

# The 24th World Energy Congress, Abu Dhabi

## The role of gas in the global energy transition

Tuesday 10 September 2019

### Introductory remarks

Dear Andy, thank you for your kind introduction and thanks to WEC for the invitation to participate on this distinguished panel on the important topic of “The role of gas in the global energy transition”.

Allow me to open up my remarks by simply saying that “Gas has a vital economic and environmental role towards a sustainable energy future”.

Every major outlook, including the recently released IEA Sustainable Future Scenario points to a clear and important role for gas for the foreseeable future and well beyond 2050.

And the reason for that is that today, the world is facing perhaps the greatest challenge of our time, sometimes referred to it as the Energy Trilemma. The challenge is how to – sustainably, securely, and affordably – provide sufficient energy to the world’s growing populations and economies, while doing it in a way that urgently improves air quality, meets climate change commitments and lifts people out of energy poverty.

We do recognize that for the short to midterm, gas is extremely well positioned to make significant positive impact to the Energy Trilemma.

We also accept that for the longer term that these challenges cannot and will not be met, unless we unleash a new era of energy innovation, research and technology.

We must also accept that, even with renewables and natural gas taking center stage, as we transition our energy systems, there are no silver bullets and a mix of solutions will be needed.

***Allow me to address a few questions,***

***First, “Is natural gas holding its promise as a ‘bridging fuel’ to a low-carbon economy?”***

Allow me to restate what I said in my opening comments, and that is that natural gas has a vital economic and environmental role towards a sustainable energy future.

We do not use labels such as “bridging” or “foundational” fuel as we do not believe that these labels help with the required debate and understanding of the Energy Trilemma that I also mentioned before.

The energy systems around the world are very diverse with each its own challenges. And that is why we believe that all energy sources will be needed well into the future and as we transform these systems in a manner that addresses the elements of the Energy Trilemma. We agree that to accomplish the long term goals that the fuel mixes will have to change, and gas is very well positioned along with renewables to take on the lion’s share of the growth.

Just last year we saw incredible growth of supply and demand for natural gas.

- Global Gas Production and Consumption grew by 4.9 per cent.
- International pipeline and LNG trade grew by 4.1 per cent.
- And all of this was done with an average hub reduction price of 2.1 dollars per MMBtu.

***Secondly, “do existing market frameworks enable the shifting role of natural gas and its contribution to low-carbon economy?”***

Good examples of the policies that enable natural gas to reach its full potential have emerged and these are very instructive on how we can urgently address sustainability.

China’s blue sky policies have had a profound impact in the increase of natural gas in their energy mix. The policies that target air quality issues increase the use of natural gas in view of its excellent environmental attributes as reducing air pollutants such as PM2.5, and Oxides.

The other example that I can point to is the tremendous transformation that is taking place in the UK where coal for all intensive purpose has been eliminated in the power sector. The key policy instrument that lead to this significant shit has been an appropriate price for carbon.

So these are two market frameworks that have allowed natural gas to maximize its contribution.

***And finally, “are the developments in gas fuelled transport and power-to-gas sign-posts towards a hydrogen economy and what would this mean for existing gas infrastructure?”***

That question has two parts so let me first address the first part relating to transportation. Natural gas is well position to contribute toward cleaner transportation, particularly in two areas, namely, heavy duty road transportation and as a bunkering fuel for the shipping industry. Both of these areas will be enabled of increasingly and globally available LNG supply. For the marine sector, LNG already meeting the more stringent IMO 2020 sulfur emissions standard,

having recently become law. We are seeing most of the new builds moving to LNG and certainly the cruise line industry is already switching to LNG.

On the second part of the question, there is no doubt that the existing infrastructure and further investments in infrastructure represent “no-regrets investments” as they will be fundamental to the development of hydrogen and other green gases such as Renewable Gas. The existing infrastructure is capable of carrying around 10% hydrogen without concern over safety. I believe that it would be prudent for the industry to transition its replacement and new infrastructure to one that can accommodate higher levels of hydrogen.