Inclusive Growth Towards a Sustainable Energy Future:
The role of gas technologies and innovation
Barcelona, Spain 21-22 November 2018

CONCLUDING STATEMENT

1. The International Energy Forum (IEF) and the International Gas Union (IGU) convened the 6th IEF-IGU Ministerial Gas Forum on 21-22 November 2018 in Barcelona, Spain

2. More than 100 Delegates, including 8 Ministers and Deputy Ministers of IEF member countries, 9 Chief Executive Officers of IGU Companies and 4 Heads of International Organisations debated how gas markets can better contribute to inclusive growth and a sustainable energy future and so help achieve globally shared goals faster together.

3. Taking a Mediterranean perspective on gas market trends between Europe, the Middle East and North Africa, Asia Oceania and the Americas, the 6th IEF-IGU Ministerial Gas Forum focused plenary session discussions on:

   - The Role of Gas Technologies in Resilient Low Carbon Energy Systems
   - Gas Demand Growth Beyond Power Generation
   - Enhancing Gas Supply Security and Diversification

4. And aimed to develop a clear vision on what is needed to roll-out new technologies and step-up innovation that delivers inclusive growth and healty and sustainable energy futures. Gas sector cooperation stands at the centre of the growing interface between maintaining global energy security, implementing nationally determined contributions to avoid catastrophic climate change, and accelerate sustainable and inclusive growth and development. Dialogue among IEF member governments, IGU natural gas business leaders, and energy market stakeholders around the world will become more important therefore.

The Role of Gas Technologies in Resilient Low Carbon Energy Systems

5. Delegates noted that the importance of natural gas in achieving inclusive sustainable growth and successful energy sector transformations is more widely acknowledged. They highlighted that natural gas is critical to help keep global warming within tolerable limits and improve air quality in major cities, noting that in comparison to other fossil fuels, natural produces less greenhouse gas emissions, negligible sulphur dioxide and airborn particulate matter and very low nitrogen dioxide emissions, while supporting the greater deployment of renewable energies and integration of other sources.

6. Public and and private sector stakeholders should therefore enhance dialogue and cooperation to seize the opportunities that readily available and new gas technologies offer to bolster energy security and achieve climate change and sustainable development goals faster together. Delegates took note of various industry and government actions that engage the gas sector, including:

    - The "IEF Energy Efficiency Knowldege Sharing Framework" proposed at 6th IEF Asian Energy Ministerial Roundtable in November 2015 and launched at the 15th IEF Ministerial Energy Forum in September 2016 with the support of the G20 Energy Ministers gathered under the G20 Presidency of China in 2016, that focuses on making energy supply chains more efficient and sustainable.
    - "Gas for Climate 2050" on the the role of gas in a decarbonsed energy system.
    - The "Hydrogen Initiative" EU governments signed under the Austrian EU Presidency on 18 September 2018 that aims to maximise the options of sustainable hydrogen technology for the decarbonisation of multiple sectors including through the use of gas infrastructure, and
    - The "Oil and Gas Climate Initiative" that on 25 September 2018 set the target to reduce by 2025 the collective average methane intensity of its shared upstream gas and oil operations by one third.

7. Implementation of more stringent greenhouse gas emission, clean air, and fuel quality standards, enables governments and industry to responds to growing demand for affordable access to reliable and modern energy services. Greater dialogue and cooperation will ensure that progress can be made in separate areas simultaneously so that technologies are deployed more rapidly in a mutually reinforcing and cost effective manner.

8. Delegates called on government and industry leaders to build confidence by overcoming obstacles to gas market trade and cross border interconnections and foster stable and predictable conditions to accelerate the deployment of gas sector technologies such as Carbon Capture Use and Storage (CCUS), Hydrogen, modern gas sector infrastructure, including flexible and small scale Liquified Natural Gas (LNG) and explore synergies through:

    - Expanding gas sector investment to serve demand growth beyond power generation alone, enhancing access to modern energy sources;
    - Capatalising on availble gas technologies and infrastructure facilities to enable greater market share of renewables, and integration of sources, including
    - Accelerating reserach and development of CCUS; capturing CO_2 to enhance efficiency and decarbonsie supply chains through hydrogen and integration of biogas and other green gas technologies.

Gas demand Growth Beyond Power Generation

9. Two years after the 5th IEF-IGU Ministerial Gas Forum held in New Delhi on 6 December 2016 found that the role of gas in global energy transformations will be larger for longer than many outlooks model, ministers and industry leaders observed how government support, anchored in environmental, clean air, and health standards have in the meantime enabled significant gas market advances.

10. As such policies are adopted more widely, gas producer and consumer countries stand to deliver on the promise of an 'Golden Age of Gas' resulting in a more secure, inclusive, and sustainable world energy market for all.

11. Delegates noted the main trends in gas consumption that made gas the fastest growing fossil fuel. Gas is expected to increase its share in the global energy mix substantially in the next decade. Growth will shift towards the non-OECD region beyond the power sector alone, and is likely to be strongest in the maritime and road transportation, industrial, and petrochemical sectors delegates found.

12. Developing demand from sectors beyond power generation can serve as a significant lever to enhance gas consumption globally. Two thirds of the increase in gas consumption is forecast to be outside the power sector, with growth driven by rising demand in Asia, petrochemical applications in the United States and the Middle East, and rising mobility needs.

13. To keep up with the pace of gas demand growth in Asia and diversity of supply requirements in other key demand centres such as Europe, gas producers must invest in new supply facilities to reliably cater to new gas demand. Flexibility offered through new technology solutions that reduce costs and offer more optionality, as well as innovative marketing and contract terms, are important means of unlocking demand in nascent gas markets**.**

14. Achieving cost advantages through economies of scale in these new growth sectors is impossible without strong government support to leverage the required private sector investments. At the regulatory level, gas market reforms and regional integration can further help overcome hurdles such as market access constraints, inefficient price formation, and rigid contract terms.

15. Robust and reliable policy and market signals will ensure that the required investment in gas infrastructure and storage facilities moves forward in tandem with future gas demand trends that healthy and secure world energy markets require.

16. Recent gas market advances show the importance of anchoring future gas demand in long-term policies focused on environmental and health standards to achieve clean air, greenhouse gas emission reduction and energy access goals. This will stimiulate innovation and the deployment of new technologies by market actors that must compete in an ever more globally integrated and competitive energy market in response.

17. Delegates noted that potential growth markets are also markets that often lack access to capital, and that innovative public private financing mechanisms, including international financial institutions are key.

18. To lower thresholdes and make gas more cost competitive, innovation, price incentives, and policy support, in particular in respect of reducing harmful emissions and mobilising investment in infrastructure is key delegates observed.

Enhancing Gas Supply Security and Diversification

19. New infrastructure developments in Europe, from the Baltic to the Medetarrenean, rising North American LNG exports, and surging gas demand growth in Asia illustrate opportunities but also expose hurdles to enhance gas supply security and diversify markets for the world to fully capitalise on the benefits that readily available gas resources and new innovative technologies bring.

20. Co-dependencies between importers and exporters are increasingly governed by flexible arrangements in a currently well supplied market. Yet to boost stable and resilient gas markets long-term investment must accelerate over the next decade. Predictable and transparent market conditions including reliable price signals and regulation are vital to gas market security and trade flows in a more diverse and rapidly changing environment.

21. Global LNG supply is growing rapidly but new capacity is still required when in the mid 2020s gas demand growth will likely outstrip supply that is lagging due to growing uncertainties delegates found. Significant infrastructure investment is required in new growth markets to unlock gas demand growth in emerging market cities.

22. To realise gas market resiliency there is also a need to focus on pricing, and reduce cost by enhancing supply chain efficiency and improve communication with stakeholders delegates noted.

23. Delegates of the IEF-IGU Ministerial Gas Forum noted the progress made by the Joint Organisations Data Initiative (JODI) Gas initiative since JODI-Gas was launched in Moscow on 2014. Delegates welcomed the enhanced visibility of JODI-Gas data that is now also available on different major data re-distribution agencies (Argus, Bloomberg, and Thomson Reuters). As LNG trade increases, delegates recognised the need for improved granularity of LNG data available in the marketplace and called on JODI Partner Organisations to help achieve this goal.