

Natural resources management & development

According to the US Geological Survey, the Arctic contains 13% of the world's still to be discovered oil and 30% of its gas. However, developing these resources will not be easy due to unique regional challenges. Fortunately, the upstream oil and gas industry has decades of experience in Arctic development and OGP's members are committed to carrying out this work in an environmentally and socially responsible manner.

- Exploration north of the Arctic Circle has already resulted in the discovery of more than 400 oil and gas fields, some of which are substantial. Most of these fields are onshore, with gas concentrated in Russia and oil deposits in North America
- Most Arctic oil and gas yet to be found is likely to be discovered offshore

With the world's population expected to exceed 9 billion within 40 years, energy use is projected to double by 2050, according to the International Energy Agency (IEA). Although renewable energy resources and other alternatives will become increasingly available, it will take decades before they can be economically developed on the global scale required. Therefore, the IEA says that oil and gas will still account for half of global energy demand by 2030.

Current hydrocarbon production is inadequate to keep up with this demand.

World Energy Outlook predicts that the equivalent of 64 million barrels of oil per day will be needed by 2030 to meet global growth and offset any decline in production. Oil and gas from the Arctic will be vital to provide a significant portion of these required resources.

But further development of the Arctic's oil and gas resources will not be easy. The Arctic environment is unique in its remoteness from population centres and major infrastructure, climate, ice conditions, permafrost, ecosystems and indigenous peoples and cultures.

Yet the upstream oil and gas industry has decades of Arctic experience on which to build. Onshore oil production started in the 1920s. Offshore production began in the 1970s. Since that time, technology for finding and extracting hydrocarbons has significantly advanced, the industry has adopted rigorous health, safety, and environment management systems and Arctic operating practices and standards have evolved. The industry now has the potential to develop Arctic resources (some previously undiscovered or technically infeasible) in a safe and environmentally responsible manner both onshore and offshore.

Conditions throughout the Arctic present challenges in every phase of operation from geophysical data acquisition, exploration and appraisal drilling, construction

and commissioning, to production and decommissioning. Due to these challenges, the period to first production may be longer than in less demanding environments. This timeline may be shortened as technology is developed. With additional experience will come even greater competence in performance and environmental protection.

As a key stakeholder in global Arctic development, the oil and gas industry – individually and through OGP – works closely with governments and their agencies, communities and other local, national and international stakeholders including the Arctic Council. OGP also has a role to play in communicating its members' drive for responsible development and in sharing with relevant stakeholders the technical expertise needed to achieve that goal.

The Arctic's potential for oil and gas development offers opportunities to put into place developments that maximise value to all stakeholders. This will result in projects that benefit wider society as well as indigenous peoples while effectively managing any risks to the environment.

Responsible development of the Arctic over the coming decades – during which time work will proceed in parallel on alternative and renewable sources of energy – will help to provide vital energy supplies and maintain energy security for consumers throughout the world.

About OGP

OGP represents the upstream oil & gas industry before international organisations including the International Maritime Organisation, the United Nations Environment Programme (UNEP), Regional Seas Conventions and other groups under the UN umbrella. At the regional level, OGP is the industry representative to the European Commission and Parliament and the OSPAR Commission for the North East Atlantic. Equally important is OGP's role in promulgating best practices, particularly in the areas of health, safety, the environment and social responsibility.