Introduction

The International Association of Oil and Gas Producers (IOGP) represents over 80 oil and gas companies responsible for producing one third of the world’s gas and half of its oil, as well as service companies and national oil industry associations. IOGP welcomes the opportunity to contribute to the discussions on the Energy Union. This paper describes the views of the European upstream industry as represented by IOGP in a number of key areas.

Fundamental to the viability of an Energy Union is the need to ensure that all three elements of the energy and climate framework - sustainability, security and competitiveness - are balanced. Critical to this balance and to promoting competitiveness is the establishment of a well-functioning internal energy market. In discussions on energy security, and also over decarbonisation, it is worth recognising that, according to the European Commission, 55% of Europe’s gross energy demand is forecast to be met by oil and gas by 2030.

As the Energy Union develops, IOGP encourages the Commission to adopt a broad definition of ‘energy security’ – beyond one that focuses purely on energy supply security – to recognise the critical importance of affordable energy. As shown in the US, access to affordable energy is critical to industrial competitiveness, to employment creation, and to the prosperity, wellbeing and overall ‘economic security’ of Europe’s citizens. The economic benefits (employment, technology development, tax and royalty revenues) from indigenous production of oil and gas should not be underestimated either. The NERA report shows that, in 2011, oil and gas generated significant revenues to European governments – over €430 billion.1

IOGP would recommend an explicit reference to affordable, as well as secure energy in future descriptions of the five Energy Union dimensions.

Main Policy Recommendations

1) As part of the Energy Union Strategy and action plans, the European Commission must acknowledge and support exploration and production of European oil and gas resources (EU28 + Norway). It should be recognised that significant potential exists for future hydrocarbon production in the Black Sea, the North Sea, Eastern and Western Mediterranean and the Atlantic – from both conventional and unconventional sources – assuming the right policy frameworks are in place to support exploration, development, production, trade/transportation and demand.

2) Furthermore extensive potential exists amongst the EU’s neighbours and from other global energy suppliers critical to supporting EU energy supply (including the United States, Canada and Africa). The conclusion of a Transatlantic Trade and Investment

1 Energy Taxation and Subsidies in Europe, NERA Economic Consulting. The full report is available here.
Partnership (TTIP) between the EU and the US would allow the liberalisation of US energy exports.

3) Recognise the vital role of gas in helping to achieve the EU’s energy objectives, because of its scalability, reliability and efficiency as well as clean burning properties and competitive costs. Recognise also that major CO2 emission reductions - around 400MT/year in the EU - could be saved in the most cost-effective way by replacing coal with gas in power generation (Source: GasNaturally, Dec 2014). Similarly, recognise that sources of renewable energy are not secure without adequate back-up.

4) Policy mechanisms that undermine the functioning of the internal gas market, including a potential common gas purchasing mechanism, need to be avoided. Instead, the EU should focus on implementing existing legislation and regulations, and exploring the benefits of introducing liberalising measures such as gas release programmes in regions where dominant suppliers and retailers remain in place. The EU should recognise the results of the supply security ‘stress tests’ that concluded that a market-based approach should be the guiding principle, with non-market measures such as forced fuels switching and demand curtailment only used in the event of market failure.

5) Focus policy measures on isolated or fragmented markets that are particularly vulnerable to supply disruptions. Avoid a one-size-fits-all approach.

1. Security of supply, solidarity and energy diplomacy

- IOGP welcomes the priority given by the Vice President for Energy Union to ensuring security of gas supply to Europe. As oil and gas exploration and production companies, members of IOGP are well placed to help deliver Pillar 5 of the EU’s Energy Security Strategy: ‘Increasing Indigenous Energy Production in the European Union’. Europe has significant remaining oil and gas production potential, including shale gas, but because of the general decline in exploration drilling in the EU, these resources run the risk of being undeveloped partly because of regulatory uncertainty and complexity, including new EU regulations. As suggested by the UK Government in its Energy Union Non-Paper, IOGP also urges EU policymakers to consider the steps needed to encourage new investment in domestic oil and gas exploration and production, working with Industry and Member States to tackle investment barriers where appropriate. We ask the Commission to reflect on this situation in light of the mid-2015 review of the January 2014 Shale Gas Recommendations, that no new EU legislation is currently required to regulate exploration, development and production of this resource.

- In the context of security of gas supply, common gas purchasing has been described by the Vice President for Energy Union as a potentially important mechanism for consolidating the EU’s collective bargaining strength. This concept is of concern to IOGP as the proposal could prevent the functioning of the internal energy market by consolidating the dominant positions of buyers and sellers. Instead, IOGP suggests exploring the concept of gas release programmes. These have been used effectively in Member States in the past to address domestic monopolies and promote gas-on-gas competition. In the context of the Energy Union, gas release programmes could be considered for regional application and limited to Member States that have monopoly incumbents.

- In a number of Member-States in Central and Eastern Europe, wholesale and domestic gas producer’s energy prices are regulated as a way of shielding domestic consumers from having to pay the market price for gas. This means that gas producers in these countries are discouraged from making investments in new indigenous European supplies, for example by drilling exploration wells or increasing production from existing
fields. For similar reasons, external suppliers are discouraged from entering a market in which end-user prices are set by regulation below market level. As a consequence, the regional gas market in large parts of Eastern Europe remains isolated, fragmented and vulnerable to supply disruptions. Without price liberalisation, the end-user price of gas will remain disconnected from the real cost of supply, and distorted wholesale prices will both discourage new investment in gas production and prevent a functioning gas market from developing in this part of Europe. By undermining price incentives for end-user demand, regulated prices also damage the ability of producers to respond to short-term fluctuations in demand, particularly during periods of external supply disruption. They also discourage long term energy efficiency investments.

- The proposal by the Vice President for Energy Union that the Commission take a more assertive energy diplomacy stance could also be welcomed by Europe’s upstream industry, provided it involves extending diplomatic support for EU Member States and energy companies in their interactions with third party host governments, should they request such support. It should not lead to the Commission taking the lead in negotiating directly with external energy suppliers, as this would inadvertently entrench the dominant supply position of external suppliers. The Commission should not have a role in markets where contracts are agreed on a commercial basis. Any mandatory approach based upon ‘aggregating demand’ would not be compatible with a competitive market. Such an approach would work to the disadvantage of private companies seeking to develop natural gas in non-EU countries who want to transport this resource into the European Union’s internal energy market based on the most attractive commercial terms available across Member States.

- We agree with the Commission that security of supply for oil and natural gas is linked to diverse routes and sources. The EU is surrounded by an abundance of natural gas resources, including in the North Sea, the Black Sea, the Caspian, the Mediterranean (incl. North Africa), and has to take the full benefit of their proximity. Today, over 50% of European natural gas supplies come from local production (EU28 + Norway). Europe is within economic distance of 80% of global gas resources and already has an extensive and well-established network of gas infrastructure, including numerous LNG regasification terminals and an increasing number of interconnectors.

- IOGP understands that the Commission may be considering actions intended to support LNG supply security. In doing so, it is critical that the Commission recognise and entrench the principle that free trade is the most efficient and cost effective means of ensuring abundant and secure LNG supplies for Europe – and that energy security is best served by a well-functioning global LNG market. Unimpeded, this market is growing rapidly, with LNG occupying a growing share of global gas trade due to its flexibility and reliability: LNG demand is expected to triple by 2040 from about 215 MTA to around 650 MTA, with the number of exporting countries set to double to around 26 by 2025. Most of this growth is expected to serve demand in Europe (and increasingly, in Asia). The continued strengthening of global LNG trade, and supply security, is therefore best served by policy-makers enacting trade rules and policies to facilitate open markets, infrastructure development and promote international cooperation. In the context of TTIP, Europe should work with the U.S. to encourage the acceleration of LNG export licenses (over 30 projects are currently awaiting Department of Energy approval, with only a handful approved to date).

- As a final remark, IOGP recommends that EU policy makers employ a wider definition of “security of supply”, taking into account:
  
  - The interdependency of energy supplier and consumer countries;

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Wood Mackenzie estimates that there are presently over 60 LNG related projects under consideration globally.
The interdependency of energy sources, specifically the variability of solar and wind renewable energy, and the flexibility of conventional sources able to adjust to demand variations;

- Imports from non-EU countries of raw materials (metals, rare earths) and power generation equipment (wind turbines, solar cells).

2. Internal Energy Market

- As explained above, IOGP strongly supports the completion of the Third Energy Package and Internal Energy Market, and considers it a key tool to promote all three objectives of the EU’s climate and energy policy. The Third Energy Package, the Gas Target Model, the European Network Codes, Security of Supply Regulation and Regulation on Wholesale Energy Market Integrity and Transparency (REMIT) together represent the collection of instruments for delivering transparent, liquid and well-functioning single European markets in gas and power. The Internal Energy Market must be completed as soon as possible to allow markets to deliver the most price efficient supply solutions for European consumers.

- IOGP believes that liquid, well-functioning wholesale energy markets, backed by well-resourced and independent regulators, will deliver supply security and the necessary infrastructure investments without the need for government intervention. This applies to both gas and power. However, in Europe today there is a tendency towards strong government intervention in the EU power generation and gas sectors (particularly the gas sector of Eastern Europe), leading to uncertainty for investors. Costs created by these interventions are typically passed to consumers in the form of mandated transfers, or to producers and suppliers in the form of regulated prices, creating situations which - from an affordability perspective - may not be sustainable in the long run.

- In vulnerable, isolated and fragmented markets, in parts of Eastern Europe only, market response alone may not always provide an adequate degree of supply security. Where strategic gas stocks or storage obligations are being considered to address specific issues in a local area, decisions on the extent of the intervention should be based on cost / benefit analysis and consultation. The organisation and use of strategic stocks or storage obligations should also be designed to minimise distortion of the gas wholesale market. As markets become better connected and gas wholesale prices are liberalised the use of commercial stocks should be encouraged and any existing strategic stockholding obligations should be revisited.

- The gas markets of Western Europe represent over 80% of the EU’s gas consumption. In this part of the EU, there is contractual flexibility, diversity of supply - including pipeline gas and LNG – indigenous production and, importantly, abundant commercial opportunities for potential new entrants to the market. Customers in this market are not vulnerable to supply concerns in the same way as in specific isolated or fragmented markets in Eastern Europe. EU policy measures and support initiatives to address the challenges of isolated and fragmented markets should therefore focus on the relevant Member States in Eastern Europe, rather than apply uniformly across the EU. A one-size-fits-all approach is not appropriate.

- We support the emphasis on EU priority infrastructure development, including the implementation of the European Projects of Common Interest (PCIs). Missing regional pipelines that would demonstrably enhance market interconnectivity as well as increase security of supply should be supported by the European Commission through existing instruments such as the Connecting Europe Facility and PCIs. Existing infrastructure could be upgraded so that reverse flows are enabled on relevant interconnectors, for example in the Hungary–Croatia and Hungary–Romania interconnectors. Fully functional interconnectors across Europe help enable Member States to provide more stable and reliable support to each other and neighbouring third countries, thereby
creating a larger scale, more attractive gas market for gas suppliers and further improving liquidity and supply security.

3. Moderation of demand

- IOGP agrees that energy efficiency will be an important part of developing a sustainable and competitive EU energy mix. However, it is the view of the European oil and gas industry that a single target – for greenhouse gas emissions - is the most appropriate means to encourage the necessary investment as part of the drive to reduce emissions by 40% by 2030 and to rely on the market to select the most cost effective fuels and technologies by which to achieve this target.

- Any new measures to implement an indicative energy efficiency target should be focused only on non-ETS sectors. This is crucial to avoid double regulation of the traded sectors, as energy efficiency is already being deployed by traded sectors as a means of achieving savings at lowest cost under the ETS.

- References by the European Commission to the need to achieve energy efficiency in the transport sector should not have the practical effect of discriminating against oil in the transport sector. The EU should not pick technologies to meet overall energy/environment objectives: technology decisions should be left to competitive free markets.

- Advancements in internal combustion engines and hybrid electric vehicles, combined with high-energy density fuels, provide the most cost-effective solutions for the reduction of greenhouse gases (GHG) in the short and medium-term (hybridisation, combustion efficiencies, light-weight materials etc.). Further, according to the Commission’s publication “European energy and transport - Trends to 2030”, during the next decades, fuel demand in transport will remain dominated by gasoline, diesel and jet fuel.

- The EU upstream oil and gas industry believes that the use of natural gas will be essential to unlock the full potential of energy savings. Gas would enable greenhouse gas reduction in the heating market in the most cost effective way, for example through the replacement of old boilers with modern natural gas condensation boilers, as illustrated by a recent study carried out by the German research institute EWI, and also by deploying gas heat pumps.

- However, the recent Communication on energy efficiency does not create the right conditions for a switch away from coal to gas. According to the accompanying Impact Assessment, ambitious energy efficiency policies would encourage a switch from gas to coal. The share of coal in the fuel mix in 2030 remains largely stable (in comparison to the Reference scenario) for EE27, EE28 and EE29, while it grows in all other scenarios. On the other hand, gas demand would reduce by a quarter by 2030 under the 30% energy efficiency target. This contradicts the latest IPCC report which recommends replacing coal with natural gas.

4. Decarbonisation of the EU energy mix

- The EU should adopt a technology-neutral approach to decarbonising the energy mix.

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3 Energiewirtschaftliches Institut an der Universität zu Köln (EWI): „Potentiale von Erdgas als CO2-Vermeidungsoption“, June 2014
5 IPCC Report 2014 available [here](#).
A significant opportunity to meet the challenge of climate change is a simple switch from coal to natural gas in the global energy mix since gas emits up to 60% less carbon dioxide than coal (and even more than 2/3rd less compared to lignite) when used in power generation. Already in two of the largest energy economies, the US and China, policies designed to encourage this switch have been introduced. Europe, however, is heading in the opposite direction, with significant new coal investment being made. The share of gas in the EU energy mix has declined by 30% in recent years. Natural gas is a ‘no-regrets’ option for the European Union. As demonstrated in the US, gas can drive economic growth and competitiveness, and is abundant, reliable and efficient.

Renewables together with natural gas will be an important component of the EU’s low carbon economy. Rolling out renewables at scale in Europe will require a simultaneous increase in natural gas infrastructure and demand, as gas is a cleaner and more cost effective complementary fuel for intermittent wind and solar power generation. Natural gas-fired power currently offers the broadest range of flexibility in terms of start times, ramp rates, minimum stable load and overall performance.

Moreover, natural gas could be used in certain segments of the transport sector, in particular to help the shipping industry to meet more stringent emissions targets. Using LNG as a marine transport fuel will reduce SOx emissions by 90%-100% and NOx by 60% and CO₂ emissions by up to 25%.

5. Research and innovation

In order to avoid policies of ‘picking winners’, subsidies for low carbon R&D energy technologies should be time and cost limited. Promising projects focusing on Carbon Capture and Storage (CCS), the storage of renewable electricity through manufacture of hydrogen or synthetic methane and their transmission in the natural gas grid, micro-CHP and energy efficient appliances deserve more attention.

Subsidies, or other forms of public support such as mandated transfers, should stop once a given technology is mature, proven and capable of being commercially deployed at scale, for example onshore wind and solar.