

2012-2015 Triennium Work Reports



THE NEW DIMENSIONS OF
GEOPOLITICS
SUMMARY PAPER
BY TF3 EXPERT MEMBERS
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FOREWORD

- In the 2012 report on *Geopolitics and Natural Gas* (TF3-IGU, presented at the 2012 WGC), geo-economic and geopolitical developments and their impact on the international gas industry were discussed at length from the perspective of geopolitical power. The report additionally addressed the large international economic changes taking place and their implications for the natural gas industry, as well as the influence of the shale gas revolution on international economic and political relations.
- In a new report¹, IFRI and CIEP revisited the geopolitical scene, highlighting developments since the last TF3-IGU report and identifying the main areas of current geopolitical importance. To complement this traditional approach in which governments, national and international companies are considered the key players of the geopolitical game, the report further focuses on the growing role and influence of other stakeholders, on how they shape energy policies and on the impacts they have on the gas business in particular.
- This paper by TF3 summarises the content of the report and discusses the role of the IGU.

¹ The New Dimensions of Geopolitics, IFRI/CIEP project for TF3/IGU, May 2015, available at <http://www.ifri.org/en/recherche/thematiques-transversales/energie> or www.clingendaelenergy.com

GEOPOLITICAL DEVELOPMENTS AND THEIR IMPACT ON GAS

INTRODUCTION

- Although in any energy issue geopolitics is never far away, the unrest sweeping Syria and Iraq, the deepening of the conflict in Ukraine in 2014 and the growing tensions between the EU and US and Russia have raised security of supply and demand to the top of the international strategic agenda. As a result, greater emphasis is being placed on diversifying energy trade patterns and developing domestic sources.
- After five years of relative stability, global oil prices suddenly decreased by 60% between June 2014 and mid-January 2015. A similar trend can now be observed in natural gas prices because of the possibilities for substitution between fossil fuels and because long-term contracts, particularly for LNG, are typically indexed on oil values. These sudden price changes have far-reaching consequences for the global economy, stimulating competitiveness and purchasing power in consuming countries, but also creating severe problems for oil and gas exporting countries. Investments in high-cost projects are being delayed and/or scaled back, waiting for the price recovery. Producing countries with insufficiently diversified economies and a large dependency on export income are the most at risk from economic shocks and thus most sensitive to related social and political instability.
- Building on the 2012 IGU report on *Geopolitics and Natural Gas*, the 2015 report assesses the latest developments in eight so-called “geographic areas of special geopolitical interest”. These regions, with both active and potential conflicts, are highlighted in this report because they can have a major impact on global supply, trade patterns and the role of gas in the various energy mixes. These include the Arctic, Eastern Mediterranean, South China Sea, EU-Russian Energy Relations, Iraqi Kurdistan, Iran, North Africa and Nigeria.

THE ARCTIC

- Arctic states are showing greater interest in the region’s hydrocarbon potential. Overlapping territorial claims and military build-ups may generate tensions. However, the key confrontation appears to be the one between project developers and the stakeholders who oppose projects on the grounds that drilling/mining in a sensitive environment like the Arctic is a risky endeavour.
- These concerns can acquire political dimensions through actions by environmental organisations to hinder resource development. In 2011, the Arctic NGO Forum was created to facilitate dialogue between the numerous NGOs working for the protection of the environment in the Arctic region.
- Even though there is little evidence that suggests an outbreak of large-scale conflict for control over Arctic hydrocarbon reserves, there is nonetheless the potential that such a stage could develop between the Arctic states. At the same time, the complexity, high costs and environmental hazards have stimulated cooperation among Arctic states.

SOUTH CHINA SEA

- Developments in the South China Sea show that ambitions to control oil and gas resources can contribute to escalating tensions between countries. In turn, these events also show how oil and gas developments can become entrenched in regional geopolitics, notably overlapping territorial claims and maritime transit issues.

- The South China Sea is a potential source of more hydrocarbon production, particularly natural gas. Due to its location on a major international shipping route between the Indian Ocean and Northeast Asia, an active conflict could disrupt freedom of navigation and adversely affect the economic interests of countries in the Asia-Pacific region and the US.
- International law offers remedies for maritime disputes. Because this issue is emerging in various areas of strategic interest, a separate paper has been written dealing with this aspect of conflict resolution.² However, most coastal states in the region have not sought the jurisdiction of international courts and tribunals over issues of sovereignty. A compromise on the issues of maritime boundaries and sovereignty over the archipelagos is not to be expected anytime soon.

EASTERN MEDITERRANEAN

- Gas developments in the Eastern Mediterranean are complicated by territorial disputes and by a volatile security environment, providing an illustrative example of how geopolitics can influence the opportunities of a region with substantial gas potential to become a major exporter.
- The Eastern Mediterranean is a region with large upstream potential, found in Israeli and Cypriot waters. The primary geopolitical element negatively influencing gas development is unresolved territorial disputes, particularly between the Republic of Cyprus and Turkey on the status of Northern Cyprus.
- At the same time, gas development and export could lead to bonds of interdependence in the region and encourage countries to find common ground on which to cooperate. Egypt, for instance, has become a net importer of energy, and regional cooperation could bring some needed stability in this region.

EU-RUSSIAN ENERGY RELATIONS

- After a rapid expansion in the 1990s, gas trade between the EU and Russia has been complicated by EU market reform policies and diverging political-economic visions, particularly with regard to developments around Ukraine.
- Security of supply and demand has dominated EU-Russian gas relations since 2004. New pipelines circumventing Ukraine were intended to reduce the transit risk. With the South Stream project, Russia wanted to create an alternative route to ensure a continuous supply stream to the South and Southeast EU markets and Turkey. Conflicting visions on the regulatory status of the pipeline have prompted Gazprom to halt the project and instead to develop an offshore gas pipeline across the Black Sea towards Turkey. Under this plan most of this gas will be conveyed to a gas hub on the border between Turkey and Greece.
- The growing tensions between Russia and the EU have given rise to political concerns about the high dependence of the EU on Russian gas, placing diversification of supply and reverse flow options high on the EU agenda. Equally, diversification of exports has become more important for Russia, which is accelerating its export plans to Asian markets.

² International Law and the Use of Maritime Hydrocarbon Resources, Rene Lefeber; cases CIEP staff, for CIEP/IFRI project for TF3 IGU, May 2015, available at http://www.ifri.org/en/recherche/thematiques-transversales/energie_or_www.clingendaelenergy.com.

IRAQI KURDISTAN

- The Kurdistan Regional Government (KRG) achieved a key milestone in its quest for financial independence by concluding formal deals with Ankara in 2013, clearing the way for oil and gas exports to Turkey. With this new route, Kurdish gas could also potentially reach the European Union at a later stage, further strengthening the position of Turkey as an important EU energy exchange location.
- While the KRG's export plans have long been contested by the central Iraqi government, curbing Kurdish autonomy is now less of a priority, as the Islamic State organisation is seen as an even larger threat to the country's stability.
- In December 2014, the Prime Ministers of the KRG and Iraq signed an agreement which foresees the export of Kirkuk oil through the recently built KRG-Turkey pipeline. After several years of tensions, this agreement was seen as a major step towards cooperation between Baghdad and Erbil, although there is still a long way to go towards full reconciliation.

IRAN

- Iran is the primary example of how a politically isolated country can fail to establish itself as a major gas producer and exporter despite having substantial resources.
- The Iranian oil and gas sector has been heavily impacted by the international sanctions, and the development of upstream projects to export gas has been delayed because Iran has limited access to international finances, insurance services, technology and know-how. The recent negotiations on the Iranian nuclear programme have offered a new perspective, but the removal of sanctions would probably take many years to be fully applied.
- In addition, there are other obstacles preventing a boost to Iran's gas production and exports. The participation of foreign companies in oil and gas projects is constrained by an unattractive legal and contractual framework, and planned reform has yet to be implemented. In addition, Iran would need to contain the rise of its domestic gas demand in order to ensure that the growth of production would actually lead to more exports.

NORTH AFRICA (ALGERIA, EGYPT AND LIBYA)

- North African countries hold significant reserves, and they have developed large export facilities to value their gas production on the global gas market. However, over the last few years, growing domestic needs have affected export commitments and plans, while in some countries security concerns and political uncertainty have contributed to reducing gas and oil exports and delaying exploration and production projects.
- The key challenge is to attract foreign investors and accelerate the development of new upstream projects in order to offset the decline of mature fields. The rise of foreign investment is contingent first and foremost on a more secure and politically stable environment.
- The European Union is devoting particular attention to North Africa as part of its supply diversification strategy and to enhance the stability of that region. More cooperation between the two sides of the Mediterranean could contribute to enhancing North Africa's gas production and exports.

NIGERIA

- Nigeria's petroleum sector is engulfed by regulatory uncertainty, instability caused by Boko Haram's ongoing insurgency, the absence of transparent government oversight and falling oil prices, all of which threaten the nation's further production and development of its large hydrocarbon potential.

- The previous administration attempted to pass the Petroleum Industry Bill (PIB), aimed at reducing corruption in the industry, in the hopes of increasing foreign investments. The current speculation over the bill's content and adoption has caused a sharp decline in deep-water exploration and development and could further delay projects and hinder long-term investment.
- Despite these challenges, there remains an opportunity for Nigeria to cut subsidies and eliminate corruption, which ultimately would reform the energy sector.

THE STAKEHOLDERS

INTRODUCTION

- We observe an increasing involvement of stakeholders, a trend that can be ascribed to the changing nature of the issues surrounding the energy business. The growing importance of environmental issues is creating new dimensions of uncertainty, economic impact and complexity, affecting many parts of society and instilling wider debates.
- This growing involvement is also attributed to the new ways in which stakeholders are able to raise their voices in policy debates. For instance, internet and social media are easily accessible and are powerful vehicles for organising public debates. In this way, a single voice can quickly and inexpensively mobilise support from like-minded citizens and create a snowball effect, eventually shaping policies.
- Apart from policymakers, these stakeholders include special interest groups, think tanks and academics, international organisations, NGOs, media, and local and regional activists.
- The level of stakeholder influence varies among geographical areas. In many cases, governments organise consultations with stakeholders about policy issues, either directly or through consultants, before taking decisions. In some circumstances, stakeholders trigger policy debates and shape public opinion.
- The following sections discuss and illustrate the involvement of stakeholders in various aspects of the gas business. By identifying the key topics that draw the most attention, we illustrate the structure of the debate and how the position of influential stakeholders can be reflected in policy development.

GAS AND CLIMATE CHANGE

Principal stakeholder involvement: Policymakers, NGOs, international organisations, think tanks and academics, media

- While local air pollution policies which advocate gas have been successful, due to the fuel's low emissions of carbon dioxide and particulates, the same arguments have not made their way into climate change policies. A separate paper³ has been prepared examining the reasons behind the failure of gas to appear in national and international environmental policies as a building block towards decarbonisation. These comprise:

³ Is natural gas green enough for the environmental and energy policies?, IFRI: Marie-Claire Aoun, Aurélie Faure; and CIEP staff, IFRI/CIEP project for TF3/IGU, May 2015, available at <http://www.ifri.org/en/recherche/thematiques-transversales/energie> or www.clingendaenergy.com.

- Policies regarding climate change are strongly focused on renewable energy sources (RES). At best they employ instruments to encourage emissions reduction by limiting coal-fired generation (i.e., through carbon pricing or standards). But so far these methods have not been able to effectively reduce CO₂ without the use of CCS or other abatement technology.
- Policymakers and other stakeholders appear reluctant to recognise a fossil fuel as being a legitimate component of decarbonisation policies. There are concerns that the environmental impact of gas, including the impact of flaring and methane emissions, is greater than the role it could play in reducing emissions. The intense exploitation methods, particularly of shale gas, have only amplified this concern.
- Additional issues arise with the comparison of gas to coal. As long as the true environmental value of gas (the CO₂ price) is not included in economic valuations, gas will be regarded as more expensive than coal.
- There also appears to be a lack of awareness of the environmental benefits of gas, and the institutional presence of the gas industry in contributing to energy policy development does not seem to be as strong as it is in the coal industry.
- Finally, gas, notably pipeline gas, is not always seen as a politically reliable energy source. Although not always fact-based, this can have a negative influence on the public's perception of gas.
- The majority of these concerns are raised in varying degrees in different regions: the issue of climate change and (pro-active) policies does not play the same role everywhere.
- Many stakeholders participate in the environmental policy debate, addressing issues ranging from local to global policy dimensions.
 - Think tanks and academics offer a mix of views on the extent of the threats posed by climate change and on the most cost-effective ways to build low-carbon economies.
 - International organisations generally recognise the role that gas can have in achieving emission reductions. However, their contribution to the debate falls short of advocating policies favouring gas.
 - NGOs dealing with the environment are more critical and argue that increasing the use of gas could delay the energy transition. Projects to exploit shale gas resources seem to have reignited the debate about the sustainability of fossil fuels.
 - Mainstream media tends to give considerable "airtime" to the subject of climate change. Like think tanks and academics, it addresses the scientific uncertainty of the consequences of CO₂ emissions and their effect on climate. It also discusses issues that are preventing global agreements on limiting carbon emissions from being made.
- As a consequence of stakeholder scepticism, there is no strong driver for a larger role for gas (at the expense of coal) like there is for RES. In this context, public opinion is unlikely to give vocal support to gas, except in cases where air pollution concerns are strong and make the environmental benefits of gas more visible to local communities.

THE ENVIRONMENTAL IMPACT OF GAS EXTRACTION

Principal stakeholder involvement: Policymakers, NGOs, international organisations, think tanks and academics, media, (local) activists.

- In most places where fossil fuel extraction is under consideration, local activists and environmental NGOs are alert to the threat to ecosystems and the potentially lasting

environmental damage. The Macondo disaster was a reminder of the reality and extent of such risk.

- The Arctic is one of the contested frontier areas. NGOs are working together for the protection of the environment in the Arctic region and are actively addressing the issues of environmental impact (see the above summary on the Arctic).
- Over the past decade, environmental concerns have grown significantly with the development of unconventional gas resources. The future of natural gas is now closely linked to the “*shale gas revolution*”, and the environmental concerns surrounding shale gas extraction therefore have a direct impact on the perception of natural gas in general.
- Experts agree that shale gas extraction is an *‘intensive industrial process, generally imposing a larger environmental footprint than conventional gas development’*⁴. A lack of consistent monitoring, the absence of a centralised database of incidents, and the perceived absence of reliable information have contributed to the wide-spread public concern in many parts of the world that shale gas developments are made at the expense of the environment.
- Environmental NGOs tend to say that fracking *‘poses unacceptable risks to people and the environment’*⁵ and recommend that the shale gas option should not be considered *‘until all these problems are adequately addressed’*⁶. Some governments have declared moratoria on shale development until such time that risks and consequences are better understood.
- It is important to note that the shale industry is improving, partly because the technology is still evolving, and also because industry participants are keen to earn a license to operate by improving their track records in extracting shale gas. The International Association of Oil & Gas Producers launched a website which provides information on hydraulic fracturing and includes voluntary disclosures of chemical additives on a well-by-well basis in the European Economic Area.
- In spite of these efforts, public opinion is likely to remain sceptical. For a radical shift in perception of gas to occur, the industry and governments will have to produce more reliable evidence of conditions that ensure environmentally safe procedures.
- Finally, gas flaring and methane emissions remain stumbling blocks in the current and future support for gas extraction.

THE SOCIAL IMPACT OF GAS PRODUCTION ACTIVITIES

Principal stakeholder involvement: Policymakers, local communities, NGOs, international organisations, think tanks and academics, media

- In addition to protecting the environment in which they operate, extractive companies are expected to obtain their *“social license to operate”*. The key idea is that IOCs should engage with local communities, and not just with governments and NOCs.
- A separate “local content” paper⁷ has been produced, showing how efforts are increasing to create productive links between the extractive activities and the domestic economy.

⁴ IEA (2012), Golden Rules for a Golden Age of Gas

⁵ WWF (2013), Position on shale gas in the EU: Keep the Pandora’s box firmly shut

⁶ Food & Water Europe, Friends of the Earth Europe, Greenpeace, Health & Environment Alliance (2012), Position statement on shale gas, shale oil, coal bed methane and fracking.

⁷ Local content strategies in the Oil and Gas sector: *How to maximize benefits for the hosting communities?*, Marie-Claire Aoun and Carole Mathieu IFRI, IFRI/CIEP project for TF3 IGU, May 2015 available at <http://www.ifri.org/en/recherche/thematiques-transversales/energie> or www.clingendaelenergy.com.

- One of the lessons learnt from past experiences is that local content strategies are more likely to be successful when implemented in a collaborative approach. Creating an enabling environment is also a key factor for the success of local content strategies, and oil and gas companies can provide a highly valuable contribution in this field by mobilising their expertise to facilitate access to energy.
- Another key pillar of the social license relates to establishing regular exchanges with the communities living in the surrounding areas. “*Community engagement*” is seen as a way to avoid social tensions which could delay or even threaten the execution of projects.
- The academic literature has emphasised the importance of ensuring transparency in the management of revenues from the extractive activities. It is seen as a way to guarantee accountability and thus ensure a better management of the resource wealth.
- On the different aspects of the social license, it is interesting to see how calls for action often emerge from stakeholder initiatives, progressively gain traction and sometimes lead to global consensus.

ENERGY DEPENDENCE

Principal stakeholders: politicians, media, think tanks and special interest groups

- Dependency on supply from abroad is considered an economic and political risk, especially because of the fear of supply disruption. Domestic energy resources are therefore often seen as important to balancing imported energy sources in the energy mix. Moreover, domestic energy supplies can also be important for employment and balance-of-payment reasons.
- Energy imports are often part of diversification policies. The ability to achieve diversification depends on the level of internationalisation of the energy market, the geographical position and the organisation of the energy sector in the country.
- Supply security for natural gas is important because most of natural gas trade is transported by pipeline infrastructures across borders. The inflexibility of these infrastructures emphasises the dependence of the importing country. The internationalisation of the previously regional gas market due to the emergence of more LNG suppliers has lifted some of these concerns, but some countries remain heavily dependent on just one or two suppliers.
- The dependence on LNG supplies also comes with security of supply concerns regarding bottlenecks in naval routes. These routes are the same as the ones featured in oil supply security documents, but LNG trade is not often included (yet).
- Energy dependency is not something that can be phased out in the short-term, despite the suggestions of dramatic newspaper headlines. Mainstream press tends to quickly link political events to energy dependency. Because of the editorial constraints, the complexities and dimensions of energy relations are often not fully reflected.
- Think tanks and research institutes have pointed out and discussed the geopolitical features of the (inter)dependence between energy exporters and importers. Some cases illustrate that the pipeline business is subject to a multiplicity of risks that can ultimately create discord between governments, such as commercial or technical incidents specific to pipelines, transit problems or pricing issues. Counter to these, some argue that the long-term nature of pipeline supplies can foster long-lasting cooperation between countries.
- This not only applies to pipeline business; Japan, for example, has always actively pursued good diplomatic relations with its LNG suppliers, contributing to bilateral stability.

GAS AND COMPETITIVENESS

Principal Stakeholders: Policymakers, media, think tanks and special interest groups

- Natural gas is not traded on a global market, although LNG is contributing to the globalisation of gas exchanges. It implies that there is no single price for gas but many regional prices, determined according to different supply and demand balances and different pricing schemes. Debates about the competitiveness of gas are therefore based on regional specificities and revolve around the key question of whether price levels are appropriate: not too low or too high as compared to other energy sources.
- The exceptionally low price of gas in recent years in North America raised concern among some stakeholders (especially wind and solar industries, but also parts of civil society and important opinion makers) that low gas prices will lead to higher CO₂ emissions by outcompeting renewables. Other stakeholders (e.g. in the oil and gas industry) dismiss the claim that cheap gas drives renewables out of the energy mix.
- The debate is completely different in other regions. Many stakeholders complain that gas is too expensive and urge governments and market players to seriously consider their loss of competitiveness relative to the US.
- Oil-based pricing mechanisms have been increasingly questioned. In past years, opposition to oil indexation in Europe rested on a solid consensus between consumers, regulators, politicians, some academics and wholesale energy companies. More recently, the Asian market has also started to challenge the traditional oil indexation, although low oil prices have temporarily quieted that debate. On the other hand, external suppliers have defended oil indexation on the grounds that market-based pricing mechanisms lack substance in some markets, are too volatile and may put long-term investments at risk.
- Apart from discussions on pricing mechanisms, there is a wider debate about the competitiveness of gas in the energy mix, related to the premium environmental value of gas relative to other fossil fuels, which is not reflected in economic and environmental policies. The gas industry frequently indicates that policymakers are not doing enough to ensure that carbon is priced in a way that allows gas to play a positive contribution in CO₂ emissions reduction efforts.

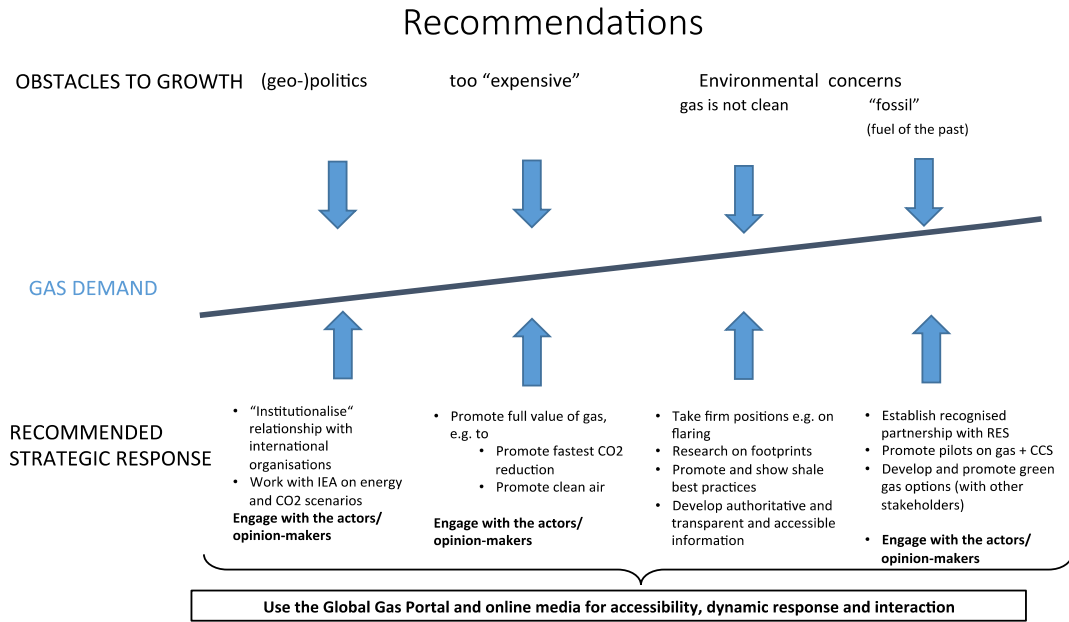
CONCLUSIONS

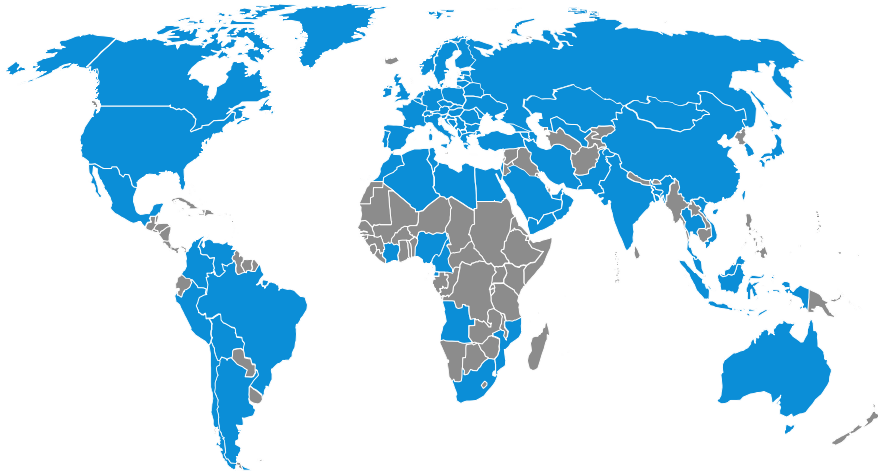
- Since the 2012 report was issued, geopolitics has remained centre stage and perhaps has even gained in importance. The “areas of geopolitical interests” listed above illustrate that in a rapidly changing world, energy continues to play a decisive role in shaping the course of events and is still a key factor in the competition between powers.
- The geopolitical dimension of natural gas is evident. As with other fossil fuels, the unequal distribution of endowment can generate tensions between state actors claiming their rights to control and exploit the resource, as can be observed in the Arctic or the South China Sea. While the share of natural gas in the world energy mix is rising, strategies to maximise production and exports are often delayed, particularly by domestic challenges and security concerns, as seen in Nigeria, Iraqi Kurdistan and North Africa. Recent developments in EU-Russian relations illustrate that regional ties are still strong, despite LNG’s contribution to the globalisation of the gas trade. As a result, security of supply, transit and demand are given significant attention. Because natural gas trade creates (inter)dependency, it can interfere with broader diplomatic considerations. The negotiations over the removal of sanctions on

Iran are a perfect example of how the potential for gas and energy trade must be assessed in the larger diplomatic context. While natural gas fuels geopolitics, its further development is also contingent upon geopolitical shifts.

- Because the world is changing at a fast pace, especially as a result of globalisation and the rise of the internet, the geopolitics of gas can no longer be seen as restricted to the interrelations between governments and national and international companies directly involved in producing or buying gas. The business is increasingly influenced by the actions of stakeholders not directly involved in the gas trade but impacted or concerned by this activity.
- While many aspects trigger stakeholder reactions, issues related to the environment generate the most active involvement. Strong arguments can be put forward to promote the role of gas in a long-term strategy towards decarbonisation. However, these do not seem to have found support within stakeholder groups, nor have they made significant inroads in policies to limit climate change.
- There are various reasons why gas is not more widely endorsed as the preferred fuel and partner on the road to sustainability. These are illustrated in Figure 1 below.
- In response, IGU may consider placing a strategic focus on the environmental record of gas, by ensuring better information-sharing on the actual performance of gas. In this perspective, reducing the carbon footprint of gas should be made a priority. IGU should monitor and take firm positions in reduction in gas flaring and methane emissions. In addition, IGU may consider clarifying the debate on the conditions for gas production. This could be done by reinforcing the dialogue on the environmental impact of shale gas extraction and also by giving a wider echo to the recent developments in biogas production. While setting new partnerships with international organisations may achieve a greater appreciation of the added value of gas in combination with renewable sources, it is equally important to work on the role of gas in the long-term vision of a zero-carbon energy system. COP21 in Paris seems to be the next arena for IGU to take an authoritative position in the debate. In this regard, IGU should also commit to the promotion of CCS projects for gas-fired power plants and fuel the debate with information on the gains in terms of emissions and on the cost-effectiveness of such technologies when applied to gas. Finally, these actions, which aim at raising the appreciation of the “green” properties of gas, need to be complemented by vocal support for strengthening the technology-neutral instruments that deliver emissions abatements (carbon pricing and emissions standards), as these remain the most efficient way to promote the real (environmental) value of gas in decarbonisation strategies.
- In all of these strategic moves, a dialogue involving all relevant stakeholders is essential.

Figure 1





The International Gas Union (IGU) was founded in 1931 and is a worldwide non-profit organisation promoting the political, technical and economic progress of the gas industry with the mission to advocate for gas as an integral part of a sustainable global energy system. The IGU has more than 142 members worldwide and represents more than 97% of the world's gas market. The members are national associations and corporations of the gas industry. The working organisation of IGU covers the complete value chain of the gas industry from upstream to downstream. For more information please visit www.igu.org

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