

The COP24 interview: Joe M. Kang, President, International Gas Union

We are now just a few months away from the COP 24 UN climate talks at Katowice in Poland, where negotiators have been tasked with finalising the rulebook that will govern implementation of the Paris Agreement. In this exclusive interview, Joe Kang, the new President of the International Gas Union, explains why the talks matter to the entire energy industry. He also outlines the advocacy initiatives the IGU is working on to ensure policy-makers are aware of the vital contributions natural gas can make to a sustainable energy future and cleaner air.

How important is the success of the COP 24 UN climate talks to the natural gas industry?

The success of these challenging negotiations is important to the entire energy industry, not just the natural gas industry. The Paris Agreement was a landmark of success in creating urgency and global consensus in dealing with one of the biggest challenges of our time.

It is now imperative to get the operational mechanisms right in Katowice, to bring some certainty around the path forward while continuing to build urgency. The world is at a critical point – measures undertaken over the coming five years will determine the feasibility of meeting the Paris Agreement target.

The IGU strongly supports the need for a global framework on climate action. Importantly, we stress the urgency of action, not just the plan.

There is an enormous potential to achieve rapid reductions in carbon dioxide emissions through fuel switching from coal and oil to natural gas. The largest reduction of global carbon dioxide emissions in recent years has occurred in the US, largely due to fuel switching from coal to gas in power generation. This has the potential to alter the trajectory of emissions growth immediately, and allow more flexibility for longer-term solutions.

Today, coal accounts for 41% of power generation. Switching from coal to gas in existing energy systems and investing in gas infrastructure in developing systems offer immediate opportunities to meet emissions targets. Perhaps as important, this will have an immediate impact on improving quality of life by eliminating air pollution that causes up to 8 million deaths each year.

Despite an extra session of talks in Bangkok last month, there is a consensus that much still needs to be done to agree the rulebook. What would be the implications of the COP24 talks not ending successfully?

Without a clear framework for climate action, there is a risk of ending up with a patchy set of contradictory climate or energy policies around the world. The major implication of unsuccessful negotiations for the energy industry would be uncertainty that could ultimately impact investment decisions.

The biggest impact on the future global carbon budget growth lies in the developing world – which has yet to reach universal access to clean and modern energy, and whose economies, populations, and standard of living are still growing. So reaching a balanced agreement will be critical to meeting the Paris targets.

There are vast differences between the developed and developing worlds' capabilities, needs, and motivations. Since energy demand has largely flattened in the OECD, future growth in energy demand will be concentrated in China, India, Africa, the Middle East and South-East Asia. In Asia alone, energy demand is expected to increase by 50% by the middle of the century, as the region's population grows by 900 million. Demand for energy will also increase in Africa.

A combination of natural gas and renewables would allow the developing world to meet the Paris commitments affordably, without sacrificing economic growth.

In both the developed and developing world the greater use of natural gas will immediately reduce the energy system's carbon intensity, increase efficiency, and provide much-needed security of electricity supply to integrate an increasing share of renewables.

Is the IGU planning any participation at COP 24?

As the global voice of the gas industry, and an organisation committed to sustainability, we think it is important to attend this pivotal event and participate in the dialogue. The IGU is a registered delegate observer organisation, as we regularly attend COP events.

Our aim is to demonstrate that natural gas has a vital environmental and economic role to play in the sustainable energy future, and that the industry is open to co-operate with the global community towards achieving this future.

We are organising a number of side events, particularly around urban air quality. We also hope to organise a session on global developments in renewable, synthetic and hydrogen gas.

Natural gas advocacy is core to the IGU's remit. What initiatives do you currently have under way?

“Gas is back”

Korea assumed the presidency of the IGU three months ago, at the conclusion of the World Gas Conference in Washington DC. While the resounding message that came

out of that conference was “Gas is back”, we still have a lot of work to do. As president, I plan on a very active three years ahead to ensure the industry stays in this strong position.

The theme of the Korean IGU presidency is “Sustainable Future, Powered by Gas” – very fitting to our discussion here. We have a packed agenda to support this aim, consisting of conducting internal committee study work, holding external events and conferences, releasing publications and reports, and facilitating education campaigns to advance the industry’s knowledge of sustainability.

For example, the IGU will continue to stress that it is imperative for the industry to keep reducing its environmental footprint – most importantly in the area of methane emissions. The IGU will continue educating and encouraging members to step up to the challenge.

As an associate signatory to the natural gas industry’s Guiding Principles on Methane Emissions initiative – and having established our own group of experts on methane emissions two years ago – we will continue to share knowledge, approaches and concerted efforts to better measure, document, and reduce methane emissions.

We will also continue to stress the – literally – vital importance of clean air, as the world faces increasing pressures from growth in energy demand and population, and urbanisation. To that end, we plan to release another edition of our urban air quality report to feature more case studies of how jurisdictions have successfully cleaned their air by switching to natural gas.

We will continue to issue reports to inform the global community on natural gas and its critical role in the global energy mix. A recent milestone report that I would like to draw attention to is the special WGC edition of Global Gas Report – a joint publication produced by the IGU, our Italian member, Snam, and the Boston Consulting Group. I would encourage everyone interested in global prospects for natural gas to download it from our website at igu.org.

All of our planned activities will focus on advancing the IGU’s mission, which is to act as the key credible advocate of the political, technical, and economic progress of the global gas industry.

We plan to continue raising the global voice of gas through working with governmental agencies and multilateral organisations to demonstrate the economic, social, and environmental benefits of gas.

The Paris Agreement stipulates that post-2050 we will need to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gas (GHG) emissions. That sounds like a big challenge for natural gas as we approach the middle of this century. How optimistic are you about the long-term future of the natural gas industry in a carbon-constrained world?

I am very optimistic about the role of natural gas in the sustainable energy future. In fact, the IGU stresses that gas is the fastest, most economical way to the sustainable energy future. The International Energy Agency noted in its last *World Energy Outlook* that “gas played an important part in recent positive carbon dioxide emissions trends in many countries and in the overall flattening of global energy-related emissions”.

Providing access to energy, while minimising negative impacts on the planet and the air we breathe, is one of the greatest challenges of the 21st century. Even assuming significant future energy efficiency gains, global energy demand is expected to grow by 30% between 2015 and 2040, while global population will add another 2.5 billion people by the end of the century.

Thus, we expect the trend of renewables and gas being the two fastest growing energy sources to continue, as these two sources of energy will supply a significant portion of the new demand.

Given the current state of technology and the urgent need to transform energy systems, a portfolio of low-carbon energy solutions will be needed to meet the climate change challenge. Furthermore, with the global trend towards greater urbanisation, this portfolio will need to be suitable for urban realities – economic, environmental, societal, ecological, and geographic.

Natural gas fits the bill perfectly. It is the most flexible, multi-purpose source of energy suited for meeting all basic needs of the modern society: electricity; industrial production and manufacturing; clean comfort at home; clean transport; critical reliability backup.

In the developing world, economic growth and steady improvement in the quality of life will continue to drive energy demand growth. As more and more communities move out of poverty – including energy poverty – energy consumption will grow, in both households and businesses. Gas is the ideal fuel for this growth.

For the longer term, we need to remember that there are also technologies that can make gas a very low-carbon source of energy. Gas paired with carbon capture and storage technologies is practically a carbon-free fuel, with 90% of the emissions removed, and the remaining 10% simple to offset with renewable gases.

Gas itself can be renewable and carbon-free, and biogas and power-to-gas technologies can reduce the carbon content of the gas supply.