion of methanol (a low-flashpoint fuel) in the IMO Code of Safety for Ships Using Gases or Other Low-flashpoint Fuels (IGF Code).

In 2018, the IMO Marine Safety Committee endorsed draft methanol guidelines for using methanol as a marine fuel. Over the next year, further refinements will be made. We expect these guidelines to be formalized by 2020.

Currently, when methanol fuel systems are installed in ships, the design needs to be demonstrated on a case-by-case basis to meet the IGF Code's general requirements. Once approved, the guidelines will make commercializing methanol-fueled vessels more straightforward for the marine sector.

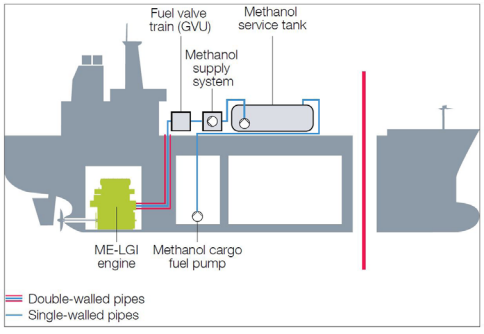


Diagram of the key components required to use methanol as fuel
Source: MAN Diesel

METHANOL AS VEHICLE FUEL

Methanex continued to support the sustainable growth of methanol as a vehicle fuel in China.

In China, increasingly stringent air quality standards are supporting the adoption of methanol as a clean-burning vehicle fuel. Methanol fuel significantly reduces air pollutants when used in place of gasoline or diesel.

In 2018, the Ministry of Industry and Information Technology (MIIT) successfully completed its M100 (100% methanol fuel) national vehicle pilot program. In March 2019, together with seven other ministries in China, the MIIT published guidelines to promote the use of M100 vehicles. The guidelines will allow provinces throughout China to commercialize M100 and opens up the market to additional types of M100 vehicles, including sedans, buses, and trucks.

Methanex has been working with automobile manufacturer Geely and other partners in two provinces in China to support the growth of M100 in this country. We helped provide training sessions in Xi'an, Shaanxi province, where approximately 10,000 new M100 taxis are expected in 2019. Similarly, in Guizhou province (where there are already more than 5,000 M100 taxis operating), we are supporting an additional 8,000 taxis in 2019.

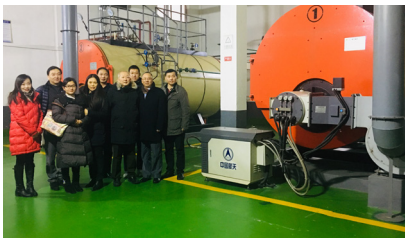
To support this growth, the Xi'an government also announced that M100 vehicles are eligible to use the city's bus lanes and are exempt from the city's road-space rationing program.

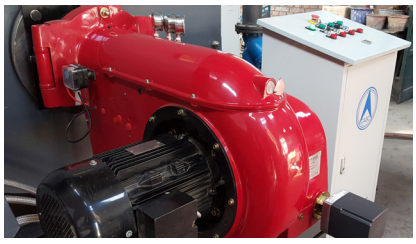
In Xi'an city and Guizhou province, the number of methanol-fueled taxis on the road is expected to reach ~23,000 by the end of 2019.

METHANOL AS POWER SOURCE

Methanex organized a Responsible Care seminar on the safe handling of methanol as a fuel for industrial boilers and engaged in other initiatives to support the use of methanol as power.

In 2018, Methanex helped organize a Responsible Care seminar on the safe handling of methanol as a boiler fuel in China. Attended by 40 people from local government and industries that use methanol boilers for heating applications, the seminar featured sessions on new national standards addressing the use of methanol as a boiler fuel. Other presentations promoted the safe handling and operation of methanol.





Left, methanol-fueled boilers in a seafood processing plant in Dalian; right, methanol burner for an industrial boiler

India is also piloting methanol technology for cargo vessels

In India, the Inland Waterways Association (IWAI) announced a pilot project that will involve conversion of three functioning workboats to methanol, and the launch of six new methanol-fueled cargo vessels in the 1,000 to 2,000 tonne size range.

Methanol blends are advancing around the world

In various regions around the world, methanol blends are being commercialized for their environmental, economic, and energy security benefits.

In India, the government is promoting the introduction of methanol fuels, including M15 (15% methanol, 85% gasoline). In Italy, an M15 blend has been introduced to fuel the car-sharing fleet "enjoy." Israel issued an M15 national standard in 2016 and commercial blends are available at some filing stations.

In Chile, Egypt, and New Zealand, Methanex is working with governments to complete pilots of low-level methanol fuel blends

Methanol continues to advance in China's boiler industry

Thanks to increasing use of methanol as a boiler fuel in China, we've been taking steps to support methanol as a fuel for industrial kilns in China. As with the boiler market, the benefits of methanol in this market are its clean-burning properties, its potential to lower fuel costs, and the modest capital cost of conversion to run on methanol.

Pilot program for 100% methanol-fueled vehicles continues to expand in Iceland

Another Geely initiative to promote M100 (100% methanol-fueled) vehicles is the expansion of its M100 pilot program with Carbon Recycling International (CRI), a renewable-methanol manufacturer in Iceland. Following a successful one-year pilot of six M100 cars in Iceland, Geely now plans to expand the program in the coming year. Methanex supports CRI in its development of safety management systems to enable the company's continued sustainable growth and its contribution to the renewable methanol market.

Methanex has partnered with stakeholders in China to support the publication of national and group standards for methanol as a boiler fuel and also released a Methanol Safe Handling Guidebook. (See Product Stewardship chapter.)

RENEWABLE METHANOL

We supported CRI's renewable methanol plant in the development of an ISO 14001 environmental management system.

In 2018, we supported initial development of an environmental management system (EMS) for Carbon Recycling International (CRI, a privately held company with headquarters in Reykjavik, Iceland, that operates a renewable methanol plant). A formal EMS will support CRI's efforts to protect the environment and use natural resources more efficiently. This work included a gap analysis against the ISO 14001 standard and training of key personnel.

We also assisted CRI in updating and revalidating their hazard and operability study (HAZOP). The HAZOP study identifies and evaluates process issues that may represent risks to personnel or equipment, with the ultimate goal of avoiding incidents. The study was revalidated to reflect cumulative changes to the production process and risk over time, and to improve the mitigation of risk.

Methanex is a key shareholder in CRI, with board representation. By supporting CRI's safety and environmental practices in manufacture and transport, we are helping to enable the sustainable growth of renewable methanol.

Howard Seto (Methanex), Valdimar Olsen (CRI), Kevin Kerik (Methanex), and Gunnar Thordarson (CRI) at the CRI plant in Iceland

Our Approach to Sustainable Energy and Methanol

Methanol is a clean-burning and economically viable alternative energy solution that can provide fuel diversity and reduce emissions. Methanol can be blended directly into or substituted for gasoline or diesel as a high-octane fuel that produces fewer emissions.

Methanol is also used as a clean-burning marine fuel to meet increasingly stringent emissions regulations. It is a key component in the production of biodiesel, a renewable fuel that can be blended with conventional diesel or used on its own to power cars, trucks, buses, farm equipment, and ships.

Methanol is used to produce methyl tertiary butyl ether (MTBE), a gasoline additive that is used as an oxygenate to increase the fuel octane number, as well as dimethyl ether (DME), a clean-burning fuel well suited for diesel engines. The use of methanol to power industrial boilers is a growing market area, and methanol is also being commercialized as a power source for large-scale plants in isolated regions.

When methanol is produced from renewable sources such as municipal waste, industrial waste, biomass, and carbon dioxide emissions, two environmental benefits are achieved: waste is being recycled, and the carbon footprint of methanol production is significantly reduced. Renewable methanol has been demonstrated to be a successful replacement in the fuels market, just as regular methanol is.

Below, find out more about methanol as a vehicle fuel, as a marine fuel, and as a source of power.

Why this matters

Governments and stakeholders around the world are looking to reduce their dependency on conventional fuels, improve air quality, and reduce greenhouse gas (GHG) emissions. Methanol is clean burning: it improves efficiency and reduces emissions, and can be made from a variety of sources, including renewables.

China leads the world in the use of methanol as an alternative transportation fuel and is a significant market for our business. China's federal and provincial governments have implemented programs and standards in many provinces to promote methanol in vehicle, marine, and power applications (i.e., industrial boilers). Other regions around the globe are demonstrating interest in using methanol in energy applications, including New Zealand, Canada, Chile, Egypt, Europe, Australia, Israel, and India, as well as Trinidad and Tobago.

New environmental regulations from the International Maritime Organization (IMO, the global standard-setting authority for the safety, security, and environmental performance of international shipping) require ships to decrease emissions of sulphur and nitrogen oxides (SO_X and NO_X). Because of its clean-burning qualities, methanol can reduce or eliminate these smog-contributing emissions, which can help improve air quality and related human health issues.

How we are managing it

Successful integration of methanol into the energy sector requires broad industry collaboration to build awareness and mutual sharing of research and development. Our role is to champion and lead thinking in this area.

We focus on growing energy applications in countries around the world to provide economic and environmental benefits while enhancing our social license to operate. We support uses of methanol as energy through methanol as transportation fuel, methanol for power generation, and renewable methanol.

Our Approach to Methanol as Marine Fuel

Methanol is increasingly being used globally as a clean-burning fuel to meet increasingly stringent emissions regulations. As a leader in supporting the commercialization of methanol as a marine fuel, we invest in new sustainable technology for our shipping fleet and participate in numerous initiatives involving methanol as a clean-burning marine fuel.

We partner with engine manufacturers (MAN Diesel and Wartsila), Stena Line, and our ship owners (Mitsui O.S.K. Lines, NYK Bulkship Asia, Iino Kaiun Kaisha, Koyo Kaiun, KSS Line, Marinvest, Westfal-Larsen and U-Ships) to develop efficient methanol dual-fuel engines. Waterfront Shipping, a wholly owned subsidiary of Methanex, runs a fleet that includes seven methanol-fueled ships. Four more ocean-going vessels powered by methanol will join the fleet in 2019, and other engine manufacturers and stakeholders are working on projects to commercialize methanol as a marine fuel.

Our Approach to Methanol as Vehicle Fuel

Around the world, methanol has emerged as a clean, sustainable transportation fuel alternative for the future, whether used in a blended application with gasoline, as a diesel substitute, in high-proportion blends in flex-fuel vehicles, or as a dedicated fuel on its own.

With support from the Methanol Institute, the global trade association for the methanol industry, we continue to be actively involved in the development of regulations, standards, and pilot projects for methanol as vehicle fuel. We also continue to participate in national and international initiatives to promote methanol as a clean fuel and advocate for its safe handling.

In China, increasingly stringent air quality standards are supporting the adoption of methanol as a clean-burning vehicle fuel. Methanol fuel significantly reduces air pollutants when used in place of gasoline or diesel. Methanex has been working with automobile manufacturer Geely and other partners in China to support the growth of M100 (100% methanol) for taxis in this country.

Our Approach to Methanol as Power Source

Over the last few years, methanol has been increasingly used as a clean-burning fuel to power industrial boilers used for heat generation. To ensure safe and sustainable development of this market, we are involved in demonstration projects involving industrial boilers in China and in the development of technical and safety standards in this region.

Our Approach to Renewable Methanol

Renewable methanol can be produced from municipal waste, industrial waste, biomass, and carbon dioxide (CO_2). When methanol is manufactured using waste carbon dioxide, the carbon footprint of the production process is significantly reduced.

We are a key shareholder in Carbon Recycling International (CRI), with board representation. A privately held company based in Iceland, CRI operates a green methanol plant that converts renewable energy and recycled CO_2 emissions (from a nearby geothermal plant) to renewable methanol. CRI markets its renewable methanol in Europe under the registered brand name Vulcanol. Vulcanol is certified by the International Sustainability and Carbon Certification system (ISCC) as an advanced, renewable ultra-low-carbon transport fuel with at least 90% fewer CO_2 emissions than conventional fuels.

36%

reduction in CO_2 emissions intensity from manufacturing since inception of Methanex Corporation

18%

decrease in CO_2 emissions intensity from marine shipping since 2002

0
significant spills

to the environment in 2018

Environment

We take a multi-pronged approach to minimize our environmental impact. We make efficient use of natural resources, such as natural gas, energy, and water. We monitor and minimize the waste and emissions we generate and maintain a comprehensive spill-prevention program.

CO_2 EMISSIONS AND ENERGY CONSUMPTION

We continue to reduce our CO_2 emissions intensity from manufacturing.

In 2018, Methanex generated 4,093,573 tonnes of CO_2 emissions (Scope 1, on an equity basis) from methanol production. Our CO_2 emissions intensity decreased by 2% (0.568 tonnes of CO_2 per tonne of methanol in 2018, compared to 0.580 in 2017). This reduction of emissions intensity was achieved even while methanol production increased slightly (by 24,000 tonnes).

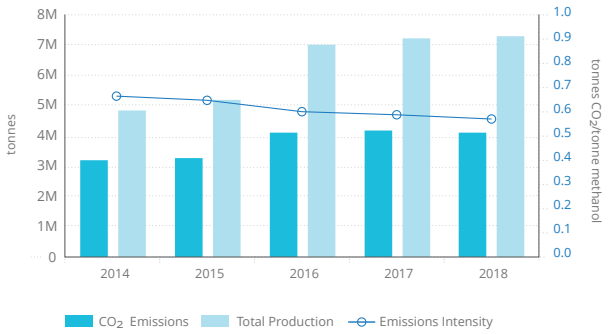
The improved CO_2 emissions intensity is due in part to improved gas supply in Chile and Egypt, resulting in higher production with improved efficiency, reduced consumption of natural resources, and reduced emissions to the environment. Higher production contributed to a 1% increase in our total energy consumption from natural gas.

In 2018, our indirect CO_2 emissions (Scope 2 emissions, on an equity basis), which are primarily from purchased electricity, increased by 1% to 206,596 tonnes. This was the result of higher electricity use to support higher production levels in Egypt. Our consumption of renewable electricity (hydropower) decreased by 29% due to plant outages from two plant maintenance turnarounds at our New Zealand sites. New Zealand is the only country where we purchase electricity produced with renewable energy. (See the environmental data summary table at the end of this chapter for more data on electricity consumption.)

With six manufacturing sites and 11 operational plants, we continually look to improve our overall plant reliability and maximize the use of our assets to minimize energy consumption and CO_2 emissions. In 2018, our overall plant reliability was 95%, an improvement from 93% in 2017 but below our target of 97%. We believe this target is achievable, and we continue to focus on reliability as a way to enhance production results and environmental performance.

Historically, the longer-term trend indicates a sustained decrease in CO_2 emissions intensity: from 1994 to 2018, we've had an overall decrease of 36% in emissions intensity. Initially, the decrease was achieved by removing some of our older plants from active service. More recently, the addition of newer plants, improved catalysts, and improvements to the reliability of existing plants have further lowered the emissions intensity of our operations.

CO_2 EMISSIONS FROM METHANOL PRODUCTION (SCOPE 1)



Increasing production in Chile while minimizing emissions intensity

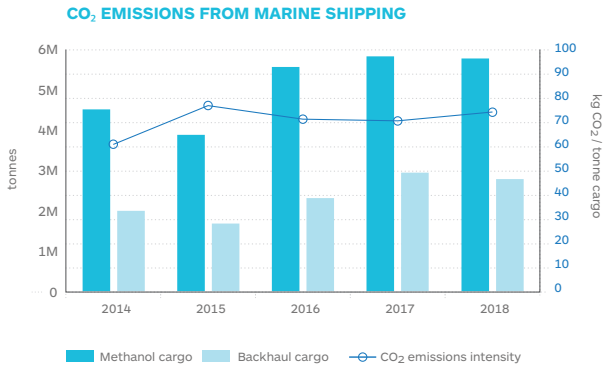
A reliable source of natural gas is critical for efficient methanol production. When plants have intermittent gas supply issues, they may either operate at reduced capacity or be shut down temporarily. Interruptions to production result in increased energy consumption and corresponding CO_2 emissions.

In Chile, we signed agreements with four natural gas suppliers. Together with existing gas agreements, this will allow us to maintain a two-plant operation and annual production at rates up to 75% capacity in the near future. This means we can produce methanol more efficiently while also minimizing CO_2 emissions intensity.

We saw a moderate increase in CO_2 emissions intensity from marine shipping.

In 2018, the volume of cargo (i.e., methanol and backhaul cargos) transported by the Waterfront Shipping fleet decreased by 4%, while total CO_2 emissions intensity from the fleet increased by 5% (74.7 kg CO_2 per tonne of cargo, compared to 71.1 kg CO_2 per tonne in 2017). This emissions intensity increase was due to a greater number of long-haul voyages with less backhaul cargo transported during the return trip (see graph), thus lowering fleet utilization. This has been occurring steadily for the last five years, as the number of trans-ocean voyages (which typically have less backhaul cargo) have been increasing.

Historically, we have seen a positive trend in our emissions intensity. Since 2002, Waterfront Shipping's CO_2 emissions have decreased by 18%. This reduction is mainly due to an overall increase in backhaul cargo, which improved fleet utilization. We have also added newer, more efficient vessels to our fleet, which contributes to a lower proportional emissions intensity across the longer term.



WATER MANAGEMENT

We maintained our freshwater consumption rate and decreased our effluent discharge intensity.

Four of our sites use freshwater sources to produce methanol. In 2018, we consumed 14,737,143 m³ of fresh water to produce 5,502,415 tonnes of methanol. (This figure excludes ~20% returned to the source as treated wastewater.) This equates to 2.68 m³ water/tonne of methanol. Our freshwater consumption remained steady from 2017.

Of the approximately 20% of water returned to a freshwater source as treated wastewater, the ratio of discharge per tonne of methanol decreased 7%, from 0.73 m3 in 2017 to 0.68 m3 in 2018. This was mainly due to shutdowns at two of our New Zealand plants for maintenance turnaround projects.

We continue to be guided by our water stewardship standard to identify and evaluate feasible opportunities to conserve water. This is particularly important in regions

where there may be water shortages. See the highlight below on using treated effluent for irrigation in Egypt, as an example of putting our stewardship standard into action.

We completed Phase 1 of a project in Damietta to reuse clean effluent from the plant for non-agricultural irrigation in the community.

In 2017, we reported that Methanex in Egypt signed an agreement with the Egyptian Environmental Affairs Agency (EEAA) to deliver a lasting and creative solution to the disposal of our clean effluent water by redirecting it to irrigate non-agricultural gardens in New Damietta.

This solution provides a sustainable source of irrigation water for the city of New Damietta, serving ultimately to benefit the community.

In 2018, we completed phase 1 of the project: installing internal pipelines within our plant gates to pump water outside the plant. This work was accomplished successfully and safely. In the next phase, our team will work with local contractors and authorities to extend the pipelines outside our gates.

We look forward to the safe and successful completion of the project and working with the community to conserve water.

A portion of the pipeline installed to direct plant effluent to community irrigation

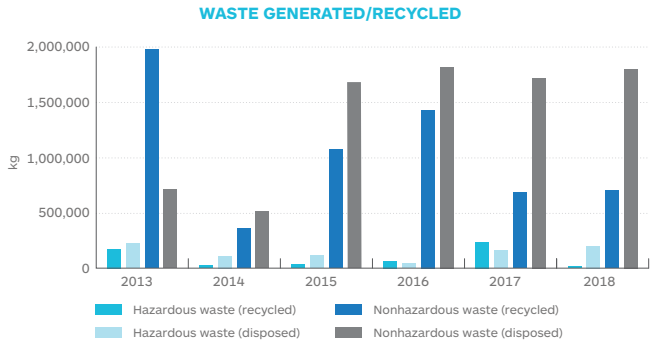
WASTE MANAGEMENT

The amount of waste disposed in 2018 remained consistent with 2017.

From year to year, the amount of waste generated at Methanex is highly dependent on plant maintenance turnarounds and projects. In 2018, there were two turnarounds (similar to 2017), and we also had project work related to the restart of our Chile IV plant.

Typically, 30–35% of the waste we generate in manufacturing can be recycled. The majority of recyclable material is generated during turnaround projects and includes spent catalysts, steel from machinery, piping, and wood. In 2018, 25% of waste was recycled, lower than previous years. This is mainly due to spent catalyst generated by one of the turnarounds, which remained on site past the end of the year and will be recycled in 2019.

In 2018, approximately 87% of our total waste was nonhazardous. This waste, which was disposed to landfill, included materials such as insulation, spent filtering resins, asphalt, and sludge. These were disposed in accordance with local requirements.



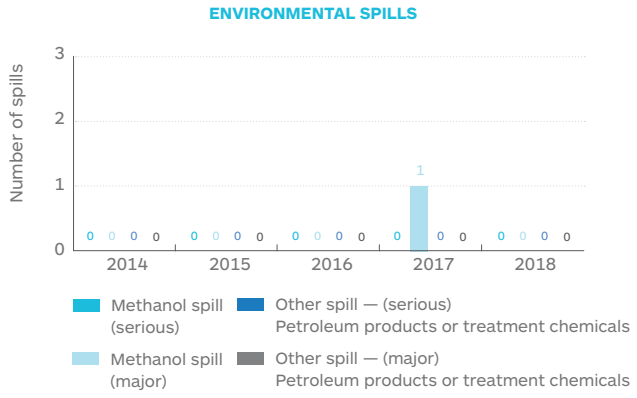
In 2014, there were no plant maintenance turnaround projects, resulting in lower volumes of waste generated.

SPILL PREVENTION AND RESPONSE

In 2018, we continued to focus on our process-safety management and lessons-learned programs, resulting in zero significant spills to the environment.

We proactively conduct plant maintenance and inspections, train our employees on environmental management, and implement process-safety management (PSM) programs. Our primary goal is to prevent the loss of primary containment of substances that are harmful to human health, safety, and the environment.

In 2018, in line with our rigorous incident investigation process, we reviewed the controls in place against minor spill events, shared lessons learned from previous incidents with all of our manufacturing sites, and took appropriate preventive actions to address hazards that could potentially lead to more significant spills.



Our Approach to CO_2 Emissions and Energy Use in Manufacturing

Our operations generate emissions when fuel is consumed during the methanol production process, particularly during the reforming stage. Multiple factors determine the intensity of the emissions, including the age and reliability of the plant (and their impact on efficiency), type of reforming technology, fuel composition, age of catalyst, heat integration, and source of power. As a result, our overall emission rates can vary from year to year.

A reliable source of natural gas is critical for making methanol, and for efficient production. It is also critical that we use this resource efficiently. When we maximize the yield of methanol per gigajoule (GJ) of natural gas, our production is improved and emissions relative to production are subsequently reduced.

Why this matters

We have an ethical responsibility to minimize our environmental impact and to protect our communities. We need to adhere to government and industry regulations and be respectful and mindful of the concerns of our stakeholders.

Likewise, our business operations, suppliers, and customers could be impacted by climate-change concerns such as water shortages, changing sea levels, changing storm patterns and intensities, and changing temperature levels. This is another reason why it's important that we contribute to minimizing environmental impacts from climate change. (Please see our Methanex 2018 Annual Report, Climate Change and Environmental Regulation, for updates on existing or pending greenhouse gas legislation applicable to our business.)

How we are managing it

In accordance with the Responsible Care Ethic and Principles for Sustainability, we take preventive action to protect the environment and innovate for safer processes that conserve resources.

One of the most significant ways we can minimize our emissions is by ensuring the reliability of our production facilities and the efficiency of production processes. This way, we reduce energy use as well as emissions of carbon dioxide (CO_2), nitrogen oxides (NO_X), and particulate matter. All new plants are built to high standards for energy efficiency.

Natural-gas combustion represents our main source of CO_2 emissions. We rigorously monitor and optimize our natural-gas efficiency to account for changing conditions in the reforming and conversion stages. Gas efficiency is monitored daily by measuring the quality and amount of natural gas used to produce a tonne of methanol (i.e., GJ/MT). If the rate of efficiency drops, we investigate the cause and make necessary corrections to improve gas efficiency. We also monitor catalyst evaluation reports on a routine basis and adjust operating parameters to ensure optimal gas conversion to methanol.

At our Medicine Hat facility, CO_2 captured from a neighbouring industrial facility is injected into the reactor to improve production efficiency, converting the waste CO_2 into methanol. (Carbon dioxide is a synthesis gas required to make methanol and is normally produced from our natural gas feedstock.)

These efficiency measures simultaneously reduce CO_2 emissions, conserve natural resources, and enable us to address environmental regulations and concerns about climate change.

Our Approach to CO_2 Emissions and Energy Use in Marine Shipping

When we ship methanol (via Waterfront Shipping) to our customers worldwide, we generate emissions from the consumption of fuel.

Why this matters

In accordance with the Responsible Care Ethic and Principles for Sustainability, we take action to protect the environment and innovate for safer processes that conserve resources. Improving the energy efficiency of marine shipping reduces CO_2 emissions and conserves natural resources, enabling us to address regulations and concerns about climate change.

How we are managing it

We maximize the use of our fleet of vessels by arranging another suitable cargo on the return voyage (backhaul of cargo) after delivering methanol to its intended destination. The backhaul cargo is usually a clean petroleum product, such as gasoline or diesel, with similar characteristics to methanol. By carrying cargo during both legs of the voyage and using fuel as efficiently as possible, we minimize the fuel costs and CO_2 emissions intensity of transporting cargo.

As part of our ongoing commitment to safe, responsible, and reliable transport of cargo, we continually replace older vessels with newer, more efficient vessels through our fleet growth and renewal program. Waterfront's fleet includes seven dual-fuel vessels (with four more dual-fuel vessels to come in 2019), all of which have greater energy efficiency features and are the first of their kind to run on methanol.

Our Approach to NO_X and SO_X Emissions

We generate NO_X and SO_X emissions when fuel is consumed during the methanol production process, and when we ship methanol to our customers worldwide.

Our primary source of NO_X emissions in manufacturing is from the steam methane reformer, an essential part of the methanol production process. The steam methane reformer converts process natural gas (mostly methane and steam) into hydrogen, carbon dioxide, and carbon monoxide. NO_X is formed during this combustion process and the exhaust gas is released through the flue-gas stack of the reformer.

SO_X emissions are dependent on the hydrogen sulfide content of natural gas consumed during methanol production. Natural gas used by Methanex contains very little hydrogen sulfide (<0.2%), so our SO_X emissions are considered low.

Why this matters

NO_X emissions can accumulate in the atmosphere and result in acid rain or ground-level ozone (smog), particularly in areas where there is a lot of industrial activity or other NO_X-emitting sources. SO_X emissions, when in the presence of a catalyst such as nitrogen dioxide (NO_2) that is already present in the atmosphere, can form acid rain.

How we are managing it

As noted earlier, we ensure our production facilities and processes are reliable and efficient, which is one of the best ways of minimizing emissions. In areas with air quality issues or regulatory requirements, we use two methods of reducing NO_X emissions:

- Low-NO_X burners, which prevent the formation of NO_X in the reformer (greater than 50% NO_X reduction)
- Selective catalytic reduction (SCR) units, a scrubber system that removes NO_X from the exhaust gas of the reformer unit (99% NO_X removal rate)

Our Approach to Volatile Organic Carbon (VOC) Emissions

When methanol is in storage or being transferred, under certain conditions some of the vapours may be released to atmosphere. These vapours are known as volatile organic compounds, or VOCs.

Why this matters

Emissions of VOCs to the outdoors are often regulated, especially in heavily industrialized or urbanized locations, to prevent the formation of ozone, a constituent of photochemical smog. Many VOCs form ground-level ozone by "reacting" with sources of oxygen molecules such as nitrogen oxides (NO_x) and carbon monoxide (CO) in the atmosphere, in the presence of sunlight.

How we are managing it

We use methanol vapour-recovery systems on storage tanks and in loading areas when there are air quality issues or applicable regulatory requirements. Leak detection and repair programs further enable us to minimize the emission of methanol vapours throughout the plant.

Our Approach to Water Management

Water is a feedstock resource for manufacturing methanol. It is essential for production processes such as natural gas reforming, steam generation to drive compressors, heat transfer, and cooling processes.

Why this matters

Water is a resource needed for methanol production, but it's also a resource for the communities and ecosystems in which we operate. This is why we focus on using water as efficiently as possible and protecting aquatic ecosystems through effective wastewater treatment and spill-prevention systems.

Depending on the location, our plants use either fresh water or sea water. Because fresh water is a shared natural resource with our communities and environment, we put the bulk of our efforts into conserving and protecting freshwater sources.

How we are managing it

Our water stewardship standard guides our decision-making and program development. It focuses on:

- Monitoring water risks and addressing impacts to communities, production, and suppliers
- Conserving water by minimizing, reusing, and recycling, and by closely monitoring water use associated with energy consumption
- Protecting water sources by reducing wastewater and contaminants of concern
- Monitoring data specific to water use, water quality, and effluent discharge
- Collaborating with local communities to invest in water stewardship initiatives

Throughout our plants, we conserve water by recovering waste steam and water, which are then reused in the production process. We also conduct regular groundwater monitoring to ensure that groundwater is not contaminated.

In accordance with regulations, all wastewater from our operations is treated and analyzed before being discharged. We go beyond regulatory requirements and set a stricter internal leading-indicator target for the performance of our treatment systems. This gives us advance warning of any potential issues with wastewater systems.

Our Approach to Waste Management

The largest quantity of waste we generate occurs during major maintenance, plant refurbishments, and servicing work. This waste includes construction-related materials such as scrap metal, wood waste, piping and vessel insulation, cardboard, and other packaging waste and containers.

Why this matters

It is important that we operate in a way that minimizes the use of resources and the amount of waste that is disposed.

How we are managing it

Each Methanex location monitors the volume of waste that is generated and diverted from disposal to recycling/reclamation facilities. Over the last few years, we've been steadily decreasing the volume of hazardous waste we generate, while recycling as much hazardous waste as possible.

We focus on critical recycling measures and ensure that any waste generated is stored appropriately and disposed of by qualified waste-management companies. We also track data about the waste we generate, so we can identify opportunities to reduce it through recycling, reusing, or reducing at source. All of our facilities have recycling programs in place; these include recycling for paper, cardboard, beverage bottles, and petroleum products.

Our Approach to Spill Prevention and Response

Of the hazardous materials that could spill at a manufacturing site, the most significant are methanol, petroleum products from machinery (e.g., fuel, lubricating oils), and water-treatment chemicals.

Why this matters

When compared to substances such as conventional gasoline and diesel fuel (and many of their constituent elements, such as benzene), methanol is safer and more environmentally benign. Since methanol occurs naturally in the environment and is readily biodegradable, methanol spills are unlikely to accumulate in the groundwater, surface water, air (as vapour), or soil.

However, a large release of methanol has the potential to adversely impact the immediate environment, depending on the nature and quantity of the release.

How we are managing it

To prevent spills, we proactively conduct plant maintenance and inspections, train our employees on environmental management, and implement process-safety management (PSM) programs. The primary goal of PSM is to prevent the loss of primary containment of substances that are harmful to human health, safety, and the environment. If spills occur, we clean up, monitor, and analyze them to identify and resolve root causes. In addition, in the event of a large spill, we have crisis and emergency-response teams in place to mitigate any health, safety, and environmental impacts.

A key aspect of our spill preparedness and response program is ensuring that local response organizations are prepared to handle a methanol-related transportation incident. In both Canada and the U.S., we follow comprehensive voluntary chemical industry standards that support transportation hazard management. As part of our commitment to stewardship best practices, we are meeting the intent of these standards in the other regions and countries where we do business.

We also work closely with our community advisory panels (see the Community Chapter) to ensure that community concerns about potential methanol incidents are addressed.

20%

decrease in employee injury frequency

7,368 hours

spent in leadership development

91%

participation rate in employee survey

77 team members

travelled globally for special assignments

Workplace

The safety and well-being of our employees, contractors, and the communities in which we do business are our top priorities. Our talent management programs provide our staff with the knowledge and tools they need to be successful and opportunities to maximize their potential. An engaged workforce and One Team culture create our competitive advantage.

HEALTH AND SAFETY

In spite of our goals and efforts to prevent injury, injury rates rose.

In 2018, the frequency of employee injuries decreased 20% (see 5-year Recordable Injury Frequency Rate graph), but overall our personal safety performance did not meet our target. While the frequency and severity of injuries to employees declined, contractor injuries increased. A significant factor was the increase in the number of major projects we undertook.

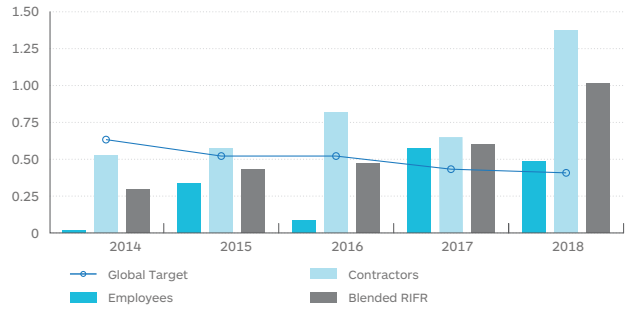
The increase in injury severity rates (RISR) was the result of injuries requiring medical treatment or resulting in lost time or modified work (recordable injuries). None of these incidents resulted in fatalities or severe injuries, although some had the potential to be more severe.

Some of our potentially significant incidents were related to working at heights and dropped objects, and they occurred during plant turnaround activities. We are bringing a greater focus on these hazards within existing safety education and awareness programs, including our work permitting system, our Critical Activities, Rules, and Expectations (CARE) standard, and our Switch On to Responsible Care safety culture program.

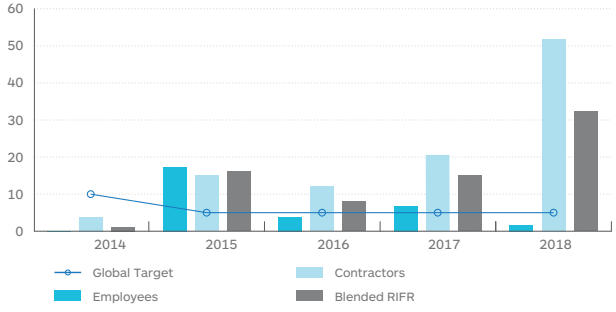
Our safety education and hazard awareness programs have shown positive results for employees, and we are working hard to bring this value to our contractor groups as well. The nature of contract work (often temporary and project based) presents a continually changing audience and unique challenges.

To improve performance, we are enhancing our focus on four key areas: leadership and employee engagement, contractor engagement and performance, plant maintenance turnaround performance, and our approaches to learning. We remain committed to achieving zero injuries through a One Team approach.

5-YEAR GLOBAL RECORDABLE INJURY FREQUENCY RATE (RIFR)



5-YEAR GLOBAL RECORDABLE INJURY SEVERITY RATE (RISR)



Increasing safety management during largest plant TAR

When our Motunui plant underwent a major maintenance turnaround to improve process safety and plant reliability, it went on record as the largest-ever turnaround at Methanex.

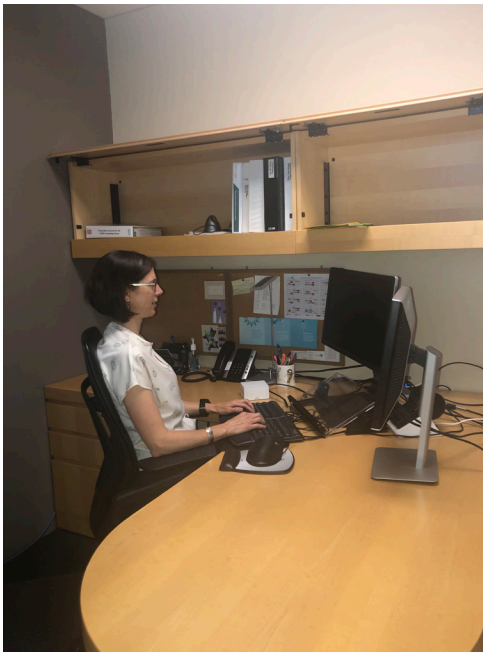
Before the turnaround started, we took extensive measures to share our safety culture with the contractor community. In meetings with principals and supervisors from the contractor companies, we focused on implementing a united approach to managing hazards. During induction sessions and daily check-ins, we delivered messages about the priority for safety.

Workers were also invited to display on their hard hats their top four reasons for going home safely, a concept adopted from our Switch On to Responsible Care safety culture program. (Read more about this program in the Workplace chapter.)

Unfortunately, the Motunui turnaround team faced several challenges, including adverse weather conditions and a lengthy extension due to work emerging from inspections. These circumstances impacted incident and injury rates, which did not meet targets.

The injuries that occurred remind us that our work to build and share a culture of safety must be ongoing. We will continue to seek effective ways to inspire and enable workers within our organization, and those joining us on contract, to work toward the goal of zero injuries.

Office-related injuries increased our awareness of ergonomic hazards in office environments.



An office environment may seem like a safe place to work, especially compared to work involving equipment and hazardous products. However, in 2018, office injuries that resulted in time off work and medical interventions reminded us of the hazards present in office settings. The injuries, which included ligament strains and an ankle fracture, were related to work at computers.

A worker's personal and work life can be significantly affected by injuries occurring in an office setting. Like hazards in any work setting, hazards for office workers require awareness and action to identify and prevent. Furthermore, potentially harmful circumstances in office environments can often remain hidden from view, including repetitive tasks such as using a computer mouse.

To increase awareness and prevention of office hazards in both corporate and manufacturing settings, we have ergonomic programs to prevent musculoskeletal injuries, as well as a MoveSafe initiative to promote frequent and safe movement. We also share with office workers hazard-assessment and mitigation practices related to their work setting.

Our safety message to all team members is the same, regardless of their work setting. Awareness of hazards to health and safety crosses all roles and types of work.

Personal responsibility and initiative from leadership, team members, and contractors are critical in taking timely action to keep everyone safe.

MOVE SAFE®

We hosted a workshop, Enabling Egypt's Process Safety Journey, the first of its kind in the region.

In 2018, we hosted Egypt's first-ever workshop on process-safety management (PSM) in order to share safety standards and practices with this region. Process-safety management is about managing the hazards in the physical infrastructure of our plants (i.e., the toxic, flammable, and explosive potential of the materials we use and the high pressures used to maintain our manufacturing process).

The event was attended by over 300 people, including top leaders and representatives from Egypt's oil, gas, and petrochemical industries. Entitled "Enabling Egypt's Process Safety Journey," the workshop was a collaboration with the Egyptian Petrochemicals Holding Company (ECHEM), our joint venture partner in Egypt and a subsidiary of the Egyptian Ministry of Petroleum. Keynote presentations addressed the fundamentals of process safety and the role of leadership in PSM. In break-out sessions, participants developed action plans on topics ranging from university curricula to leadership engagement.

Mohamed Shindy (above), Managing Director, Egypt, and Jason Clement (below), Director of Process Safety Management, speak to participants at the workshop in Egypt

To build on the event's momentum, we have committed to supporting and organizing an annual PSM conference in the region. Methanex will also support a monthly PSM forum and advise ECHEM and the Ministry of Petroleum on ways to define their own PSM roadmap.

A new executive steering committee for process safety

In 2018, to further our efforts in process safety, we created a new Executive Process Safety Steering Committee. This committee will create a direct line of sight for senior leadership to key process-safety risks and mitigating measures at our plants.

Greg Sargent, process safety engineer at our Medicine Hat site, recognizes the value of the steering committee: "The EPSSC is a conduit to senior leadership for the PSM professionals at the site level. This enables us to better help leadership to understand, prioritize, and address the critical issues at our sites."

KEY TAKEAWAY

Process Safety Depends on a Strong Team Culture

All team members need to maintain a disciplined approach to safety-critical operations and avoid complacency by adopting a perspective of chronic unease.

Extract from Process Safety Management: A Handbook for Methanex Senior Leaders

Other process-safety initiatives advanced in 2018 included the voluntary adoption of "safety case," a rigorous, evidence-based approach to evaluating the adequacy of risk reduction measures at our manufacturing facilities. We also developed process-safety hazard pamphlets to guide internal operations in raising awareness of what can potentially go wrong and measures to protect against these scenarios.

Every Methanex facility around the world engaged in health promotion efforts.

Methanex undertakes global health-management initiatives to provide employees at all our locations with health programs that meet the highest standards. In 2018, our Global Health Network launched the Global Health Standard to direct Methanex's global health programs, and each region participated in a variety of health promotion efforts.

Medicine Hat published a comprehensive health promotion brochure to share about the company's health promotion practices with employees. The program includes annual influenza vaccinations for workers and their families, shingles vaccinations, health surveillance, and onsite massage therapy.

In Egypt, Dr. Medhat Elbarogy (pictured left) conducted an employee session to raise awareness about shift work fatigue and other health impacts. The session provided information about circadian rhythms—natural cycles of energy and drowsiness—as well as tips on managing shift work fatigue.

In Vancouver, a Mental Health Week Committee was formed to raise awareness that "Mental Health Is Everyone's Business." The 15-person committee conducted a local survey to highlight national statistics and their relevance to staff.

In New Zealand, in conjunction with the record number of turnarounds occurring in one year, a mobile medical portacom (portable building) was launched to support employee and contractor health. The medical portacom was relocated as needed during the turnarounds.

The Methanex Geismar site was awarded the "Geismar Wellness" Program award by a community wellness association.

To promote employee health at out Punta Arenas, Chile plant, staff participated in three talks about nutrition and exercise. Through an internal Sports and Cultural Club, "Club Deportivo," physical activities (e.g., the National Geographic run, pictured) were promoted to both employees and their families.

BUILDING OUR CULTURE

We achieved our seventh successful Responsible Care verification, further strengthening our Responsible Care culture and practices.

In 2018, after reviewing practices across our organization, the Chemistry Industry Association of Canada (CIAC) provided us with a successful Responsible Care reverification. In addition, the verifiers pointed out that Waterfront Shipping, a wholly owned subsidiary of Methanex, remains the only shipping company in the world to have adopted Responsible Care as its guiding code.

This verification indicates that the Responsible Care Ethic and Principles for Sustainability are guiding our company decisions and actions, and that an innovative and reliable management system is driving continual improvement. This is our seventh successful company-wide verification since we were first verified in 1997. The report is available to the public on the CIAC website.

The verification identified 49 best practices (a record number from a single verification of Methanex), 29 findings requiring action, and 22 improvement opportunities. Some of the identified best practices included quarterly CEO communication sessions and blog, active community advisory panels (CAPs), our Process Safety Management Handbook and safety case technique for risk management, and our Safe Trans-loading Program (for transfer of cargo from one mode of transportation to another).

Rawle Ramlochan, plant manager in Medicine Hat, accepts the CIAC Responsible Care Verification certificate

The verification is both an affirmation and a learning opportunity, which we embrace as part of our journey toward operational excellence and Responsible Care leadership in methanol production.

We expanded our Switch On safety culture program to reach contractors and re-engage employees and leadership.

Our Switch On to Responsible Care program focuses on building a strong safety culture. After training most of the organization in 2016 and 2017, we rolled it out to our contractors in 2018.

For those who had already been through the program, we introduced a new iteration called “Staying Switched On” to reinforce a culture of sharing, mindfulness, and individual empowerment in working safely. This new module included 10 “toolkits” of supporting materials for use in toolbox meetings and everyday conversations about safety. Our manufacturing regions have begun using the kits to support safety awareness campaigns, orientation programs, and turnaround preparations.

The visibility of leaders in safety programs—their involvement and their conversations with staff and contractors—is an important driving force in a strong safety culture. In 2018, we held a half-day Switch On training session for senior leaders, which included participation by the Board of Directors and Executive Leadership team. The session provided participants with the principles and language of our global Switch On program, enabling them to engage in safety conversations and lead in establishing a safety culture.

Promoting Responsible Care from Brussels

While Responsible Care has very specific applications in the manufacturing setting, its stewardship practices have a place in every role across the organization.

In our marketing and logistics offices in Brussels, recognition of the importance of a Responsible Care effort in all roles has led to a unique initiative: as part of their development goals, each employee now has a Responsible Care objective. In 2018, as part of the initiative, two colleagues were recognized with Responsible Care Awards for their personal contributions to Responsible Care.

Nicolas Guillaume, manager in Supply Chain and Logistics, was named Responsible Care Ambassador 2018 for work he did in relation to emergency response and terminal assessments. Virginie Vandrille, business controller with the Finance Department, was named Responsible Care Rising Star 2018. Virginie made meaningful contributions related to incident management, analytics for surveyor work, and safety moments during staff meetings.

Pride in Methanex Culture

In 2018, we conducted our biennial Global Employee and Culture Survey and were delighted to see a 91% participation rate. This far exceeds the average participation rate reported by AskYourTeam, the company that conducts our surveys.

We are also proud that we maintained or improved our scores around our culture, which included questions about our values and Responsible Care. Responses indicated a strong belief in the company's commitment to Responsible Care and to the priority given to employee and contractor safety. These results are very encouraging and emphasize the overwhelming pride our employees take in working for Methanex.

Feedback from our last survey (in 2016) had identified improvement opportunities in three areas: learning and development, information technology, and project management. In 2018, we used the survey to measure progress in these areas and gain insights on further improvements needed. Based on the latest feedback, we will implement more changes next year, including more leadership development, increased training on new IT developments for staff, and shared processes and tools to improve delivery of capital projects.

We were awarded Best New Employer by China Europe International Business School (CEIBS).

In June 2018, Methanex in Shanghai was honoured to receive recognition from the China Europe International Business School as the Best New Employer for 2017–2018. CEIBS was cofounded by the Chinese government and the European Union in 1994, and its MBA program has been ranked in the Top 25 of the Financial Times' annual global business school survey for 14 consecutive years (2005–2018) of its 23-year history.

Methanex has held recruitment and campus talks and supported events and campaigns at CEIBS. In March 2018, Sarah Boon, Methanex Director, Corporate Services (Hong Kong), spoke at the CEIBS MBA Women's Leadership Forum on initiatives that support women in organizations and approaches to fostering women in leadership in China.

Partnership with CEIBS is an important part of our recruitment strategy in Asia Pacific and demonstrates our commitment to supporting education organizations through our social responsibility programs.

TALENT MANAGEMENT

Our commitment to building leadership capability is evident in the growth of our Global Leadership Suite of learning and development programs.

Through our Global Leadership Suite, we spent 7,368 hours building leadership capability across different levels of the organization.

- 134 emerging leaders participated in 21 two-hour sessions throughout our regions, learning practical, easy-to-apply leadership skills.
- 25 attended the Global Leadership Forum through the Centre for Creative Leadership and gained insight and perspective that helps them tap into their leadership potential and develop key leadership skills.
- 17 mid-level leaders participated in a three-week experiential-learning session, called Courageous Leadership. In this program, leaders explore the specific challenges and opportunities of leading within a global organization.
- 34 leaders participated in our High-IMPACT Coaching and Mentoring program. (See highlight below.)

These programs complement regional training plans and activities that focus on developing specific competencies and skill sets. They also provide opportunity for global network building and sharing of best practices across locations.

The cohort of emerging leaders from the 2018 Centre for Creative Leadership program in San Diego

In 2018, we integrated our High-IMPACT Coaching and Mentoring program with the Global Leadership Suite.

Having successfully piloted the High-IMPACT Coaching and Mentoring program in 2017, in 2018 we expanded the program across the broader organization as a new offering within our Global Leadership Suite. This program creates a foundation for a shared and sustainable coaching and mentoring style for the business. It is based on a model that uses an inquiry process to help team members find solutions and realize their potential for high performance, while helping them achieve goals and support the organization's execution of its strategy.

In 2018, three new coaching cohorts were formed. Altogether a total of 34 coaches invested approximately 60 hours in self-development and on-the-job practice, after being paired with 41 trainees. In 2019, three more coaching cohorts will be rolled out, increasing our coaching bench to approximately 75.

According to feedback received from the coaches, the most valuable program outcomes were skills gained in active listening, open-ended questioning, and problem solving. Managers reported that trainees improved their ability to support their teams. Others cited execution of projects and leadership transitions as areas where positive impacts were observed as a result of the program.

Coaches and coachees from the High-IMPACT Coaching and Mentoring Program

We refocused our learning and development programs to better respond to employee needs.

Our 2018 Employee Culture and Engagement Survey used targeted questions to gauge whether our employees feel that the learning and development measures we've taken since 2016 are making improvements. The results told us that employees and leaders value the support they receive, but we can be more consistent in how support resources are tailored to individual employee careers and their unique skills.

In 2018, we provided more deliberate guidance to help managers be more effective in developing employees to reach their potential while enabling the business to achieve strategic goals. This new guidance is being applied in annual career- and development-planning conversations as part of the goal-setting programs we have had in place for years.

During these conversations, employees and managers discuss strengths, development opportunities, and career aspirations. They then agree on an action plan to support continued development through a balanced mix of learning styles: 70% on-the-job experience, 20% learning from other people, and 10% formal or structured learning.

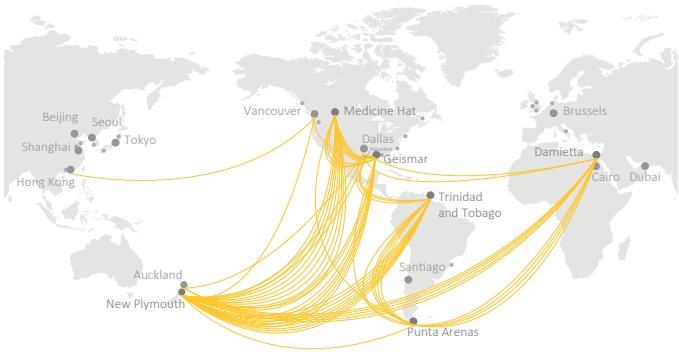
Employee development has long been a key pillar of our culture. The survey results are helping us be more deliberate about where we should focus and how we'll measure our success going forward.

Coaches and coachees from the High-IMPACT Coaching and Mentoring Program

77 of our team members traveled to work in Methanex locations around the globe, supporting business needs, building networks, and gaining experience at the same time.

In 2018, through our Global Mobility program, 77 of our team members had the opportunity to work outside their home countries. This is more than double the number of people in last year's Global Mobility movement and included both short- and long-term assignments and support for plant projects, maintenance turnarounds, and other business initiatives.

The Global Mobility program supports our business strategy of developing talent through extended business travel experiences and assignments, optimizing both business performance and individual development. Team members gain expertise in a new setting while simultaneously learning about operations in another region and culture. Assignments allow our host teams to experience greater diversity and fresh ideas, enhancing knowledge and culture at the same time.



Our Approach to Workplace Health and Safety

We have comprehensive health and safety programs to ensure the safety of our employees and contractors in every area of our global operations.

Why this matters

As the world's largest producer and supplier of methanol, we understand how critical it is to ensure that our employees and contractors are working in a safe environment and are not exposed to potentially harmful hazards. We care deeply that all of our people go home safely every day.

How we are managing it

We firmly believe that all work-related injuries and illnesses are preventable. Safety is our top priority, and our primary goal is a zero-injury workplace. This is the foundation on which we design our Responsible Care management systems, execute core safety programs, and maintain a strong safety culture.

Global Integrated Management System

Our Global Integrated Management System (GIMS) helps us implement our Responsible Care Ethic and Principles for Sustainability. Its requirements meet or exceed the latest management system standards for quality (ISO 9001:2015), environment (ISO 14001:2015), occupational health and safety (ISO 18001:2007), and process safety (Center for Chemical Process Safety). This integrated management system focuses on the recognition and mitigation of hazards in our process and across all site activities.

The GIMS is implemented by teams made up of Responsible Care and Quality leaders and technical practitioners in all regions who develop and implement safety standards and initiatives across our sites.

Process Safety Management Program

Our Process Safety Management (PSM) program is devoted to safely containing hazardous materials within the plant systems. We use the Center for Chemical Process Safety's (CCPS) Guidelines for Risk Based Process Safety to benchmark best practices with our peer companies and to guide the development of our global and regional programs.

Occupational Health and Safety

Our occupational health and safety program focuses on the safe execution of all work at our sites and consists of several major elements that impact every stage of the work cycle. These include identification and management of job-specific hazards, worker competency and training, work-permitting systems, job supervision, compliance monitoring, and contractor management.

Our Critical Activities, Rules, and Expectations (CARE) standard identifies the activities that present the greatest risk to workers and the actions required to work safely and avoid significant injury. CARE applies to both employees and contractors, to add a critical layer of protection against the most serious injuries that can occur on a manufacturing site.

Safety Culture

To support our core safety programs, we have multiple initiatives that focus specifically on work behaviours. Human-factors and behaviour-based safety programs focus on safe behaviours, accountability, and the interface between people and the work environment. Our Switch On to Responsible Care safety culture program reminds people of their own personal reasons for working safely and enlists their commitment for doing just that. Responsible Care leadership programs focus on inspiring each person to take responsibility for Responsible Care and promote visible and effective Responsible Care leadership from management.

Learning and continual improvement are key pieces of our culture. They are principles that shape our incident-management program and the sharing of lessons learned from incidents, which generates systemic changes throughout the organization, helping to eliminate vulnerabilities in regions beyond where an incident occurred.

Healthy Workplace

We have a variety of global health initiatives supporting the well-being of our staff. These include a Health and Fitness to Work Network, a global forum enabling Methanex health professionals to share information across the organization and establish core Health program elements, screening programs, and awareness campaigns tailored to regional needs.

Contractor Management

Our Contractor Health, Safety, Security, Environment, and Quality Management Standard defines how we manage the work of these valued partners on our work sites. Processes for their pre-qualification, onboarding, job planning, and risk management are focused on setting them up to do their work safely and in compliance with our standards.

Methanex policies, standards, and procedures relevant to a contractor's work are communicated as part of the contracting process. Contractors are held accountable for their compliance with our expectations, but we hold ourselves accountable for bringing them into our safety culture, sharing Responsible Care values with them, and being a partner to them during their time on site.

Our Approach to Talent Management

We are invested in providing rich learning experiences and opportunities so we can continue to attract and retain a talented, thriving workforce that shares our company's values and vision and works together as One Team to deliver our business strategy.

Why this matters

Our people are critical to our success in every area of our business. Maintaining our leadership position means continuously developing our people and ensuring that they have the knowledge, tools, and opportunities to maximize their potential and deliver our business strategy.

How we manage talent

Our Employee Value Proposition supports our workplace programs through three pillars:

- **Talented Team:** Creating a team of exceptional people who are agile, driven, and caring, enabling us to work together across functions, disciplines, and regions toward our shared vision
- **Powerful Impact:** Enabling employees to create a real impact through a diverse range of innovative and challenging projects
- **Bright Future:** Continuously growing and developing our people, and ensuring they have the knowledge, tools, and opportunities to maximize their potential

We focus on building leadership capacity and implementing effective talent-development programs to support and develop new and existing employees and to successfully deliver on our strategy. These programs include:

Leadership Development
The Global Leadership Suite is an integrated set of signature leadership-development programs customized for leaders at all levels of the organization. It consists of the Executive Leadership Program, the Courageous Leadership Program, the Centre for Creative Leadership Global Leadership Forum, Methanex Leadership Essentials, and the High-IMPACT

Coaching and Mentoring Program. In addition to completing a formal learning program, participants build a network of high-performing peers to enable future growth and collaboration.

On-the-job Learning and Development Opportunities
It remains our goal to have a company-wide framework that provides a pipeline for developing employees with multi-disciplinary capabilities and leadership potential.

One of the ways we do this is through our Global Mobility Program, which promotes knowledge and cultural exchange. Through this program, employees can undertake a temporary or permanent position at another global location or business function. These assignments aid in employee growth by transfer of specialized skills, accelerating personal and professional development and promoting our "One Team" philosophy. It is a key strategic enabler to build capability and strengthen our technical and leadership bench strength, while facilitating effective and efficient utilization of our employees across geographies.

Diversity Program
Our Methanex Diversity Policy identifies three key diversity attributes—experiential, demographic, and personal—that enhance and improve our organization by creating a balance of skills, experience, perspective, and knowledge. The policy recognizes the importance of diversity, at all levels of the company for organizational effectiveness, and our talent-management programs foster diversity in our teams of people.

Graduates in Training
Our Graduate in Training Program is a two-year development program designed to foster leadership and professional growth among recent engineering graduates in the areas of technical, commercial, environmental, and interpersonal skills. Through the program, graduates have the opportunity to work on cross-functional engineering projects, providing them with broad exposure to many areas of the business.

In addition to functional and technical capabilities and leadership development, each graduate receives a personalized, behaviour-focused development plan that includes coaching and assessment tools. They also receive support from a cross-functional team to ensure a successful transition from the university setting into our work culture.

Employee Engagement
We periodically conduct Employee Engagement and Culture Surveys to see how invested team members are in their workplaces and determine where employee concerns lie. We look hard at the feedback received, then take action to strengthen our culture and improve our workplaces.

Overall the message from our employees in recent surveys is clear: We need to keep doing what we're doing, increase communication and consultation (particularly around changes to work scopes or projects that may have Responsible Care implications), and continuing learning and development efforts.

Fostering Teamwork and Social Responsibility through Employee Volunteering
Methanex partners with employees who contribute financially or as volunteers to organizations within their community. This partnership can be in the form of matching financial donations, providing corporate support for fundraising opportunities, or coordinating volunteer events in which other Methanex employees can participate. By committing our time through volunteering, we make a real difference in the communities where we operate and, at the same time, work together to build stronger connections with our colleagues. (Please see the Community chapter for more information.)

23 CAPs

(community advisory panel meetings) held around the world

12,474 hours

of volunteering in the community

302 organizations

benefitting from our efforts

Community

We believe our business must have a positive impact on people's lives. Our goal is to build and support healthy communities that are great places to live and work. Through grants, education, community development, and volunteerism, we invest in the communities where we do business, aligning our efforts with our values and culture.

COMMUNITY DIALOGUE AND ENGAGEMENT

In 2018, we held 23 community advisory panel (CAP) meetings around the world, engaging with community members on topics they care most about.

The topics of our CAP meetings vary, depending on community needs and concerns. Here are some highlights from 2018:

Our **Trinidad** location revised its CAP charter to expand its membership to 13 people. The site management team hosted a Disaster Preparedness Workshop with CAP members to increase community resilience following natural disasters; community members were also invited to the workshop.

In **Medicine Hat, Canada,** we held our second open house (Community Day) in June 2018, as part of our commitment to transparency with the public. (See sidebar story, below.)

In **Taranaki, New Zealand,** meetings included a visit to Aica (one of our customers), a bio-diesel demonstration, a visit to Port Taranaki, and a visit to our new control panel room at Waitara Valley. CAP members were updated on safety issues, turnarounds, and our community engagement and giving program. In a unique joint venture, CAP members and Methanex personnel presented their collaborative work at the Waitara community night market.

Geismar, USA CAP meetings included sharing of environmental performance data and sharing of a study on the economic impacts of the chemical industry on the state of Louisiana. CAP members also held discussions about mutual aid (the network of emergency-response resources from neighbouring facilities in the area) and lent their support to a local program that exposes high-school students to jobs in the manufacturing industry.

In **Egypt**, extensive efforts were spent collaborating with the International Labour Organization (ILO) and the Ministry of Trade and Industry on implementing programs that support women and youth, employment opportunities, and small-scale entrepreneurship. See more about these efforts in stories below.

In **Punta Arenas, Chile,** CAP meetings included discussions about the restart of the Chile IV plant and improved gas availability in Chile, as well as our activities to celebrate 30 years in the region. CAP members presented information about their own institutions and how Methanex plays a role in their objectives.

Celebrating 30 years in Chile

Methanex celebrated 30 years of operations and presence in the Magallanes province. To thank the community for three decades of partnership, two initiatives were carried out.

First, Methanex was instrumental in the publication of a book of photographs titled 30 años de historia en rostros magallánicos ("30 years of history in faces of Magallanes"). The book features people from the community who have contributed important work in areas ranging from sports, literature, and the arts, to education and inclusion. This initiative expressed Methanex's pride as a member of the Magallanes community.

The second initiative was our commissioning of a study of the perfil Magállanico ("Magellan profile," or "Being from Magellan"). The study was carried out by a prominent survey company, GfK Adimark, and presented to the community by Methanex. Its purpose was to demonstrate with facts and numbers who the Magellan people are, what they do, what they like, and what they expect. This gift was well received by the Magallanes community.

Launch of the book 30 años de historia en rostros magallánicos

We incorporated lessons learned from emergency-response exercises and training into our emergency-response plans.

Training, drills, and exercises are a regular part of our emergency-response programs in each region. After each drill or exercise, we evaluate what we did well and what we can do better, then incorporate these lessons learned into emergency-response plans. These plans are in place to guide us in the event of a real emergency.

In 2018, these programs advanced in unique ways in each region.

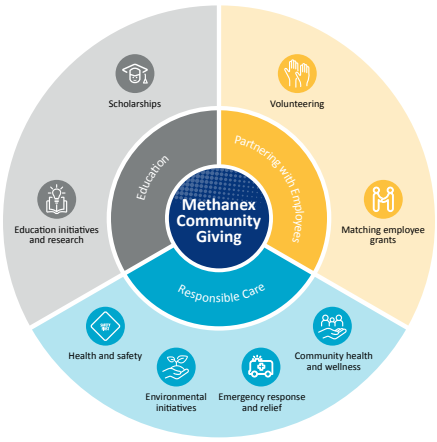
- In **Europe,** we conducted two emergency-response exercises that focused on pipeline scenarios in the UK. We also updated our regional ER program, including basic training for emergency responders and improvements to our communication channels.
- Our emergency-response team in **Medicine Hat, Canada** held a TRANSCAER transportation safety training event to educate local first responders about products moving through the communities via rail and truck. A day later, they held a full-scale emergency-response exercise that involved local Emergency Medical Service (EMS), the Medicine Hat Police, and the Medicine Hat Fire Department.
- **Methanex Chile** hosted its 11th annual fire-fighting training camp at the Chilean Fire Academy outside of Santiago. This year, they invited 19 health, safety, and environmental representatives from diverse sectors and industries across Brazil, Peru, Colombia, Uruguay, and Chile. During this four-day event, training addressed topics such as Responsible Care, risk management, and fire ground control exercises, using state-of-the-art simulators to emulate potential situations.
- In **Geismar, USA,** Methanex participated in Community Awareness and Emergency Response (CAER) Day, an annual event that brings the emergency-response teams from the chemical manufacturers in Ascension Parish together with municipal partners, elected officials, CAP members, and others. The day included a guest speaker, a classroom session, and information sharing by vendors, as well as a showcase of the various response vehicles operated by the participating agencies. The event demonstrated that emergency response is most effective when it is part of a strong mutual aid network.

CAER Day booth in Geismar

COMMUNITY INVESTMENT AND VOLUNTEERING

In 2018, we invested USD $1.47 million and contributed 12,474‡ hours to support communities around the world, benefiting 302 organizations.

We have three areas of focus for our global community investment and volunteering efforts: partnership with employees (working together as One Team to have powerful impacts in the community), Responsible Care (supporting health and safety, environmental initiatives, emergency response and preparedness, and community health and wellness), and education (including scholarships, co-op opportunities, summer employment, and funding for research).



‡ *Total hours include time spent managing the volunteer activities as well as participation, in accordance with London Benchmark Guideline (LBG).*

In Egypt, we helped to make significant advances to support women and youth, employment opportunities, and small-scale entrepreneurship.

In 2018, Methanex Egypt delivered three pilot projects to the Damietta community: The GET Ahead for Women in Enterprise, Job Search Clubs, and Start and Improve Your Business. Together with a new module, Know About Business, these training packages will constitute the core activities of a two-year project, running from April 2019 through March 2021, through a unique partnership with the UN's International Labour Organization to extend to Damietta the full scale of their successful project, Decent Jobs for Egypt's Young People.

The project will be the focal point of our social responsibility programs in Egypt and addresses one of Egypt's most pressing challenges: youth unemployment and underemployment. It also honours our Responsible Care ethic for social responsibility.

By the end of the three years, we expect to reach out to 20,000 members of our community, create over 500 jobs, and develop relationships with new stakeholders such as Egypt's National Council for Women (which reports to the President's office); the Micro, Small, and Medium Enterprise Authority (reporting to the Prime Minister); and the ministries of manpower, youth and sports, and education, among others.

The project will also focus on building capacities of local partners on the ground for improved service delivery to support unemployed youth, while also addressing key cross-cutting themes such as occupational safety and health, inclusion of people with disabilities, and gender mainstreaming.

Methanex supports Damietta's young entrepreneurs

With Methanex's support, a new community initiative for Damietta was launched in 2018. Start and Improve Your Business (SIYB) is one of the ILO's largest global business management training programs and a core tool of the ILO's Decent Jobs for Egypt's Young People. As a strategy to create more and better employment for women and men, the program helps small-scale entrepreneurs start and grow their business. In 2018, six workshops were delivered to 118 beneficiaries in Damietta.

The program focuses on potential and existing small-scale enterprise owners and entrepreneurs and encompasses a range of training, monitoring, and evaluation methodologies and instruments. These activities are designed to be cost effective and practical and to meet the management training needs of this target group. Under the new partnership with Methanex, more iterations of SIYB will be delivered to future and existing entrepreneurs in Damietta over the next two years.

The Ministry of Trade and Industry's development agency for micro, small, and medium enterprises offers both financial and non-financial support to graduates of SIYB. The government is actively encouraging entrepreneurship as a vehicle to generate employment and improve people's livelihoods.

Young entrepreneurs from one of the six SIYB workshops

Far left: Brad Boyd, Senior Vice President, Corporate Resources, with the first female carpenter in Damietta; hear her story in the video, GET Ahead for Women in Enterprise

Near Left: Participants in the GET Ahead training program

Reaching our community in Medicine Hat, in partnership with our CAP

One way we fulfill our commitment to being transparent with the public is through Community Open House days. The Medicine Hat site held its second open house (Community Day) in June 2018. Many of the site's employees volunteered at the event, which included a charity BBQ, bus tours, an emergency response demonstration, and information booths. Approximately 300 individuals received a bus tour, including two classes from Alexandra Middle School. Among the 300 were two classes of students from a local middle school, as well as four members of our CAP (who managed an information booth).

Members of our CAP were on hand to speak about their experiences. Methanex invited the Palliser Airshed Society, Safety City (a community safety program for children), and Praxis Society—organizations closely aligned with our operations—to set up booths at the event. Praxis set up science stations for children, including one where the students could make methanol molecules out of candy and toothpicks.

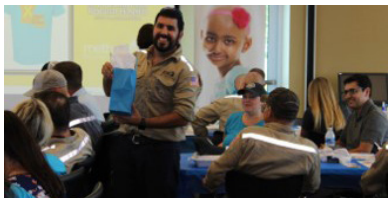
The Medicine Hat Maintenance team with their Community Day display

Each of our global teams volunteered and made investments to help meet needs and support valuable projects in their communities.

*Fifteen members of our team in **Shanghai** returned to visit a family in a rural area, whose four children receive ongoing education support from Methanex. The team delivered gifts and small home supplies to help and encourage the family. They treated the children to a special trip and meal to continue fostering positive relationships that might help these children in the future.*

*Our **Dallas** team contributed to the Chemical Education Fund, which funds science-based educational activities. We also supported children through Cherished Creations, an organization that helps children who are seriously ill, and provided Christmas gifts to two adopted families through the Angel Tree program (pictured).*

*After widespread flooding in October 2018, Methanex **Trinidad** employees contributed to relief efforts through fundraising, volunteering at a local relief organization (pictured), and helping with restoration efforts at a secondary school. Employee contributions were matched by Methanex.*



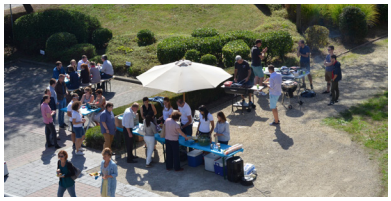
*In **Geismar, USA,** we were the flagship sponsor for the 2018 St. Jude Run/Walk to End Childhood Cancer (pictured). This was also the fourth year of our commitment to support construction of a new facility for Our Lady of the Lake Children's Hospital in Baton Rouge.*

*Methanex's Procurement team in **Taranaki, New Zealand,** helped sort donated items for a Foodbank drive, helping local families in need.*

*Employees in **Chile** worked throughout the year to raise funds for the Telethon of Magallanes, as part of their ongoing efforts to support children with disabilities.*

*In **Vancouver, Canada,** for the 26th year in a row, employees made company-matched donations and contributed volunteer hours to the United Way. They also contributed to the KidSafe program (pictured), which provides nutrition and education to underprivileged kids.*

*Our **Medicine Hat, Canada** team donated funds and time to the Praxis Society (pictured), which provides science, technology, engineering, and math (STEM) opportunities for children and youth. They also supported Bowl for Kids' Sake, the Santa Claus Fund, and United Way.*



*Our **Brussels** team organized a fundraising barbecue at their head office for Snijboontje, a non-profit organization fighting against poverty and social exclusion. Companies in our neighbourhood were invited to attend and learn about this initiative.*

In each region, our team members generously volunteered their time to projects benefitting their communities.

Our Hong Kong team again supported Hong Kong Food Angel, a food bank for needy elderly at the beneficiary centre in Hong Kong. Eleven colleagues participated in this long-term partnership with Food Angel as an expression of our commitment to the society.

In Brussels, we participated in Run to Walk, an annual charity event that supports people with physical disabilities. Several employees formed a team that did a nonstop relay run of 300 km starting at 9 a.m. in the morning and continuing until the next day.

Our team in Medicine Hat, Canada, did restoration work for the South East Alberta Watershed Alliance, a group dedicated to sustainable management of the South Saskatchewan River sub-basin and the Pakowki Lake watershed.

Our team in Geismar, USA had a Crawfish King Cook-off to support The Big Buddy Program, a local nonprofit youth-services agency that provides positive role models and quality learning experiences to over 2,000 disadvantaged children and youth.

In the Damietta community in Egypt, with the help of Methanex employees, we delivered two medical caravans providing physician consultations and medication to villages surrounding the city.

Once again, our Dallas team provided donations to Camp Summit, a camp for children and adults with disabilities.

For 12 years, Methanex Chile employees have been donating Christmas gifts to the Villa Austral nursery school; in 2018 they also prepared and distributed boxes of food at Christmas to families living in extreme poverty.

Methanex volunteers from Taranaki, New Zealand, excavated a path to Goodies Hut, East Taranaki, to aid conservation work. They also donated 25 buddy benches to schools in North Taranaki, as part of the Safe Days initiative.

Employees in Trinidad assisted their fence-line communities by repainting an orphanage, preparing a kitchen garden (pictured) for another orphanage to help reduce their food costs, and cleaning up a local beach.

Vancouver staff volunteered on initiatives to support Soup Sisters (empowering and nourishing women, children, and youth in need), Kick for a Cure (supporting childhood cancer research), PALS Autism Society (pictured), Lynn Creek Estuary, and Great Canadian Shoreline.

Supporting children at La Châtaigneraie in Belgium

In 2018, we donated funds toward the construction of four unique studio apartments in a new building for La Châtaigneraie, a charity organization in Belgium that provides homes for children who come from difficult backgrounds.

Constructed on the current site of La Châtaigneraie, the studios will provide housing for 18-year-old students from the organization's youth program who, though of legal age, are still too young to live independently. Two of the units will be occupied by these students, and the other two by university students who will provide peer mentorship and support. This project started at the end of 2018 and will be operational by early 2020.

We've been supporting La Châtaigneraie for many years, contributing to house renovations, equipment, and a swing set in the past, and we are committed to helping this organization meet its worthy goals of helping a needy population of youth.

Methanex held a barbecue for the centre's children.

Restoring native bird populations in East Taranaki

In three separate events, Methanex volunteers assisted in a project coordinated by the Department of Conservation and the East Taranaki Environment Trust to support the monitoring and translocating of founder birds to their native habitat.

More than a dozen Methanex employees were involved in each event, which involved helicopter transport and a 20-minute hike to carry the birds for the final leg of their journey from Huaturu (Little Barrier Island) to their new home, where they have not been seen in 30 years.

"At first I thought nothing of this other than a nice thing to be part of, but once we were there and mixing and mingling with the community of Purangi, an overwhelming sense of pride overcame me," said Methanex administrator Kelly Gates of the experience, which has left a lasting impression on her. "Not only are these birds now living amongst the beautiful bushlands in the Taranaki region; they will be a part of the future for generations to come."

Overcoming disability through teamwork

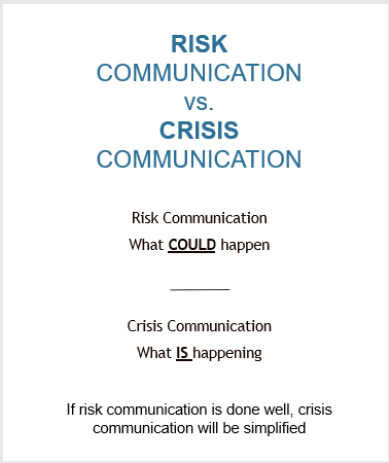
Our teams in China partnered with Shanghai Xuhui Local University to sponsor a city-wide orienteering game that brought Methanex teams and their families together with hearing-impaired students to solve a series of puzzles around the city. The exercise engaged both groups in collaborative problem solving, both to communicate and to achieve a goal together. The event celebrated China's 28th annual Help the Disabled Day, a day dedicated to improving the welfare of the disabled and preventing disability.

Partnering to support health and safety in university programs

In 2018, Methanex in Medicine Hat established a partnership with Minerva Canada, a non-profit organization dedicated to health and safety education, to assist in a project that Minerva describes as their "most ambitious initiative" to date. In this initiative, industry experts partnered with graduate students at Canadian universities to create teaching modules that address health and safety gaps in the curriculum of engineering students. The project was developed in response to industry feedback that students are leaving university with a limited understanding of this area.

Anneleen Muller, Process and Occupational Safety Supervisor in Medicine Hat, worked closely with a professor and two graduate students at the University of Alberta's Edmonton campus to develop a teaching module on risk communication. This module teaches students how to communicate risk to external stakeholders in, for example, situations of new developments or emergencies. Development of the module involved careful selection and thorough discussion by the team; the work resulted in a compilation of risk communication theories and case studies to be used by instructors in their classes.

This module and many others are available on the Minerva website.



Content from a presentation developed with the risk communications module.

Anneleen Muller (right) with University of Alberta student Vivian Giang, who traveled to the Medicine Hat plant to present to members of our Emergency Operations Centre.

Our Approach to Community

As a leader in Responsible Care, we are committed to people and to the environment in which we live, work, and play. We believe our business must have a positive impact on people's lives, and we strive to be a respected neighbour and valued corporate citizen by creating positive and sustainable impacts in the communities and regions where we have a significant presence.

Why this matters

Communities have the right to understand both the benefits and risks of our business. From a business perspective, our community-relations efforts support our growth and operations by enabling us to build and maintain our social license to operate. A strong commitment to giving back to our communities also aligns with our core values and culture, supports employee attraction, engagement, and retention, and builds positive relationships with key stakeholders.

How we are managing it

We are guided by the Responsible Care Ethic and Principles for Sustainability and the Chemistry Industry Association of Canada (CIAC) Responsible Care Codes of Practice. Our community policies and Community Dialogue Standard align with the Accountability Code of Practice and set out communication and engagement goals and actions for building positive relationships in our communities. We consistently endeavor to understand community interests, communicate information about our product and our business activities, and address community concerns.

Consultation & Communication with our Communities

We have community advisory panels (CAPs) in our manufacturing locations. These panels encourage communication and transparency between Methanex and our communities. We hold CAP meetings three to five times per year to share information about plant operations and seek input on our community programs. Other community dialogue channels include stakeholder associations, open-house days, community projects, seminars, local surveys, public meetings, conferences, and grievance-response mechanisms.

Contributions to Communities

Through our business activities and tax payments, we contribute to local economies by employing people (directly and indirectly) and by purchasing goods and services from local suppliers. In addition, we regularly provide financial contributions and volunteer time to support community programs, services, and events. Employee-run social responsibility committees at our locations around the world identify local needs and develop community investment strategies to support these needs.

Community Investment and Volunteering

Through our social responsibility investment programs, our company and team members give back to their local communities in ways that are aligned with our core values, our culture, and our business strategy. We are extremely proud of the generosity and spirit of our team members. Every year, team members give thousands of hours of volunteer time—as teams and as individuals—to create positive impacts in local regions. In addition to supporting local communities, team members work together to build stronger connections with each other.

We have three areas of focus for our global community investment and volunteering efforts:

Partnership with Employees – Working together as One Team is an essential part of our culture. We believe we do our best work together, and we work together as one team to impact both our company and our local communities. Employees are our greatest asset and our best ambassadors. To support our team members and the community causes they care about, we match employee donations and support their volunteer efforts both on and off business hours.

Responsible Care – In alignment with the principles of Responsible Care, we provide funding and volunteer help to support programs that focus on health and wellness, safety, environmental protection, and the unique community needs of each region where we do business.

Education – We are an innovative learning organization that strives for continuous improvement and growth. We support education efforts that contribute to regional education initiatives and help us develop a skilled workforce, to improve productivity and drive business growth. These efforts include scholarships, co-op opportunities, and summer employment for students who are pursuing studies in engineering, environmental studies, marketing, public affairs, and international business. We also provide funding for academic research aligned with our business areas.

Community Awareness and Emergency Response

The safety and well-being of our communities, employees, and contractors is our number-one priority. We work with local emergency responders, agencies, and service providers to share information about potential health and environmental hazards related to our product and operations. Our goal is to work with communities on emergency-response training and planning programs, including effective road, rail, pipeline, and marine emergency preparedness and response, for transportation incidents that may occur.

Our global transportation emergency-response standards are based on the CIAC Transportation Emergency Assistance Plan (TEAP III). These standards enable us to work with qualified local emergency responders, emergency response service providers, and other agencies to effectively respond to potential emergency situations. Each manufacturing region and site shares emergency-response plan information with the community, provides training to emergency responders on methanol incidents, and participates with partners in joint emergency response training exercises.

We also align our response plans with the Transportation Community Awareness and Emergency Response (TRANSCAER®) initiative. TRANSCAER members are industry associations in Canada and the USA representing manufacturers, distributors, transportation companies, and emergency responders along our product's transportation routes. TRANSCAER members work with municipalities, emergency responders, and residents in communities to make sure they are informed about the products being moved through their area and prepared to respond to potential incidents involving dangerous goods. Find out more about TRANSCAER–Canada and TRANSCAER in the U.S.

100%

of all planned ship safety visits and training completed

2739 people

attended our methanol safety seminars—a Methanex record

747 organizations

reached through methanol safety seminars

Product Stewardship

Our comprehensive approach to product stewardship safeguards the public, the environment, and the communities in every country where we do business. We promote the proper use and safe handling of methanol while implementing environmental stewardship and social responsibility across our supply chain.

MARINE SAFETY

We improved safety programs for our Waterfront Shipping fleet and raised our safety standards.

In 2018, we continued to make improvements to our Responsible Care practices in marine safety. Our work in this area helped to maintain the strong fleet safety ratings we achieved last year.

The improvements included changes to how we share about incidents and lessons learned, as well as changes to improve the quality of our incident investigations. We expanded our speak-up program, which reminds people to express any concerns about the safety of work and empowers them to openly ask questions and make suggestions to vessel and shore management.

We enhanced our fleet's training and mentoring programs in the areas of competency management, training development, and on-the-job training. We also focused on the mental health and well-being of sea staff. (See the sidebar story, right.)

	Planned	Achieved
Vessel safety visits	25	25
Annual Chemical Distribution Institute CDI-Marine inspections	25	25
Methanol and nitrogen safety training sessions	100	100

To verify that our fleet is suitable and approved to carry customers' products, we maintain vetting inspection approvals from major international oil and gas companies. We also carry out Chemical Distribution Institute (CDI) audit inspections and safety visits on our ships on an annual basis.

Making mental health top priority

At our biennial Responsible Care meetings of the Methanol Group, discussions ordinarily revolve around Responsible Care performance and best practices. (The Methanol Group is a consortium of ship owners and ship-management companies that actively collaborate in the sharing of best practices and lessons learned related to safety.) However, at our June 2018 meeting, led by Waterfront Shipping, mental health for seafarers took top priority.

In the past, mental health has not been an openly discussed topic. Methanex is working to change that across our organization. Data from marine industry experts shows that over the last six years, there has been a significant rise in mental health-related issues for ship crews. The top stressors are distance from family, social isolation, financial issues, fatigue/long hours, and inspection demands by regulators and other stakeholders.

At the 2018 Methanol Group meeting, 58 people representing ship owners, ship managers, Waterfront Shipping, and Methanex selected mental health as the top priority among other emerging issues. Everyone committed to work toward progress in this area.

To support the change and increase awareness, the ship-owning and ship-managing companies committed to including training and awareness programs for the senior officers in our fleet, among other actions. As well, Waterfront Shipping has added a chapter on mental health and motivation to its annual safety visit program.

Open-door and safety event in Brazil

In October 2018, we conducted our third methanol safety workshop and open-door event at our Cattalini methanol storage terminal in Brazil. Sponsored in conjunction with Cattalini at the Camboa Hotel in Paranaguá, this biennial event has attracted an increasing number of participants every time it is held.

This year's event included participation from the main transportation companies that haul more than 20,000 truckloads from this terminal on annual basis, as well as surveyors, local authorities and agencies, and emergency responders. Speakers covered a range of topics that included vessel safety, shipping regulations, and new safety technology for trucking. The day included a group tour of the terminal's facilities.

At the event, we also celebrated the fact that six million metric tons have moved through the terminal since we first started there in 2001.

TERMINAL SAFETY

We partnered with terminals in our supply chain as part of ongoing efforts to continually improve Responsible Care performance and share best practices..

Our Chemical Distribution Institute (CDI) terminal inspection program, a core part of terminal safety, relies on partnerships with terminals to take our Responsible Care efforts even further. In 2018, we worked closely with Methanex global terminals on a variety of activities to find solutions that will close safety gaps and optimize the effectiveness of safety measures. Some highlights included:

- Nine terminals in the Asia Pacific region joined our safety/Responsible Care recognition program, demonstrating increased engagement with safety cultures. As part of this program, we gave out 10 Responsible Care Awards. (See highlight below about two ideas that earned recognition.)
- We supported four European terminals in implementing improvement actions and engaged another four terminals to complete the Methanex Terminal Pre-screening Assessments (TPSAs). The assessments are aimed at identifying opportunities to improve safety practices.
- In Latin America, as part of our Terminal Best Practice Exchange Program, two loading master supervisors spent a week sharing best practices with our Responsible Care team and local loading masters at the Cabo Negro terminal in Chile. This work will be replicated in 2019 with loading masters from Chile going to Brazil.
- We worked closely with our terminals in North America to address safety inspection/audit findings. We also conducted a Responsible Care assessment for a new terminal. This part of our process allows Methanex to ensure the systems, safety culture, and practices, along with fire protections and emergency response protocols, meet the expectations of Methanex's Responsible Care approach.

A customized mobile ladder, designed for one of our North American terminals, helps prevent falls during cargo loading

In Asia-Pacific, we gave 10 awards to staff at our partner terminals for contributing ideas that improve safety and foster continuous improvement.

Our Logistics Service Providers (LSP) Recognition Award in the Asia-Pacific region is given to staff who contribute valuable safety improvement ideas at their respective terminals. In 2018, nine terminals from our Asia Pacific network participated, including six terminals from China, two from Korea, and one from Japan.

One award recipient devised a magnetic door plate that affixes to truck doors during loading operations. The plate functions as a warning sign for drivers to make sure they don't enter the cabin or operate the truck before loading finishes and all hoses are disconnected.

Another operator came up with the idea of making an inexpensive device that makes it safer for operators to retrieve pigs from pipelines. (A pig is a device used for pipeline maintenance operations such as cleaning and inspection.)

A third award recipient proposed adding lighting at a terminal, at an elevation that would increase visibility for ships during low tide.

Magnetic safety sign (left) and lighting installed at a terminal (right): ideas proposed by terminal staff to improve safety


Device designed to retrieve pigs from pipelines, a safety solution proposed by terminal staff

ROAD AND RAIL SAFETY

We received awards from five major North American rail lines, qualifying us for the American Railroad Association's Grand Slam award.

In 2018, our North American team was proud to receive rail awards from Canadian Pacific, BNSF, Union Pacific, Norfolk Southern, and Canadian National rail lines, These awards qualify us once again for the Grand Slam Award from the American Railroad Association.

For delivery of our product in North America, we carry out a rigorous railcar preventive maintenance program, which reported 100% compliance in 2018. This program depends on careful monitoring of regulatory changes to tank car standards and operational controls for flammables.

In 2018, we also instituted a proactive plan to ensure railcars in our service adapt to new standards announced by the U.S. Department of Transportation for implementation by 2025. We are requiring all railcars (currently DOT-111) to be either retrofitted to meet the DOT-117 specifications or replaced with the DOT-117 railcar by 2023, two years ahead of the deadline. The new railcar design leaves only a 3% chance that product could release in a derailment situation, compared to 26% for railcars currently.

Team members from our Dallas office, accepting the 2017 CP Chemical Shipper Safety award. (The 2018 awards ceremony will occur in 2019.)

To enable the safe transportation of methanol, we worked closely with stakeholders across the supply chain.

In 2018, we conducted a variety of activities to enable the safe transportation of methanol and to test that our emergency-response networks are capable of safely and efficiently responding to any potential land-transportation incident involving methanol. Examples of these activities in each of our regions are described below.

Our emergency planning and response activities for potential transportation incidents follow the Transportation Emergency Assistance Program (TEAP) standards (http://www.teap3.ca/), defined by the Chemistry Industry Association of Canada (CIAC). We strategically focus on enabling coordinated technical resources and emergency support across our supply chain for any emergency or transportation event, whether or not it involves our product.

- In Chile, we began working with one of the country's largest emergency responders to support our emergency preparedness efforts in Punta Arenas. Also, for the fourth year in a row, we launched the Random Audit Truck Program for Brazil. The results of these audits are shared with customers and logistics service providers in Brazil to share best practices, as are the cumulative scores of over 30 transportation companies in Brazil who participate in these audits.
- Our emergency-response team (ERT) in Medicine Hat, Canada, attended two TRANSCAER events in Edmonton and Calgary, along with multiple agencies and municipal partners. With neighbouring municipal partner Cypress County Fire Department, the team hosted a training night for local firefighters to raise awareness on fire-fighting tactics for fires involving railcars and events occurring at night. The Medicine Hat ERT also joined fire departments from across southern Alberta for two days of training hosted by CP Rail. This hands-on training event focused on emergency response in situations involving railway transportation and flammable liquids.

Night training for our Medicine Hat emergency response team and Cypress County Fire Department

Promoting supply chain safety and emergency preparedness in the Middle East

In alignment with our mandate to promote awareness of Responsible Care and inspire others to commit to Responsible Care principles, we presented at the 2018 Gulf Petrochemicals and Chemicals Association (GPCA) conference in Dubai. The conference was attended by 174 people from 68 companies in 13 different countries.

We shared our experiences in building Responsible Care practices within the Waterfront Shipping fleet through training programs for crew members and initiatives to enhance crew well-being. We also shared effective communication strategies for emergency response, including the need for strong supply chain partnerships and emergency response plans.

Photo courtesy of the GPCA

Hands-on Responsible Care seminar in Edmonton

In September 2018, our Marketing and Logistics team in Dallas hosted our first-ever interactive Responsible Care seminar for customers in Edmonton, Canada.

Topics and activities at the seminar included the use of personal protective equipment, a live demonstration of mock methanol fire extinguishment, and opportunities to see and handle operational equipment such as handle hoses, gaskets, and O-rings. Each attendee was provided with a compatibility guide for the use of methanol in typical operation environments.

The overwhelming success of this event led to announcement of an interactive seminar in 2019 to expand these education/outreach efforts and provide more customer-specific, onsite training opportunities.

Customers and Methanex staff, following the hands-on demonstrations

- In Geismar, USA, Methanex participated in CAER Day, an annual event hosted by the local chemical industry's Community Awareness and Emergency Response (CAER) committee. (See the Community chapter for more information.)
- In Europe, we assessed transportation hazards along 15 methanol transportation routes. (We call these "route risk assessments," a phrase that denotes an extensive process of identifying possible hazards along the path of travel of our product, from terminal to customer.) We are working closely with customers who have recognized our efforts in this important area and are seeking to learn from us.
- In China, where we have been working since 2013 to promote product stewardship "downstream" through the supply chain, we hosted another distribution forum that was attended by over 80 representatives from more than 25 downstream partners. These included distributors, truck companies, and distributors' customers and terminals. In a cumulative total of 240 hours spent together, participants focused on practical best practices in the areas of truck maintenance and management, driver training, route risk assessments, and emergency preparedness. There is great appreciation for Methanex's leadership in Responsible Care in the region.

INDUSTRY COLLABORATION AND RESPONSIBLE CARE ADVOCACY

Our methanol safety programs reached record numbers of people and organizations around the world.

Globally, we conducted 80 methanol safety seminars with 747 organizations, directly reaching a total of 2,739 people worldwide with information about methanol and safe handling practices.

- Methanex Europe held 24 Responsible Care sharing sessions with partners, reaching 109 different organizations. We also led several customer workshops to build synergies and create learning opportunities in Responsible Care. At the Gulf Petrochemical and Chemicals Association (GPCA) conference in Dubai (see sidebar below), we presented our vision of safety along the supply chain and took an active role in a workshop on product stewardship codes. At a Responsible Care seminar in Turkey, we invited two of our service providers to speak on the importance of emergency preparedness and incident investigation.
- A distribution forum in East China was attended by 80 participants from more than 25 downstream partners, including customers, distributors, terminals, and truck companies. The forum addressed practical approaches to truck maintenance, driver training, and transportation route risk assessments, as well as emergency response preparedness.

Value-chain partners share best practices at the East China Distribution Forum.

- In Chile, we increased training at our Cabo Negro terminal in Punta Arenas, due to an increase in loading operations. Altogether, 238 people were trained in Responsible Care and safe practices for handling methanol. Once again, we presented on safe handling in a global market at Brazil's Biodiesel BR Conference, the largest congress of its kind in the region. We completed and tested the first two modules of our online Responsible Care training program; this will be launched in 2019 on the Asociación Chilena de Seguridad (ACHS) website as a joint effort between ACHS and ASIQUIM Responsible Care committee. This training will be accessible to Chilean companies in the chemical sector.

Fernando Reinecke speaks about methanol safety at the 2018 Biodiesel Congress in Brazil.

- Our North America team hosted 80 participants at two safety webinars. Each attendee received a thumb drive containing an incident management checklist, a safe handling presentation, and a chemical compatibility guide. The webinars have proven to be effective in reaching larger groups within our supply chain, without requiring travel. We intend to do more of these in the future.

As a member of Responsible Distribution Canada (RDC), we continued to elevate safe distribution standards across North America.

In 2018, through RDC's Regional Distribution committee, we developed Transloading Guidelines for safer cargo transfer operations. (Transloading is the process of transferring a shipment from one mode of transportation to another.) We also advocated for the adoption of these guidelines across the RDC.

As a result, the Transloading Guidelines are being incorporated into Canada's RDC guidelines. In the U.S., many of our distributors have begun to incorporate similar guidelines and standards into their operations. This has resulted in significant improvements to the systems that support and facilitate safe transloading operations.

All of our Canadian distributors (and many of our U.S. distributors) are RDC certified.

We launched a Methanol Safe Handling Guidebook for the use of methanol as an industrial boiler fuel in North China.

In partnership with industry associations and stakeholders, we launched China's first-ever Methanol Safe Handling Guidebook at a Responsible Care seminar. This guidebook helps support safety standards for the country's transition to methanol-fueled industrial boilers from coal (the traditional energy source for boilers in the region).

Bringing Responsible Care to university students in China

We strongly believe the principles of Responsible Care should be shared with students who are embarking on careers in the chemical industry.

Since 2010, we have been hosting Responsible Care seminars at the Beijing University of Chemical Technology (BUCT) and the Taiyuan University of Technology (TUT). To date, approximately 800 undergraduate students at our seminars have learned about Responsible Care, methanol safety, methanol energy applications, and the environmental benefits of methanol.

This university seminar concept was shared with the Association of Chemical Manufacturers, which has established a similar program with its member companies.

The sharing precedent of this program was further advanced when we engaged BUCT and TUT scholarship winners as student mentors, to share their understanding of Responsible Care with their fellow students.

We collaborated with the Methanol Institute to produce an updated video on safe handling of methanol.

We collaborated with the Methanol Institute to create a new video to promote safe practices for anyone handling methanol. This includes workers in methanol plants, distributors, chemical and energy consumers, first responders, and the general public. This video provides an overview of critical methanol safety information, including methanol health and fire risks, and how to mitigate them through proper safe handling procedures.

This important video is being released in 2019. It is available at https://www.methanol.org/safe-handling/.

Our Approach to Product Stewardship

As the world's largest producer and supplier of methanol, Methanex is committed to supporting the safe handling and safe use of methanol. We have six production facilities and over 60 contracted terminal and storage facilities throughout the world. We distribute methanol to our customers via ship, barge, road, pipeline, and rail to major international markets in North America, Asia Pacific, Europe, and South America.

Our global supply chain is supported by the world's largest fleet of methanol ocean tankers, which is managed by Waterfront Shipping, a wholly owned Methanex subsidiary. In North America, we send over 10,000 shipments of methanol to customers by rail every year. Globally, we load more than 30,000 trucks and 600 barges annually with methanol.

Why this matters

The distribution of methanol raises potential safety hazards if improperly handled and stored, as well as potential environmental impacts if spills occur. (See the Environment chapter for more information.) This is why we are committed to ensuring its safe use.

How we are managing it

By minimizing risks at critical points in the methanol value-chain—product transportation, distribution, storage, and use—we are doing our part to protect the public, the environment, and communities.

We do this through a variety of internal and external health, safety, and environmental initiatives that are all guided by our Global Integrated Management System. We actively work with business partners and industry associations to improve the stewardship of products over their life cycle and share technical and safety information with stakeholders at seminars and conferences, and in online education initiatives.

Each year, we communicate about the risks and benefits of our operations and products with approximately 2,000 individuals worldwide, and we reach many more through our train-the-trainer model. As a member of the Methanol Institute, we also participate in numerous groups and initiatives to ensure the safe handling of methanol and its derivatives across the global distribution chain.

In conducting our business, we are accountable and responsive to the public. We respond to community concerns about our products and services, have regular and proactive engagement with stakeholders, maintain up-to-date safety information, and provide product information in an appropriate and timely manner.

As we expand methanol into energy applications, we are mindful of the need to recognize the different risks that come with these new markets. We continue to evolve our Product Stewardship program to support the safe, sustainable development of these new end markets and their specific needs.

Our Approach to Marine Safety

Waterfront Shipping takes practical precautions to minimize risk to people, the environment, and the communities in countries in which we operate. We work with our contractors, ship owners, and their ship-management companies to follow industry best practices and comply with all applicable regulations.

We go above and beyond regulations with our Responsible Care programs for shipping. These efforts include:

- Vessel safety visits
- Chemical Distribution Institute's Marine (CDI-Marine) audits and inspections
- Methanol safety training for ship crews
- Training on nitrogen safety, to mitigate asphyxiation risk (nitrogen is used to remove the risk of fire and explosion in the tanks)
- Environmental compliance and energy efficiency
- Best practice sharing within the fleet and the industry through the Methanol Group

Every year, Waterfront Shipping provides customized training programs for crew members working aboard the Waterfront fleet. This includes training on safe methanol handling, as well as nitrogen awareness and asphyxiation risks.

To verify compliance with all regulations and best practices, all ocean-going ships are required to complete an annual inspection based on CDI-Marine protocol. In addition, all contracted barge operations are audited to verify the safe transportation of methanol on inland rivers.

Our internal Safety Visit Program, conducted annually on all ships, is a review of 21 areas of on-board safety management and people practices (e.g., crew morale, motivation, leadership, safety culture). Results of the visits help determine the fleet's safety rating; they also provide a benchmark of safety practices and help ship-management companies improve their safety and environmental systems.

Our in-region barge operations are not owned or operated by Waterfront Shipping. However, all contracted companies have successfully passed our safety assessment protocol to enhance their Responsible Care performance when transporting methanol along inland rivers.

Find out more about Waterfront Shipping's fleet statistics here.

Our Approach to Terminal Safety

We request our contracted terminals (used to store our methanol) to undergo the Chemical Distribution Institute's Terminal (CDI-Terminal) inspections by a third-party inspector every three years. In some cases, they are requested to do a self-assessment based on CDI-Terminal requirements. This includes essential elements and best practices in the areas of safety, environmental protection, social responsibility, and sustainability for chemical storage and transfer. Currently, all of our contracted terminals participate in the CDI-Terminal inspection program.

After an inspection is performed, we work with the terminals to prioritize the areas that need improvement. We also encourage other delivery locations that are not contracted by Methanex to participate in CDI-Terminal inspections.

Our Approach to Road and Rail Safety

Methanex voluntarily subscribes to the principles and ethics of Responsible Care Ethic and Principles for Sustainability through the Canadian Industry Association of Canada (CIAC) and the American Chemistry Council (ACC). Two key initiatives of product stewardship under Responsible Care are the Transportation Emergency Assistance Program (TEAP) and Transportation Community Awareness and Emergency Response program (TRANSCAER).

Methanex has incorporated the TEAP and TRANSCAER programs into standards and programs that are applied globally across our organization. The TEAP and TRANSCAER programs focus on: training and community awareness about the safe handling of methanol for key stakeholders and emergency responders; risk assessments along the route our product travels; and assurance that the modes of storage and transportation of methanol (and the products used to manufacture methanol) are safe.

All of the tank cars in our railcar fleet undergo mandatory regulatory inspections every 10 years, which includes a thorough review of tanks and valves, to verify that all equipment meets legislated standards. Our North America Railcar Preventative Maintenance program complements this protocol and exceeds minimum regulatory mandates by requiring our own internal inspections every five years. We are recognized annually by railroads for our safety stewardship practices.

Our road safety program includes:

- Audits and assessments of our land-based carriers/haulers on a three- to five-year cycle using a Methanex-appropriate protocol (i.e., the CDI-Terminal program, the Safety and Quality Assessment System [SQAS] in Europe, the Road Safety Quality Assessment System [RSQAS] in China, and Asociación Gremial de Industriales Químicos [ASIQUIM] in Chile).
- Truck methanol-handling safety seminars and workshops.
- Truck company qualification and selection program.
- Transportation-route risk assessments for motor carrier routes from producing locations, as well as assessments of newly proposed routes.
- A road "spot test" program to assess the performance of truck drivers. Our fleet-management standard sets stringent preventative maintenance requirements for our railcars, incorporating best practices and lessons learned from past incidents. In many cases, these requirements exceed those of industry.

Our Approach to Responsible Care Advocacy

We provide Responsible Care seminars for our supply-chain partners, customers, terminals, surveyors, distributors, carriers, and emergency services, as well as local and/or regional authorities. Our objective is to share Responsible Care practices and initiatives, health and safety best practices, and lessons we've learned, focusing on the methanol supply chain and dangerous goods in general. We host over 40 seminars and workshops every year, engaging an average of 200 organizations and over 1,000 individuals. We continue to expand our program reach as we expand our business to new application markets and business partners.

To help customers train their own employees and interact with their communities, we provide technical information on methanol, available free on our website. These materials are provided in multiple languages and include material safety data sheets, a safe handling guide and video, and other educational materials. We also conduct joint site visits, partnering with our customers and distributors to help their downstream customers improve their methanol safety standards.

Summary of Responsible Care and Sustainability Indicators

		2014	2015	2016	2017	2018
ENVIRONMENT	**CARBON DIOXIDE (CO_2) EMISSIONS**					
	CO_2 emissions manufacturing (scope 1)[1]	3,169,259 t	3,245,947 t	4,118,285 t	4,171,421 t	4,093,573 t
	CO_2 emissions manufacturing (scope 2)[2]	67,709 t	131,370 t	177,372 t	204,597 t	206,596 t
	CO_2 emissions intensity manufacturing (scope 1) *tonne of CO_2 / tonne of methanol*	0.653	0.625	0.587	0.580	0.568
	CO_2 emissions marine transportation (scope 1)	397,923 t	428,914 t	567,579 t	619,834 t	625,314 t
	CO_2 emissions intensity marine transportation *kg of CO_2 / tonne of cargo shipped*	61.7	77.6	72.6	71.1	74.7
	NO_x emissions (manufacturing)[3]	-	-	-	6,834 t	6,922 t
	SO_x emissions (manufacturing)[4]	-	-	-	49 t	47 t
	VOC emissions (manufacturing)[5]	-	-	-	3,054 t	3,227 t
	ENERGY					
	Total energy use (excluding electricity)	226,303,331 GJ	222,201,248 GJ	292,556,200 GJ	315,532,499 GJ	318,852,561 GJ
	Total electricity use	229,460 MWh	277,437 MWh	411,800 MWh	452,546 MWh	463,873 MWh
	Electricity self-generated – nonrenewable	44%	20%	20%	26%	30%
	Electricity self-generated – renewable	2%	0%	0%	0%	0%
	Electricity purchased – nonrenewable	46%	65%	65%	61%	61%
	Electricity purchased – renewable	17%	15%	14%	13%	9%
	WATER					
	Total freshwater consumed	11,870,091 m^3	9,969,751 m^3	12,624,989 m^3	14,848,502 m^3	14,737,143 m^3
	Freshwater consumption intensity *m^3 / tonne of methanol*	3.35	2.92	2.38	2.68	2.68
	Effluent discharged (freshwater use)	3,422,577 m^3	3,105,424 m^3	4,176,699 m^3	4,061,522 m^3	3,768,304 m^3
	WASTE					
	Total weight of hazardous waste – disposed	101,934 kg	140,920 kg	48,646 kg	179,307 kg	362,176 kg
	Total weight of hazardous waste – recycled	8,438 kg	16,088 kg	59,595 kg	330,752 kg	10,201 kg
	Total weight of nonhazardous waste – disposed	497,312 kg	1,670,064 kg	1,809,966 kg	1,735,240 kg	1,802,879 kg
	Total weight of nonhazardous waste – recycled	361,948 kg	1,065,124 kg	1,464,681 kg	673,980 kg	709,712kg
	Waste recycled (% of total waste disposed)	38%	37%	45%	34%	25%
	SIGNIFICANT SPILLS					
	Methanol spill (serious)	0	0	0	0	0
	Methanol spill (major)	0	0	0	1	0
	Other spill – petroleum products or treatment chemicals (serious)	0	0	0	0	0
	Other spill – petroleum products or treatment chemicals (major)	0	0	0	0	0
	COMPLIANCE					
	Fines (USD)	0	0	0	0	0
	PRODUCTION					
	Methanol (total tonnes)	5,807,628 t	5,800,325 t	7,822,306 t	8,343,996 t	8,401,087 t
	Methanol (equity share, tonnes)	4,853,000 t	5,193,000 t	7,017,000 t	7,187,000 t	7,211,000 t

[1]Scope 1 CO_2 emissions are direct emissions on an equity basis.

[2]Scope 2 CO_2 emissions are indirect emissions, on an equity basis, from the generation of purchased energy.

[3]Nitrogen oxide (NO_x) emissions

[4]Sulphur oxide (SO_x) emissions

[5]Volatile organic carbon (VOC) emissions

[6]Recordable injuries are incidents that require medical attention or that result in restricted work or lost time.

[7]Recordable injury severity rate (RISR) describes the ratio of significant and near-miss incidents with high potential for loss being reported as compared to the total incidents reported.

		2014	2015	2016	2017	2018
WORKPLACE	**EMPLOYEE INJURY STATISTICS**					
	Recordable injury frequency rate (RIFR)[6]					
	Number of recordable injuries / 200,000 hours worked	0.28	0.46	0.53	0.65	1.03
	Recordable injury severity rate (RISR)[7]					
	Number of significant incidents / total incidents	1.85	16.46	8.50	15.34	32.34
	GLOBAL EMPLOYEE STATISTICS					
	Total number of employees	1100	1295	1275	1357	1426
	Asia Pacific	4%	3%	4%	4%	5%
	Chile	9%	9%	10%	12%	12%
	Dallas	3%	3%	3%	3%	3%
	Egypt	13%	12%	11%	12%	11%
	Europe	3%	3%	3%	2%	3%
	Geismar	12%	13%	13%	12%	13%
	Medicine Hat	10%	10%	10%	10%	10%
	New Zealand	21%	22%	22%	22%	21%
	Trinidad	15%	15%	15%	13%	13%
	Vancouver	10%	10%	10%	9%	10%
	LENGTH OF EMPLOYEE SERVICE					
	< 1 yr	17%	11%	9%	14%	13%
	1–2 yrs	21%	25%	24%	16%	18%
	3–5 yrs	20%	21%	23%	26%	25%
	6–10 yrs	17%	25%	21%	21%	21%
	11–15 yrs	11%	5%	10%	9%	8%
	16–20 yrs	6%	5%	6%	6%	8%
	21–25 yrs	3%	2%	2%	2%	3%
	26+ years	5%	5%	5%	5%	5%
	EMPLOYEE GENERATION					
	Millennials (1981 or after)	27%	30%	34%	36%	40%
	Generation X (1966–1980)	48%	48%	48%	44%	43%
	Boomers (1946–1965)	25%	22%	19%	19%	17%
	Mature (1945 or prior)	0%	0.1%	0.2%	0.1%	0.07%
	EMPLOYEE GENDER					
	Female	26%	26%	27%	27%	28%
	Male	74%	74%	73%	73%	72%
	Females in Senior Management	2	2	2	2	1
	Females on the Board	2	4	3	3	4
COMMUNITY	Community investment	-	-	USD $1.00 m	USD $1.27 m	USD $1.47 m
	Community volunteering	-	-	-	13,069 hr	12,474 hr
	Beneficiaries (organizations receiving our support)	-	-	235	369	302
	Community advisory panel (CAP) meetings	-	29	23	23	23
PRODUCT STEWARDSHIP	Marine vessel safety visits	17	18	23	25	25
	Marine vessel inspections (CDI-Marine)	17	18	28	28	25
	Marine safety training sessions	55	70	117	100	100
	Terminal inspections (CDI-Terminal, TPSA, follow-ups)	27	24	30	36	28
	Responsible Care seminars held	29	50	49	75	80
	Responsible Care seminar attendees	>1,500	>1,500	1,340	1,100	2,739
	Organizations reached	-	922	300	300	747

Thank You

Thank you for reading our 2018 Responsible Care and Sustainability Report.
We welcome you to explore the report on our microsite at
https://rc-sustainability-reports.methanex.com/2018/.

Past reports are also available on our website at
www.methanex.com/responsible-care/responsible-care-sustainability-reports.

Your questions, comments, and feedback are valuable to us, and can be sent via the contact information on the back cover.

We hope you will return next year for more updates and highlights about our activities as we work to continually improve Responsible Care and sustainability at Methanex.

For the complete version of our 2018 Responsible Care & Sustainability Report, please visit **https://rc-sustainability-reports.methanex.com/2018**. If you have any questions or comments about this report or our Responsible Care and sustainability activities, please contact us.

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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.