

APPEA 2014
Plenary Session: Sustaining our Natural Advantage
Monday 7 April 2014

*Natural Gas: as an integral part of a sustainable
global energy future*

Jérôme Ferrier
President IGU

Members and Senators,
Mr Rob Cole, Chairman of the APPEA board,
Distinguished Guests,
Ladies and Gentlemen

It is a great honour and privilege for the *International Gas Union* and his President to have been invited to present the views of the Organization at the opening Plenary session of the 2014 APPEA Conference in the beautiful city of Perth, the pearl of Western Australia.

Advertisement: Before I start I would like to show you a short video clip...

This is our challenge
It is up to the world gas community to work together to counter the simplistic and truthful messages about natural gas.
They are destroying the brand. If we don't take action our brand will not recover.
This challenge is international. The international Gas Union has a plan:
an advocacy plan to highlight the benefits of natural gas

Slide 1

IGU is representing the worldwide gas industry, with 83 countries, (the 84th has been approved during our ExCom in Sydney last week) among which 14 nations of the Asia-Pacific region, and covers 95 % of the natural gas and LNG global market. Australia is one of the oldest since 1938. This conference is an event of outstanding importance for IGU, since Australia is the third largest LNG producer in the world and has the will and the potential to become the second if not the largest in the medium term.

In naming the present session "*Sustaining our Natural Advantage*", the APPEA has raised a fundamental issue, which is that, in spite of its obvious economic and

environmental advantages, natural gas will not get the share that it deserves in the global energy balance, unless if we constantly advocate for its intrinsic merits towards policy makers, opinion leaders, international institutions and, altogether, the largest number of people.

Slide 2

The 2013 *International Energy Outlook to 2035* allows identifying a series of key points in the energy landscape that constitute risks and opportunities for our industry:

- With world GDP rising by 3.6 % per year, world energy use will grow by 56 % between 2010 and 2040. Half of the increase is attributable to China and India. The engine of energy demand growth is clearly moving to South Asia;
- Coal grows faster than petroleum consumption until after 2030, mostly due to increases in China's consumption, and slow growth in oil demand in OCDE member countries.
- Natural gas is the fastest growing fossil fuel, supported by new conventional reserves and increasing supplies of shale gas, particularly in the United States. **However, coal still remains the dominant fossil fuel on the global scene.**

Slide 3

Natural gas is abundant and we should endeavour that it displaces coal more rapidly for the benefit of global climate. Estimates point to more than 240 years of recoverable natural gas reserves at current consumption levels. New pipelines, new interconnections and expanding LNG infrastructures, along with a revolution in the exploitation of unconventional resources have transformed supply realities.

Slide 4

Universal access to modern energy services is still far from being a reality: in the *New Policies scenario* of IEA, in 2030, almost 1 Billion people have no access to electricity and more than 2.5 Billion do not use clean cooking facilities. **Natural gas can be the main actor of an *Energy for All* scenario**, first in China, India and Sub-Saharan Africa. IGU is an active stakeholder in this process, in partnership with the United Nations Development Programme, and has made this goal as a top priority for the on-going 2012 to 2015 triennium.

Gas can be the answer

Slide 5

At the global level, coal remains the largest source of power through 2035. This is a major challenge for our industry. Replacing old coal plants with new natural gas -fired plants could curb the GHG emissions by more than 60% per kWh generated, taking into account the entire life cycle, from exploration and

extraction right through to decommissioning. **Even the most modern coal plants emit twice the amount of GHG per kWh as natural gas combined - cycle power plants.**

Slide 6

Global CO₂ emissions from energy use are expected to grow by 29 % to 2035. Policies to lower emissions continue to tighten, and the rate of growth of emissions declines, but emissions remain well above the path recommended by scientists. Although emissions grow more slowly than energy consumption, as the energy mix gradually decarbonises, coal appears to be the main driver for the trends in CO₂ emissions in per capita terms, both in the right way, as we observe in the US, with a switch from coal to gas for power generation, or negatively in China and India, still relying upon a massive recourse to coal in power plants.

Gas can be the answer

Slide 7

It is obvious that the UN global climate mitigation targets will never be reached by 2050 if we follow the path sketched in the 2013 IEA's projections. A sensible target for our industry should be to curb by one-third the expected share of coal in electricity generation in 2040.

This would increase the global natural gas demand by 25%, implying an additional production of about 1 100 Bcm in 2040, a target which seems reachable with due consideration to the importance of natural gas conventional and unconventional resources. Under this new scenario, the global gas demand for power generation would reach 2 000 Bcm in 2035/2040, with a share of gas in the fuel mix in this sector climbing from 24 to 36 %.

The additional substitution of 1 100 Bcm to coal for power generation would significantly reduce the growth of GHG emissions, **making it possible to stabilize the emission level at a maximum of 40 Billion Metric tons as from 2030 onwards.**

Slide 9

Our industry should not be shy in addressing the health issues deriving from the massive use of coal. Studies evidence that health damage caused by the use of coal for power generation is extremely important, resulting in a series of unaccounted health costs that are estimated, for European Union countries only, at some 15 to 42 Billion \$ per year.

Gas can be the answer

Slide 10

The situation is actually much more critical in China and India than in the rest of the world. In large urban areas, like in Beijing or New Delhi, peaks of air pollution have become a major political issue and a real concern for people.

Slide 11

Since the electricity sector represents 75 % of the coal demand in the OECD countries and 60 % in the rest of the world, it is possible to reduce massively the carbon emissions by regulating the use of coal in this sector, without affecting the competitiveness of the industry through heavy carbon taxes that would undoubtedly have detrimental consequences on global trade.

Slide 12

In continental Europe, on the contrary, more than 50 000 MW of CCGT gas plants have been closed or mothballed as a consequence of the EU energy policy, which imposes a fast growth of renewables at a high cost. Having to reach a target of 20% of renewables in the energy balance by 2020, EU power producers had no other choice than turning to coal, so as to keep the average cost of production within affordable limits for consumers. The carbon market (*Emission Trading System or ETS*) has failed to regulate the emissions from power plants, since any price level allowing to restore the competitiveness of CCGT against coal would have severely hit the EU exporting industries, already much affected by the global economic slowdown.

Slide 13

Natural gas and renewables, which complement each other almost perfectly, both for electricity generation and storage, as well as for the injection of biogas in the pipelines, should be acknowledged as the two main pillars of an environmentally friendly and sustainable long term global energy policy.

Slide 14

As a conclusion, I would like to say that our industry should not only be proud of its contribution to ensuring a sustainable and climate friendly future at a global level, and that we should be adamant to let it know on every occasion. You will perhaps be surprised by the excellent image that Greenpeace carries of our industry. Actually, I have observed that our difficulties often come from the lack of understanding of energy matters by governments, in particular of the intrinsic merits and advantages of natural gas and LNG.

The IGU encourages the gas industry around the world to work together with the same message:

Gas will help to reduce carbon emissions.

Gas will provide energy security

Already, under the Australian presidency of the G20 gas is considered part of the energy solution.

This is not a simple an advertising campaign. It's broader than that.

This will be sustained medium to long term advocacy plan to bring gas to its rightful place in the world.

I encourage the Australian industry to be part of this tremendous challenge.

Once again, I would like to thank APPEA for having invited me to present and I would be delighted to welcome you all in Paris, in June 2015, for the World Gas Congress of IGU where these important issues will be widely debated and reviewed at the highest level of our industry.
