



International
Association
of Oil & Gas
Producers

MOVING TOGETHER, INTO TOMORROW

Vision & policy recommendations
from the upstream oil & gas
industry in Europe

MANIFESTO

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FOREWORD

The upstream oil and gas industry welcomed the Paris Agreement as an important global step in addressing climate change and its challenges.

Delivering sustainable development relies on supporting transitions to a low-emission future while ensuring enough energy to meet the needs of the world's growing population.

With this Manifesto, the European upstream oil and gas industry offers a set of practical steps for policymakers to help bring about a cleaner, more efficient, secure, prosperous, and innovative European Union.

A CLEANER & MORE EFFICIENT ENERGY SYSTEM

Energy is at the very heart of our economy: access to secure and affordable energy is essential for households and industry. It is also crucial to preserve the EU's competitiveness, jobs, and growth.

Moving towards a lower-emission world requires fundamental changes to the way citizens behave across all sectors of the economy.

THE OIL & GAS INDUSTRY'S ROLE

Oil and gas form the basis of products which support Europeans in their everyday lives. Oil and gas will also enable Europe to reach its climate objectives more efficiently. Meanwhile, the European upstream oil and gas industry itself is continuing efforts to improve its own energy efficiency and lower emissions, including those of methane, by reducing venting and fugitive releases and by detecting and repairing leaks.



Oil

Oil provides the raw materials (feedstock) needed to create products such as energy-saving insulation, the plastics used in cars to make them lighter and more fuel efficient, and the lubricants that enable wind turbines to spin and generate cleaner energy.

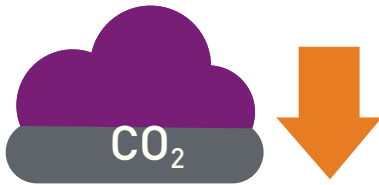


Gas

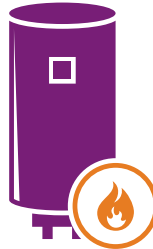
Gas emits 50% less CO₂ than coal and can improve air quality thanks to very low NO_x emissions, no SO_x emissions, and virtually no particulate matter. Replacing coal with gas can provide cleaner heating, enable cleaner transport, and make Europe's energy more efficient.

gas emits **50%**
less CO₂ than coal

cleaner
heating & transport



Gas can cut CO₂ emissions from power generation by half, and significantly reduce air pollution.



Gas boilers can be twice as efficient as electric ones.



The use of technologies like liquefied natural gas (LNG) for shipping and freight trucks and compressed natural gas (CNG) for light-, medium-, and heavy-duty vehicles can enable cleaner transport.

HOW TO DO IT



Promote the use of flexible natural gas combined with variable renewables in power generation.



Acknowledge the role oil and gas plays in our daily lives in the national integrated energy and climate plans required by the Energy Union Governance Regulation.



Support economy-wide policies which will incentivize the most cost-efficient solutions to reduce GHG emissions, including carbon pricing mechanisms.

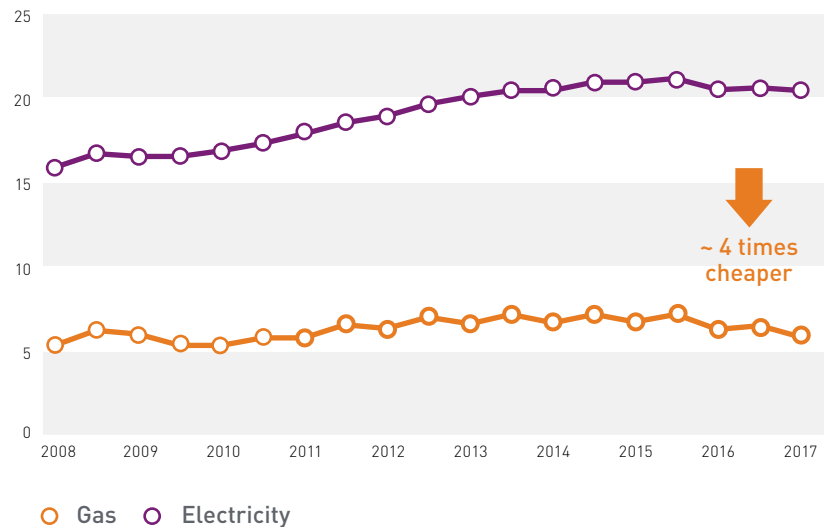


Encourage public entities and businesses to utilise LNG and CNG in road and maritime transport to improve air quality.



Full electrification should not be the objective in itself: More cost-efficient carbon emission reductions can be achieved by using oil and gas wisely in industrial processes, power generation, heating, and transport.

Evolution of household electricity and gas prices in the EU
Prices in € per 100kWh, all taxes and levies included



Source: Eurostat (2018), Energy Prices in 2017

A MORE **SECURE** ENERGY SUPPLY

Currently, gas resources in the EU and Norway supply 50% of the EU's gas demands. Additional resources are being developed in the Caspian and Eastern Mediterranean Seas. These, along with LNG from Africa and North America and Coalbed Methane (CBM) in Europe, will strengthen European energy security. Further, the completion of the internal gas market through adding missing links will enable cross-border gas flow within Europe.

In the International Energy Agency (IEA) *World Energy Outlook 2017*'s most ambitious Sustainable Development Scenario, 40% of EU energy demand will be met by oil and gas in 2040 (or 51% in the IEA's New Policies Scenario).

THE OIL & GAS INDUSTRY'S ROLE



Oil

With 32.5 billion barrels of known oil resources, Europe could cover 25% of its own demand for another 13 to 26 years. Continued development of Europe's indigenous oil reserves could supply around a third of Europe's oil demand by 2040, retaining jobs and a highly skilled engineering base.



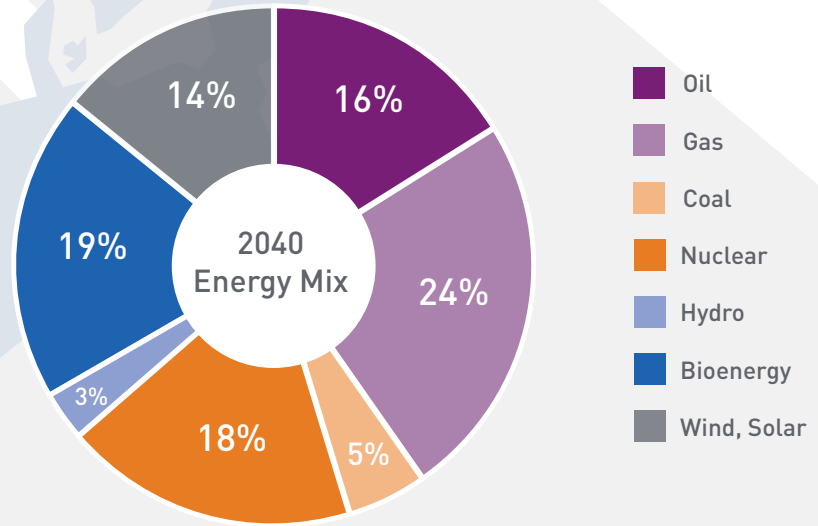
Gas

With 5100 billion cubic meters of known remaining natural gas resources, Europe has enough gas to continue meeting around half of its own demand for another 25 years¹. As Europe increasingly relies on a large share of variable renewables, gas will strengthen the power grid by providing real-time and seasonal adjustments of electricity supply, especially during dark and windless winter days.

These resources will be available to EU citizens only if the necessary licenses are granted by national authorities.

¹IOGP, European Gas Resources Report, 2017

40%
of EU energy
demand will be
met by oil & gas
in 2040



Source: World Energy Outlook 2017, Sustainable Development Scenario (Below 2 degrees Celsius)



Support exploration and production of untapped domestic oil and gas resources.



Foster collaboration between regulators and industry to remove operational and commercial barriers.



Ensure the effective implementation of the existing Offshore Safety Directive, before developing new rules.

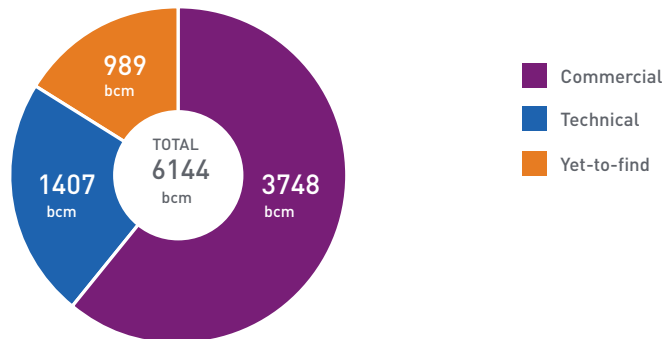
CEF + PCIs

Enhance diversification, security of supply and market interconnectivity through continuing the Connecting Europe Facility (CEF) and European Projects of Common Interest (PCIs).

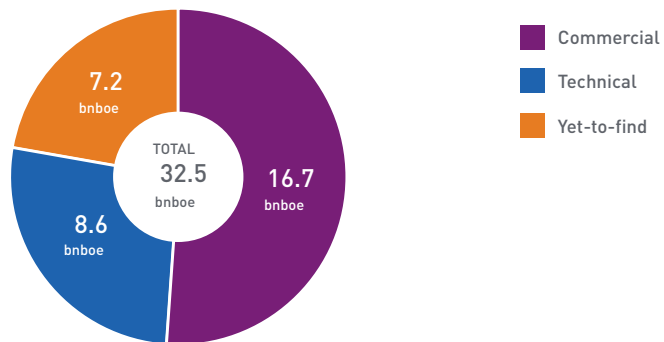


Recognise the role of gas as a flexible partner for the development of variable renewables.

Europe's estimated remaining gas resources



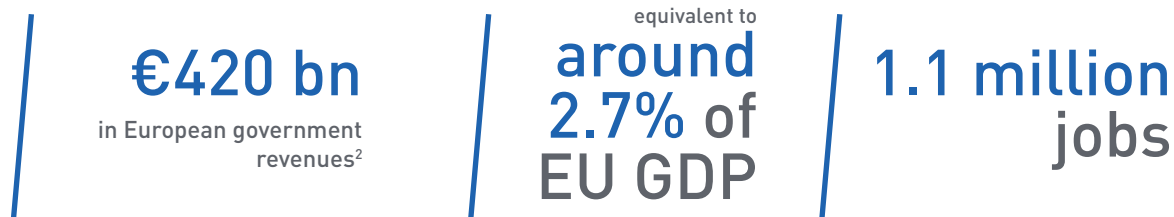
Europe's estimated remaining oil resources



Source: Wood Mackenzie

A MORE **PROSPEROUS** EUROPEAN UNION

OIL & GAS REPRESENTS



THE OIL & GAS INDUSTRY'S ROLE

Energy poverty is a pressing challenge: 54 million Europeans are unable to keep their homes adequately warm.³ The oil and gas industry will continue to supply Europeans with the affordable and secure energy they need.

The European Commission's figures show that, on average, EU citizens pay around 4 times more per kilowatt hour (kWh) for electricity than for gas (with taxes and levies included). This means that a shift to full electrification of heating would lead to higher costs.⁴

In most regions of the EU, the existing gas transport and storage infrastructure is nearly invisible, well-established, and can affordably carry and store large amounts of energy in gaseous form. Using these existing assets will keep electricity grid costs in check, reduce the need for additional investment, and be more publicly acceptable when compared to building new power lines.

²NERA Economic consulting [2018] Update on Energy Taxation and Subsidies in Europe: An Analysis of Government Revenues from and Support Measures for Fossil Fuels and Renewables in the EU and Norway.

³Energy poverty and vulnerable consumers in the energy sector across the EU: analysis of policies and measures', Insight_E – EC think tank, May 2015

⁴Eurostat (2018), Energy Prices in 2017

HOW TO DO IT



Complete the internal gas market by filling in the missing links to ensure secure flow of gas within Europe.



Design consumer-friendly policies that tackle energy poverty effectively and promote affordable energy sources. For example, gas is today around four times cheaper per kWh than electricity in the EU.

A MORE **INNOVATIVE** EUROPEAN UNION

Innovation is a key driver to achieve the goals set out in the Paris Agreement as well as the objectives of the European Union. Technological development will significantly increase the options available and will, over time, bring down costs and ensure competitiveness.

According to the IEA, Carbon Capture and Storage (CCS) could provide 14% of the cumulative emission reductions needed in the period to 2060 to limit future temperature increases to 2°C. CCS could provide 32% of the reductions needed for a Beyond 2°C Scenario (B2DS)⁵. It is important to provide support to all promising innovative technologies, such as CCS and hydrogen.



14%

cumulative emission
reductions provided
by CCS

THE OIL & GAS INDUSTRY'S ROLE

The oil and gas industry is currently supporting the development of future-oriented technologies, including large-scale deployment of Carbon Capture Use and Storage (CCUS), a technology we are well-placed to develop with over 100 years of geological and engineering knowledge.

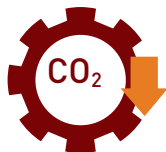
CCUS can help minimize the carbon footprint of energy-intensive industries such as the steel, cement refining, and chemical sector, and help retain their role in a lower carbon EU economy. CCUS can also be applied to gas-fired power plants, turning them into carbon-free and flexible sources of electricity.

Moreover, gas can decarbonize in the longer term. Pre-combustion, CCUS can be combined with transforming natural gas into hydrogen, a carbon-free energy source which can be delivered to mobility, heating and power.

The oil and gas industry is also continuously modernising its processes through digitalisation and, in the future, the use of artificial intelligence.

⁵ Energy Technology Perspectives 2017, International Energy Agency.

HOW TO DO IT



Expand R&D&I programmes for all promising non-mature technologies with long-term carbon reduction potential. Include technologies such as natural gas-to-hydrogen, low-emission liquids, and CCUS.



Focused support by the Commission and Member States is required to enable investment in full scale CCUS projects. One concrete action would be the deployment of the Strategic Energy Technology CCS and CCU Implementation Plan.



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The International Association of Oil & Gas Producers (IOGP) currently has around 80 members globally, of which over 30 members are in Europe. IOGP represents most of the world's leading publicly traded, private and state-owned oil and gas companies, industry associations and major upstream service companies. Our Members produce 40% of the world's oil and gas, and 90% of Europe's indigenous supplies.

IOGP's mission is to provide a forum for sharing experiences, debating emerging issues and establishing common ground to promote cooperation, consistency and effectiveness in every aspect of health, safety, the environment, security, social responsibility, engineering, efficiency and operations.

Our Members in Europe

