

Clean Energy Transition: Oil & Gas

Demand for clean energy and biofuels expected to grow

Oil and gas are an integral part of the energy mix of the Americas, Middle East and Oceania. In the US and Canada, fossil fuels make up 80% of the domestic supply, with the US alone consuming more oil than any other country in the world. Brazil is the largest oil producer in Latin America and among the world's top ten largest producers.

Five of the global top ten oil producers can be found in the Middle East; Saudi Arabia, Iraq, the United Arab Emirates, Iran and Kuwait. The vast majority of electricity generated in the Middle East (nearly 95%) comes from oil and gas.

Oil accounts for the largest share of Australia's primary energy mix, followed by coal then gas.

Oil and gas clearly have an important role in each of these markets, so how will they achieve the transition to clean energy?

Speaking at recent COP28 in Dubai, the Executive Director of the International Energy Agency (IEA) said: "Oil and gas producers around the world need to make profound decisions about their future place in the global energy sector." To achieve the Paris Agreement target of slowing global warming to 1.5°C by 2050, the IEA warns that the oil and gas industry would have to cut their own emissions by 75% by 2050.



Highlights in the Americas, Middle East and Oceania



Hydro

Hydro-energy, also known as hydroelectric power, harnesses the energy of flowing or falling water to generate electricity.

Rewiring the Nation

This is an investment programme of AUS 20 billion to update Australia's electricity grid, so that it meet the growing demand for clean electricity.



Canadian Clean Energy Plan

Canada's 2030 Emissions Reduction Plan aims to achieve 40-45% emissions reductions below 2005 levels by 2030.

Diversification is likely to be critical for the survival of much of the industry, and the journey ahead will be complex. If oil and gas companies invest in switching their focus from fossil fuels to renewables, will they be responsible for the disposal of the redundant infrastructure? And if they do invest in growing clean electricity production, will the existing electricity grids be able to carry the increased loads of electricity?

What's more, there is the need for ongoing oil and gas supplies to ensure the security of energy supply during transition and also to provide fuel for sectors and emerging economies where lowering emissions is much more challenging. So how do we decide which oil and gas producers can continue to produce, and which need to make the big decision to end operations, which to invest in the (costly) switch to clean energy?

“

Industry opportunities include diversification into other energy services, or areas such as plastics recycling.

”

Atradius Underwriter, Canada

What do Atradius underwriters see as the primary issues for the sector in the specific regions?

In North America, the Inflation Reduction Act (IRA) and Canadian Clean Energy Plan are accelerating energy transition by supporting growth in renewables. Our underwriters in those markets noted the opportunities that government incentives can provide, with our colleagues in Canada adding that further

possibilities could be opened up through partnerships between private companies and government entities to develop clean energy infrastructure. Challenges include the capital costs associated with transition as well as regulatory issues.

Our underwriters in Brazil acknowledged the size of country's hydropower industry and said: "Vast natural resources continue to provide a competitive advantage in clean energy production." And, in a nod to new growth areas, they added, "demand for biofuels is expected to grow in the next years." Echoing industry concerns about the cost of transition they said: "A major industry challenge is finding the capital to invest in new technologies to produce clean energy while maintaining profitability and shareholder value."

In the Middle East, our industry specialists acknowledged there is a huge opportunity for the industry to "make a significant expansion into this new business segment of clean energy." Hydro is the biggest source of renewable energy in the Middle East, followed by a growing solar sector. Transitioning from and oil producer to an energy producer holds huge potential for the region, but this hinges on the willingness of the region's governments to move in that direction.

Our local industry specialists in Australia also point to the potential presented by utility-scale solar photovoltaics, including better profit margins from clean energy sources. However, a risk impacting the electricity sector is the country's creaking electricity grid. The government programme, 'Rewiring the Nation' is focusing on updating this.

An issue shared across all of these markets is geopolitical risk. Each of our industry experts listed it as a challenge, with geopolitical uncertainty in Eastern Europe and the Middle East representing the areas of most concern.

Challenges: What are the most urgent challenges for the sector over the next three years?

1. Maintaining profitability

How to maintain profitability while winding down a key business area and investing in new technology is one of the biggest challenges facing the industry. Although when faced with the dilemma, adapt or die, transition towards clean energy may be the only option for most industry players.

2. Geopolitical risk

Geopolitical tensions have had a significant impact on the energy market, including the energy crisis that followed Russia's invasion of Ukraine. Furthermore, an escalation of the conflict between Israel and Hamas could lead to instability in the Middle East's oil markets.

3. Government regulation

There is no level playing field when it comes to sustainability regulation. Some governments have introduced incentives and support to help oil and gas companies explore alternatives such as the generation of clean energy. Others have carbon taxes and others have no incentives in place. In a global market place, the varied map of governmental regulations seems to be challenging.

Opportunities: What are the greatest opportunities for the sector over the next three years?

1. Growing demand for alternative fuels

The demand for sustainable fuels and energy from renewables and biofuels is expected to grow significantly and is likely to present opportunities for several markets including the Middle East, Brazil, Australia and the US.

2. New technologies

The development of new technologies can enhance production optimisation, cost reduction and the reduction of the carbon footprint. This could range from greater efficiency in the use of oil and gas, to technology such as carbon capture and storage to reduce greenhouse gas emissions.

3. Transferable skills

With engineering skills and real estate, the industry has the potential to play a significant role in developing and implementing clean energy technologies.



The oil of castor seed is one of raw materials used in the production of biofuel in Brazil.

Where next?

In each of the geographies we spoke to political risk was highlighted as an issue affecting the oil and gas industry. Each of our underwriters spoke about the importance of political support for the industry on a domestic level, particularly as it faces the costly processing of decommissioning old technology and investing in a whole new approach to energy generation. Some markets are able to benefit from government support, investment and incentives. But globally, there is no level playing field and industry players in smaller, poorer countries risk getting left behind.

Connect with Atradius
on social media
[youtube.com/user/atradiusgroup](https://www.youtube.com/user/atradiusgroup)
[linkedin.com/company/atradius](https://www.linkedin.com/company/atradius)

Atradius
David Ricardostraat 1
1066 JS Amsterdam
P.O. box 8982
1006 JD Amsterdam
The Netherlands
Phone: +31 (0)20 - 553 91 11

info@atradius.com
www.atradius.com