Methanex Corporation is the world’s largest producer and supplier of methanol to major international markets in North America, Asia Pacific, Europe and South America. In 2014, our sales volume of 8.5 million tonnes represented approximately 15 per cent of global methanol demand. As the global leader in methanol, we support the development of new applications for methanol to provide innovative solutions for the world’s energy needs. Today, approximately 40 per cent of global methanol demand is used in energy-related applications.

Methanol – A clean-burning fuel and essential ingredient of modern life

Methanol is an essential ingredient of modern life that is used to produce hundreds of everyday industrial and consumer items, including paints, carpets, fabrics and building materials. Methanol is also a clean-burning, biodegradable fuel.

As governments and stakeholders around the world look to reduce their dependency on conventional fuels, improve air quality and reduce greenhouse gas emissions, methanol has emerged as an attractive, economically viable alternative that can provide fuel diversity, reduce emissions and increase consumer choice.

The Benefits of Methanol Fuel

**It’s a low-emission fuel**
Methanol is a clean-burning fuel that produces fewer smog-causing emissions — such as sulphur oxides (SOx), nitrogen oxides (NOx) and particulate matter — and can improve air quality and related human health issues.

**It’s high-octane – improving performance and efficiency**
As a high-octane vehicle fuel, methanol offers excellent acceleration and power. It also improves vehicle efficiency.

**It’s an economical option**
Methanol can be produced, distributed and sold to consumers at prices competitive to those of gasoline and diesel with no need for government subsidies.

**It can be made from a variety of sources, including renewables**
Methanol is most commonly produced on a commercial scale from natural gas. It can also be produced from renewable sources such as biomass and recycled carbon dioxide and anything that is, or ever was, a plant!

**It’s used in vehicles worldwide**
Methanol fuel blends are used in vehicles around the world, particularly in China. With more than 100 million passenger vehicles, China is the world’s largest user of methanol for automotive fuel.

**It’s accessible all around the world**
Methanol is one of the top five chemical commodities shipped around the world each year, and unlike some alternative fuels, is readily accessible through existing global terminal infrastructure.
Methanol – The transportation fuel of the future

Methanol’s popularity as a clean-burning, cost-competitive transportation fuel continues to grow worldwide, particularly in China. China has more than 100 million passenger vehicles in its vehicle pool and is the largest user of methanol for automotive fuel. According to statistics by IHS, a leading source of analytics and strategic information, methanol makes up approximately six per cent of China’s national gasoline consumption. Today, M15 fuel blends (15 per cent methanol) are the most widely used in standard motor vehicles produced by both local and multinational automakers. China also has national standards for M85 and M100 fuel blend use in modified vehicles or dedicated methanol vehicles. Other countries, including Australia and Israel, have conducted fuel-blending trials to support the commercialization of methanol fuels.

Today, methanol is used for running cars, trucks, buses, ships and even electric turbines. Below are just a few of the methanol for energy initiatives that Methanex participates in around the world.

Methanol as a clean-burning marine fuel

New environmental regulations from the International Maritime Organization require ships to decrease sulphur oxides (SOx) and nitrogen oxides (NOx) – air pollution emissions that contribute to smog. Due to its clean-burning qualities, methanol can reduce or eliminate emissions like SOx, NOx and particulate matter, which can help improve air quality and related human health issues.

THE WORLD’S FIRST METHANOL-POWERED VESSEL

In 2014, we worked with industry partners to complete the SPIRETH (“Alcohol (spirits) and ethers as marine fuel”) demonstration project. This led to the development of the world’s first methanol-powered vessel, the Stena Germanica ferry, which operates in the Baltic Sea and has been recognized by the Port of Kiel in Germany for making a positive impact on the environment.

INVESTING IN SUSTAINABLE TECHNOLOGY FOR OUR SHIPPING FLEET

Through our wholly owned subsidiary, Waterfront Shipping, we invested in seven new ships with more efficient design features and flex-fuel engines that can run on methanol, resulting in lower emissions. We look forward to welcoming these new vessels to our fleet in 2016.

Renewable methanol

Renewable methanol can be produced from municipal waste, industrial waste, biomass and carbon dioxide with significantly less greenhouse gas (GHG) emissions during the production phase. For example, Methanex is participating in an exciting initiative with Carbon Recycling International in Iceland to produce renewable methanol from carbon dioxide, which reduces production emissions by more than 90 per cent. Due to its lower GHG footprint, renewable methanol can help meet renewable fuel standard requirements around the world.

Other uses of methanol for energy

Approximately 40 per cent of global methanol demand is used in energy-related applications, which, in addition to methanol fuels, includes methyl tertiary butyl ether (MTBE), dimethyl ether (DME) and biodiesel.

Responsible Care & Sustainability at Methanex

Methanex adheres to Responsible Care®, a United Nations recognized sustainability initiative. As the growth of methanol for energy applications brings methanol products closer to consumers around the world, the safe distribution, handling and use of methanol take on increasing importance. Learn more about the safe handling of methanol at: www.methanex.com.