



INTERNATIONAL ENERGY FORUM

8 March | 2020 | Ritz-Carlton Riyadh

A light gray world map serves as a background for the central text. Overlaid on the map is a complex network of thin gray lines connecting numerous small gray dots, which are distributed across all continents, suggesting a global interconnectedness or energy network.

Energy Sustainability Working Group (ESWG)

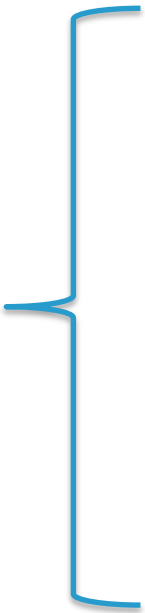
Parallel Session: Energy Security Safeguarding Energy Infrastructure

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Backgrounds


Communique G20 Ministerial Meeting 15-16 June 2019 Karuizawa Japan



“In light of recent developments highlighting concern about energy security, the G20 Energy Ministers acknowledge energy security as one of the guiding principles for the transformation of energy systems. The G20 Energy Ministers also emphasize the importance of resilience, protection, and development of reliable energy infrastructure to prevent energy supply disruptions; and stress the importance of diversification of energy sources, suppliers, and routes, facilitation of open, flexible, transparent, competitive, stable, and reliable markets, increasing energy efficiency. They attach importance to promotion of dialogue between consumers and producers.”

Backgrounds


Concluding Statement 8th Asian Energy Ministerial 10 September 2019 Abu Dhabi, UAE



“Asian energy producers and consumers share a growing responsibility with the world to maintain global energy market stability and cushion excessive market swings. Dialogue on emergency preparedness and measures, including the build-up and maintenance of spare capacity and strategic stocks with other producer and consumer countries on the IEF platform further reduces the disruptive impact of excessive volatility on energy markets, and safeguards responsible growth prospects in Asia and the world.”

Backgrounds

G20 Osaka Leaders' Declaration 28-29 June 2019



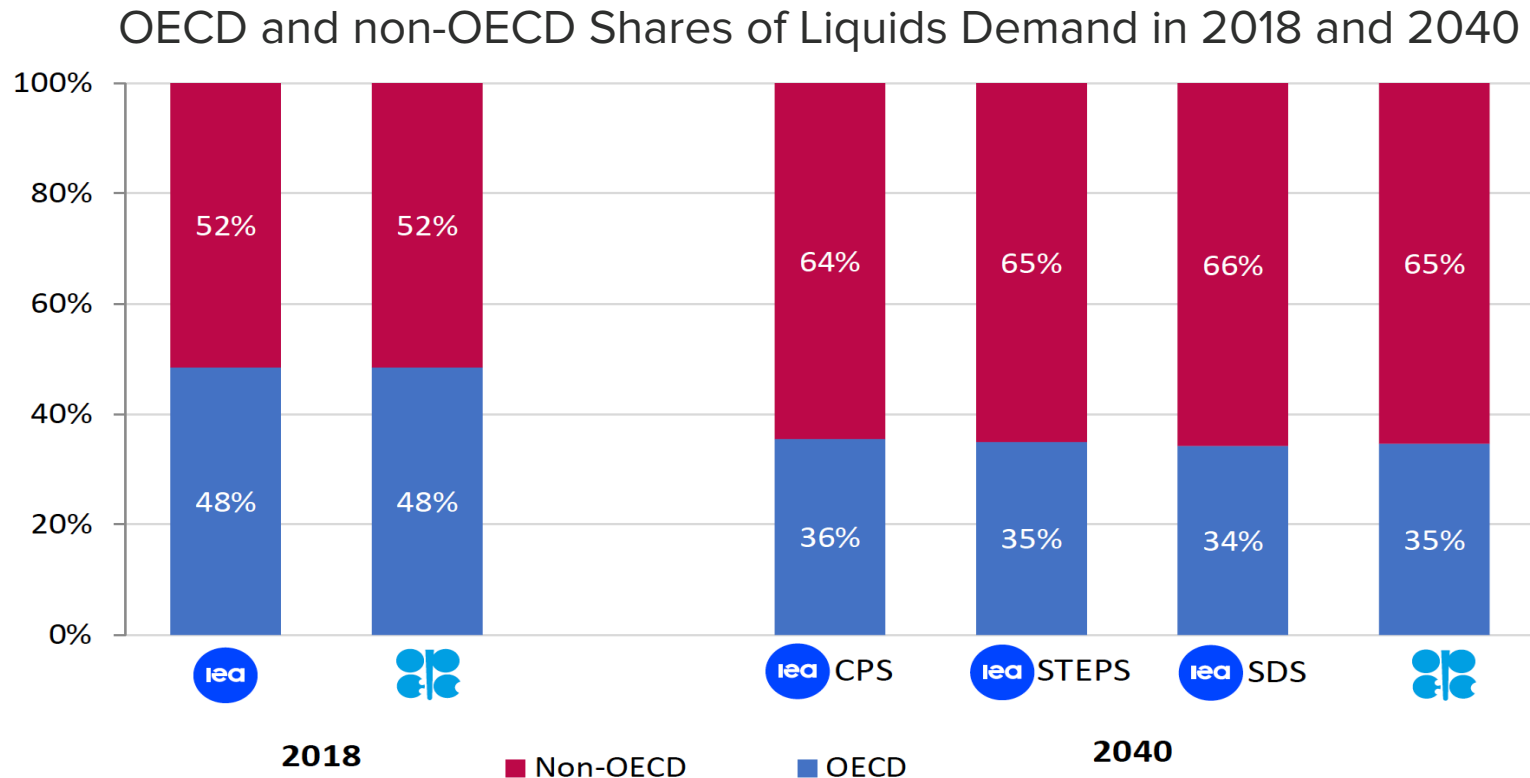
“In light of recent events highlighting concern about safe flow of energy, we acknowledge the importance of global energy security as one of the guiding principles for the transformation of energy systems, including resilience, safety and development of infrastructure and uninterrupted flow of energy from various sources, suppliers, and routes.”

Overview

- Global transformative trends in a changing energy security environment
 - Energy supply, demand, trade, and investment flows
 - Policy and regulation; fiscal and legal stability
 - Digitalisation, and new technologies
 - Critical energy infrastructure, and safe passage
- Collective responses to safeguard energy infrastructure in a new era

Global shifts at multiple levels

What do they imply for existing safeguards?

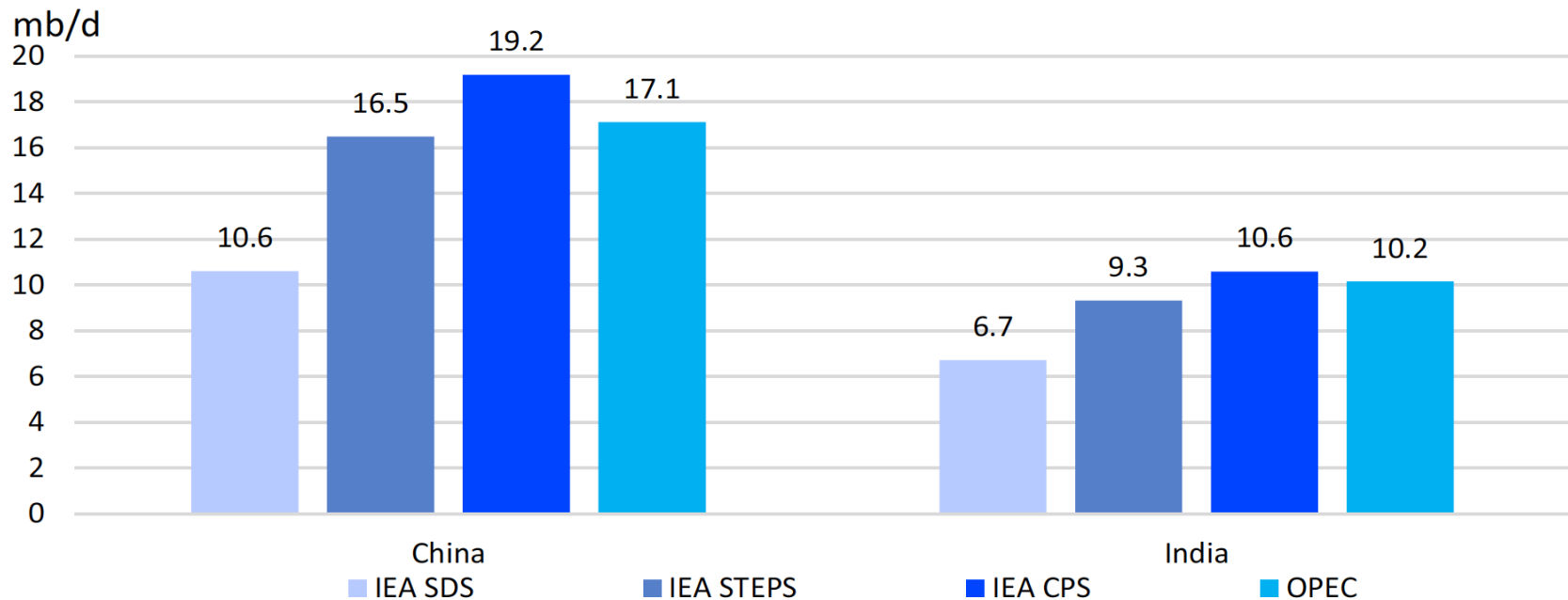


Non-OECD reliance on energy infrastructure, including ports, and sea lanes increases in line with the growing share of liquids demand in the region

Rising reliance on energy infrastructure

Requires strengthening dialogue and cooperation on energy security

Non-OECD Asia Oil Demand in 2040

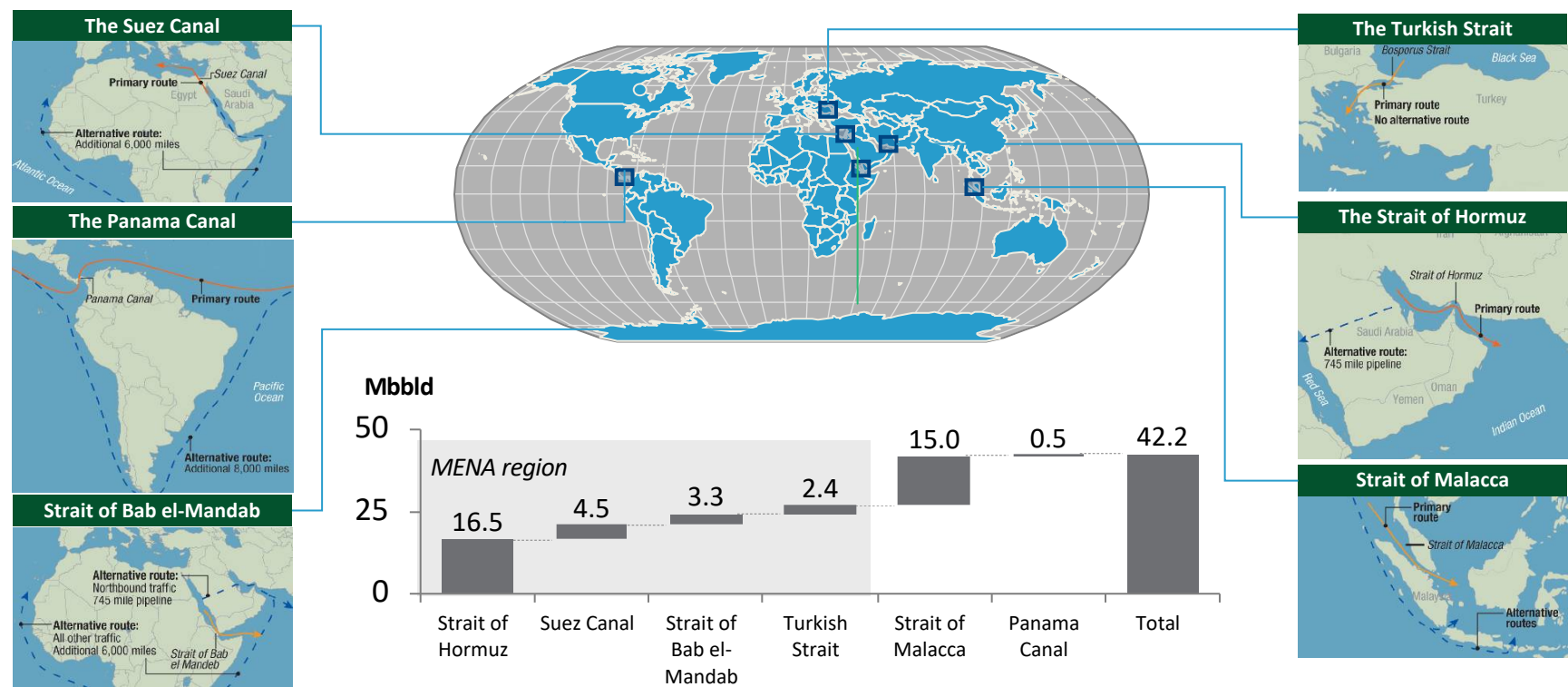


Increasing import dependence in Asia has implications for energy security and adequately safeguarding energy infrastructure

More seaborne oil & gas to flow through straits

Energy flows are exposed to a new and more dynamic risk environment

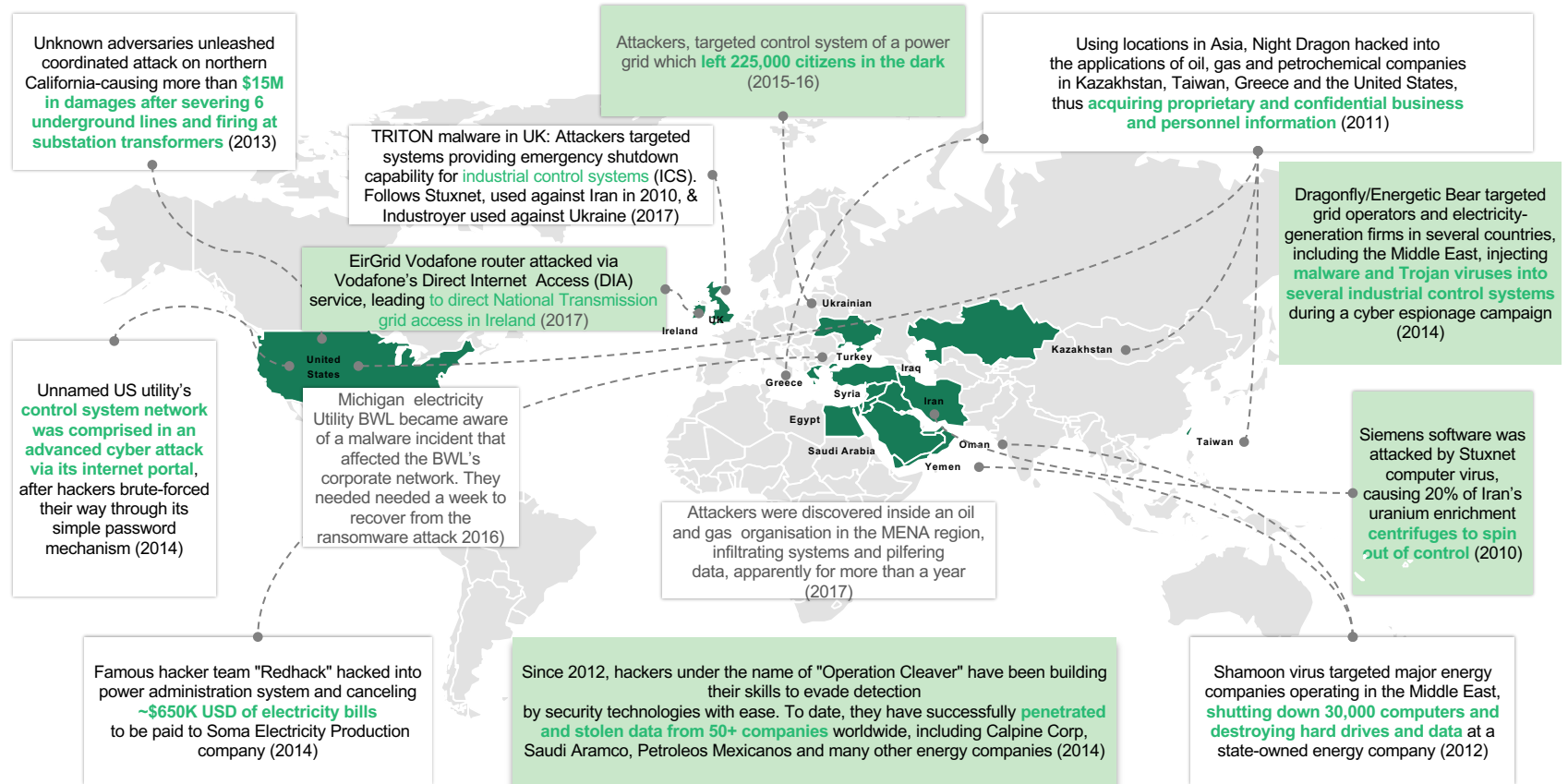
Overview of global straits
more than 50 percent of oil passes through MENA region today



BCG - IEF Knowledge Partner Analysis

Cybersecurity threats are on the rise

As digital sophistication and electrification rates increase so do vulnerabilities



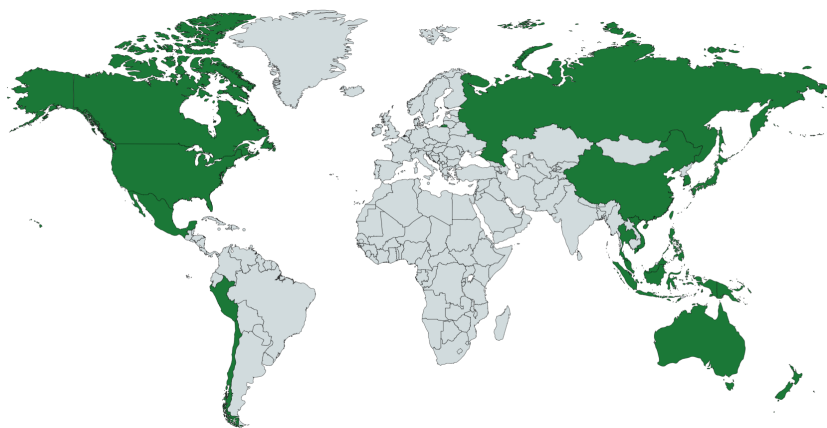
BCG - IEF Knowledge Partner Analysis

Key Messages

- Numerous energy security initiatives exist **but these efforts are scattered**
- Some G20 members already take part in **one of or several initiatives**
- Dialogue and cooperation **key for safeguarding global energy security**



Energy Working Group



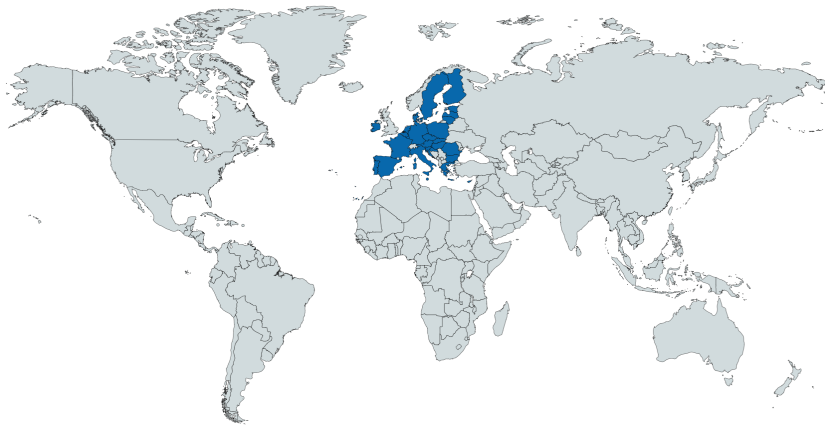
The APEC Emergency Preparedness Working Group (EPWG) The EPWG seeks to build capacity in the region so that APEC member economies can better mitigate, prepare for, respond to, and recover from emergencies and natural disasters. This is achieved by building business and community resilience; fostering private-public partnerships to protect communities and businesses from disruption; and by sharing information, knowledge and technology to improve regional capacity on disaster risk reduction.

ASEAN

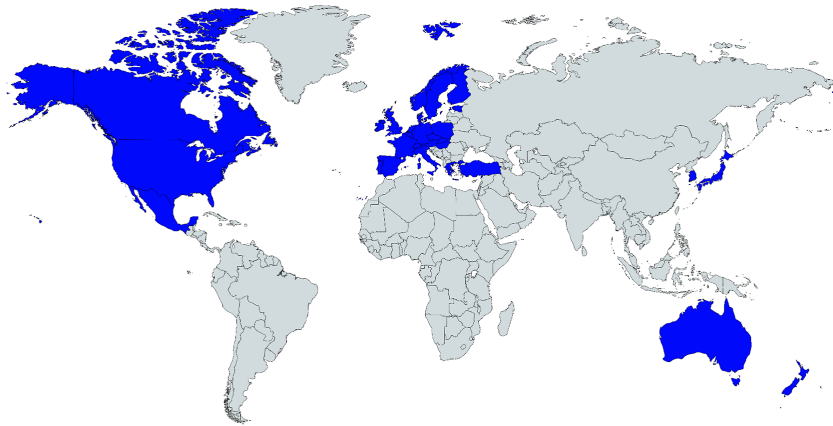


ASEAN Petroleum Security Agreement- Governments of the ASEAN Member Countries have ratified an emergency Petroleum sharing scheme for crude oil and/or petroleum products in time/ circumstances of both shortage and oversupply- this covers a “typical 12 month period of consumption” after the emergency.

European Union



EU countries must maintain emergency stocks of crude oil and/or petroleum products equal to at least 90 days of net imports or 61 days of consumption, whichever is higher. Stocks must be readily available so that in the event of a crisis they can be allocated quickly to where they are most needed. Detailed statistics on the levels of emergency stocks held by EU countries from 1 January 2013 onwards are available from Eurostat.



The IEA was established in 1974 in response to the 1973-1974 oil crisis to protect security of supply after an embargo pushed prices to an historic high. The subsequent treaty-based cooperation ensured members held a collective emergency response system. These responses have been used three times in the IEA history: in 1991 during the First Gulf War, in 2005 after hurricanes Katrina and Rita damaged oil infrastructure, and in 2011 during the Libyan crisis.

G20



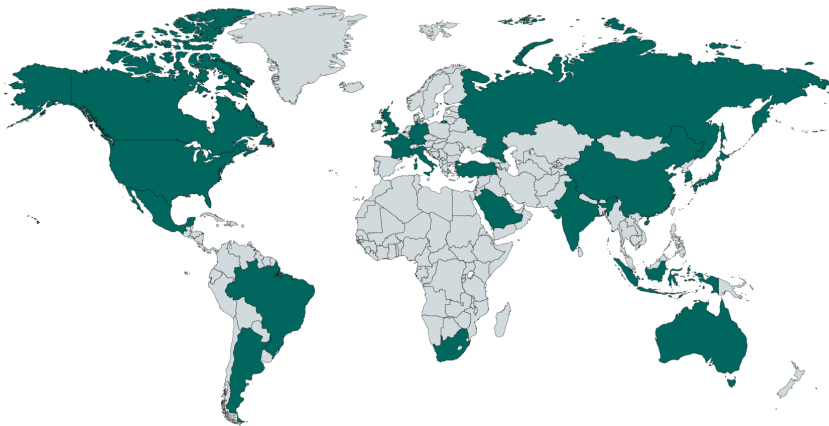
G20 states represents:

58% of global oil supply

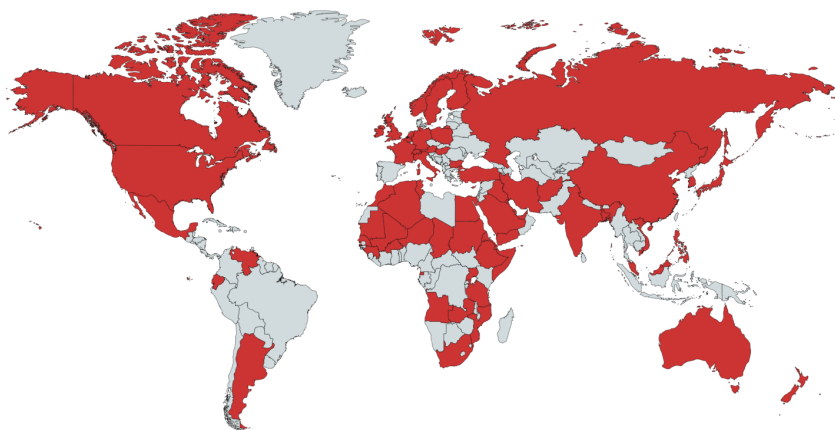
66% of global oil demand

57% of global gas supply

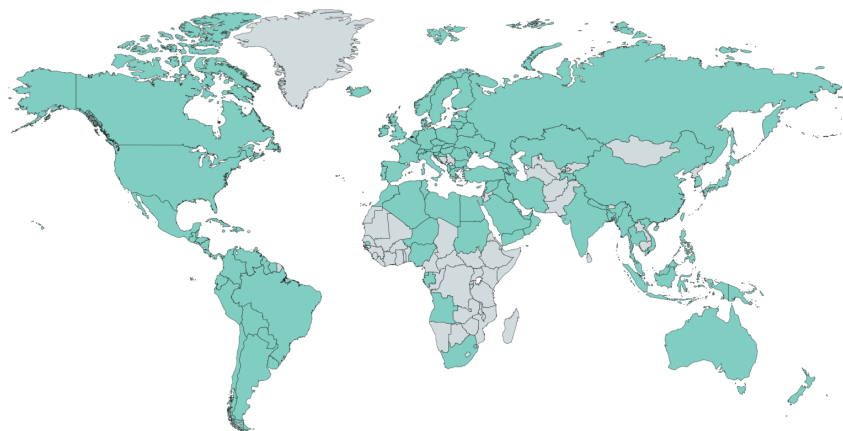
65% of global gas demand



IEA World Energy Balances 2019



85% of global gas demand



JODI partners represent:

98% of global oil supply

88% of global oil demand

92% of global gas supply

94% of global gas demand

Key Messages

Enhance dialogue and cooperation between existing and new frameworks of the OECD and Non-OECD region to maintain energy security and safeguard energy infrastructure.

Collective evaluation of crisis prevention and emergency response mechanisms in a more dynamic and new risk environment, including but not limited to cybersecurity and maritime monitoring.

Explore how to broaden dialogue on collective crisis preparedness and response measures on the IEF platform among G20 countries with the IEA, OPEC, and JODI Partners in collaboration with other relevant international organisations.

Dialogue and collaboration on research and development to assess how new technologies and innovation affect existing and new energy infrastructure, while addressing global challenges.



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GENERATION**
Through Dialogue

**ENERGY
SECURITY**
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**ENERGY
TRANSITION**
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