

St Petersburg International Gas Forum

1-4 October 2019

Thank you very much,

It is a pleasure for me to be here again to discuss this world class Forum on the critical topic of the energy transition, which has been front and centre on the global agenda and is gaining attention.

In fact, just less than a month ago, in Abu Dhabi, at the World Energy Congress, the topic was the major point of discussion and many views of the opportunities and challenges were highlighted.

To me, it was very interesting to hear the efforts of many of the Middle East nations that are currently heavily dependent on oil production, consumption and export to present their ideas and plans for energy diversification within the region.

But my observation and single take away from the Congress was that there is nothing easy about the upcoming energy transition and that there are no silver bullets that will somehow leapfrog our energy consumption and use to one that is carbon-neutral.

To this end, innovation and technology will need to be significantly stepped up and supported by the industry and governments as we will need some major breakthroughs if we are serious about a significant reduction in energy related emissions.

Even if there is debate about the rate of the transition and how it compares to previous shifts, I think that one thing is evident and hard to deny

– the concept of itself has never before garnered so much public attention

attention from all corners of the world, across popular media and communications platforms, and featured prominently on many government agendas.

This is truly unprecedented and it is made so by our current real time communication platforms and social media. But as we have experienced, at times these platforms can be manipulated with misleading and false messages that are very hard to detect or defend against.

In 15th-century Peru, children were sacrificed, to show good will to the Chimú gods, in an attempt to end natural disasters caused by the climatic phenomenon we now call, appropriately enough, El Niño.

In our time, the roles have been reversed. Now children, primarily through social media and rallies, are warning of an impending climate catastrophe and are the ones that have to be appeased. Now it is they who demand our sacrifices.

Even though sometimes the attention is not always positive toward our industry, we do not view it as a bad thing, it simply becomes important that the industry step up its own communications and engagement. I truly feel that as an industry we need much greater cooperation, alignment, and effort in this area, recognizing that there are differences in the individual corporate strategies and brand positioning. The IGU is perfectly placed and has been working hard to improve the industry's engagement efforts through our Global Voice of Gas initiative.

Because the importance and urgency of the energy transition is well recognized by the public and private investors, now is the most opportune time to showcase that our industry is ready to offer smart solutions today and in the future.

It is time to transform the perception of our industry and show that we are modern, innovative, nimble, and can also play in the clean tech space. We are an industry that strongly values sustainability and recognizes the critical importance of technology and innovation to the sustainable energy future. We are central to taking on the Energy Trilemma, head on.

So, turning to the role that natural gas will have in the sustainable energy future.

I firmly believe that it will be a critical role.

Natural gas is the most economic and direct route to the sustainable energy future, and not merely as a bridge, but as a vital long term economic and environmental contributor.

With that said, the value proposition of gas and its infrastructure will vary greatly by region.

There are large differences in energy needs and opportunities around the world,

so for example – the role of gas in the European and North American markets will be very different from that in the ASEAN or African regions.

In the mature markets of the developed world, gas offers a quick win.

It provides a tangible and immediate path to cut emissions, by increasing utilisation of the extensive, existing natural gas infrastructure and switching away from heavier carbon fuels like coal.

Natural gas penetration in these markets is already high; existing assets are already available, but currently in some cases under-used, natural gas offers the ability to store very large amounts of energy as very low cost.

When we look to the **developing world, the picture is entirely different.**

The average age of coal plants in South Asia is less than 15 years – in other words, it has a new and rapidly growing fleet of coal power plants.

At the same time, the penetration of natural gas in these areas is very low, compared to the global average, and infrastructure investments are needed to take advantage of the opportunities that gas presents.

Opportunities for fuelling these regions' economic development, while cleaning up their air, and cutting emissions.

My remarks would not be complete if I did not focus on the European gas market.

I must admit that as an Association, the IGU has struggled a bit to find the appropriate role it should play in Europe in view of the large number of local and regional associations that exist, I believe at last count, somewhere around 18 or so.

But at the same time, we are being pressured by our European Charter members to increase our level of engagement in the important energy debates that are taking place in Europe and at the Commission. To this end, we recently established a European working group under the Task Force Communications and Outreach to provide an opportunity to sharpen the IGU's

messages and better define the level of engagement that we should be undertaking. We also recently rejoined GasNaturally as a full-fledged member of that group.

We fully appreciate the market and European political complexities. Despite all of that, we must find a way that effectively sends the appropriate messages relating to the vital economic and environmental role that natural gas and its vast infrastructure plays and will continue to play in Europe. And this is not just in the short term as some even within our industry are suggesting.

There is no doubt that the long term future of the gas industry will depend on the level of effort to reduce the carbon intensity of our product. And we will do so through a variety of efforts inclusive of reducing the methane emissions of the entire supply chain, encouraging the increased supply of renewable gas and ultimately hydrogen, through small scale CCS and CCUS, increased energy efficiency of applications and innovative technologies.

But at the core, it will still be natural gas and its infrastructure that will be at the core of the energy system.

Thank you again for the invitation and congratulations on staging yet another word class Forum.