## Natural Gas Development and Production Project (Canada) Montney/Shale Gas Development Shale Gas Development and Production in Canada

MC, in partnership with Ovintiv Inc. is actively engaged. in shale gas development at a premier unconventional resource play in Montney, an area well recognized for its massive reserves. MC will export the gas produced at Montney to markets in East Asia, including Japan, through the LNG Canada project in which MC also participates, in addition to marketing the gas locally in North America.



### Decarbonization-related Venture Investments (UK, USA) AP Ventures/ Breakthrough Energy Catalyst Investing in One of the World's Leading Venture Capital Firms

Through AP Ventures LLP, a UK-based venture capital firm focusing on hydrogen, we are identifying direct investment opportunities in startups that have promising technologies for realizing a decarbonized society. So far, we've invested in Hydrogenious LOHC Technologies GmbH (a company with hydrogen storage and transportation technology), Hystar AS (a company with water electrolysis technology), and Amogy Inc. (a company with ammonia cracking technology). We are also working on projects through Breakthrough Energy Catalyst, a company founded by Bill Gates that is dedicated to accelerating social adaptations of net-zero technologies, and have committed to investing in projects such as Infinium Holdings, Inc.'s Roadrunner project (an e-SAF production project). Such investments will play a pivotal role as we strive to utilize new technologies to further create business opportunities going forward.

Garraf Crude Oil Production (Irag) Basrah Gas Company Refining & Sale of Natural Gas (Irag)

> **Qalhat LNG** (Oman) Oman LNG (Oman)

> > Brunei LNG Malaysia LNG (Brunei) (Malavsia)

Diamond Gas International LNG Marketing (Singapore)

Browse Development (Australia)

North West Shelf (NWS) (Australia) Wheatstone LNG (Australia)

## CIMA ENERGY, LP. Gas Marketing (USA) Petro-Diamond Inc. Procurement, Storage, and Sales of Transportation Fuels

LNG Canada

(Canada)

(USA)



LNG Liquefaction and Marketing Business (USA)

Project Utilizing the Cameron LNG Terminal

commercial operations in August 2019.

e-methane (Synthetic Methane) Development Project

US-based Natural Gas Liquefaction and Export/e-methane Development

Cameron LNG is a project where natural gas produced in the US is liquefied

and exported. The project, which has a capacity to commercially produce

12 million tons of LNG per annum, a third of which is handled by MC, started

In addition, in order to decarbonize heat demand, MC aims to introduce "e-methane (synthetic methane)\*" into the global energy mix by utilizing Cameron LNG's existing infrastructure and is striving to realize export to

\*Synthetic methane produced from raw materials such as hydrogen and CO<sub>2</sub>.

Cameron LNG/

Japan by 2030.

Clean Hydrogen and Ammonia Manufacturing and Marketing Business (USA, Japan, Indonesia, etc.) Clean Hydrogen and Ammonia Project Clean Hydrogen and Ammonia Social Implementation Project

As one approach to achieving a carbon-neutral society, we are aiming for the social implementation of using hydrogen and ammonia as fuels. Hydrogen and ammonia are attracting attention as a next-generation fuel sources that do not emit CO<sub>2</sub> when burned. Together with our partners, we are developing projects worldwide to establish large-scale and stable supply chains.

Projects under development
 Projects under operation





**Sakhalin -2** (Russia)



# Marketing of Petroleum Products (Japan) Mitsubishi Corporation Energy Co., Ltd. Providing a Stable Supply of Petroleum Products

Mitsubishi Corporation Energy Co., Ltd. (MCE) was established on October 1, 2015, with the objective of merging the management resources for Japanbased petroleum product sales. While providing a stable supply of petroleum products such as gasoline, kerosene, gas oil, fuel oil and asphalt, MCE is also promoting new DX businesses utilizing its retail networks, including e-commerce businesses through its subsidiary, Car Frontier Co., Ltd.

### LPG Import and Marketing Business (Japan) Astomos Energy Corporation One of the World's Largest LPG Players

MC Group company Mitsubishi Liquefied Petroleum Gas Co., Ltd. and Idemitsu Kosan Group company Idemitsu Gas and Life Co., Ltd. came together to form Astomos Energy Corporation in 2006. Astomos is among the world's largest enterprises specializing in LPG, and handles approximately 25% of Japan's LPG demand. The company is also engaged in power retail and the promotion of residential fuel cells and highefficiency water boilers.

# Environmental Energy Group

The Environmental Energy Group's mission is to contribute to the realization of a carbonneutral society by promoting the energy transition while simultaneously ensuring stable supplies of energy.

For more than half a century, MC has been contributing to the stable supply of energy through our natural-gas-, LNG-, petroleum-, and LPG-related businesses, together with numerous customers and partners.

Utilizing our business development and marketing capabilities, in addition to the robust networks and relationships we have developed in the course of our business operations, we will deliver energy solutions optimized to meet the requirements of each customer through the timely development and supply of energy products.

Next-Generation Energy Div.	<ul> <li>New Power Generation Fuels Business Dept.</li> <li>Hydrogen Solutions Development Dept.</li> <li>Bio &amp; e-Natural Gas Business Dept.</li> <li>Carbon Management Dept.</li> <li>Business Development Dept.</li> <li>Clean hydrogen/ammonia, SAF, hydrogen, low carbon methanol, low carbon ethanol, next generation-energy related infrastructure, carbon credits, CCUS, other decarbonization products and technologies</li> </ul>
Petroleum Solutions Div.	Refinery Business Dept. LPG & Petroleum Feedstock Business Dept. Crude oil, gasoline, kerosene, diesel, LPG, naphtha, other petroleum products, wood pellets
LNG Asia-Pacific Div.	<ul> <li>Brunei Business Dept.</li> <li>Malaysia Business Dept.</li> <li>Indonesia Business Dept.</li> <li>Australia Business Dept.</li> <li>Delivery Operations Management Dept.</li> <li>Natural gas, liquefied natural gas (LNG)</li> </ul>
LNG Americas & New Ventures	Business Development Dept. Global Marketing Dept.

LNG Americas & New Ventures Business Development Dept. Global Mark Div. Natural gas, liquefied natural gas (LNG)



## SAF Production and Sales Business (Japan) Sustainable Aviation Fuel (SAF) Production Business Domestic SAF Production Project

MC is working on the social implementation of SAF to decarbonize the aviation sector, which is one of hard to abate sectors. With the aim of developing a supply system for domestic SAF, MC and ENEOS Corporation are studying the commercialization of SAF, using feed-stocks such as used cooking oil, animal fat, and other wastes and byproducts at the ENEOS Wakayama Plant. MC will accelerate the study to start production from FY2028 onwards.

LNG Liquefaction and Marketing Business (Indonesia) **Donggi-Senoro LNG** 





The Donggi-Senoro (DSLNG) Project is the world's first LNG project to be undertaken exclusively by Asian companies, and without the involvement of major oil and gas companies. Companies from Japan, Indonesia and South Korea are taking part in the project. As the largest shareholder, MC assumes the leading role in this project, from which production and sales of LNG and condensate have been underway since 2015.

Tangguh LNG