Ladies and Gentlemen, it is a pleasure to address you at this World Gas Conference. The International Gas Union has again brought together the players from both policy and industry whose cooperation will be so crucial to seeing in a “Golden Age” of Gas. Natural gas is on the verge of a break-through moment – but it was not always so.

When the International Energy Agency was established in the early 1970s, the world consumed four times as much energy in the form of oil as it did in gas. The United States and the Soviet Union already had large domestic gas systems, and the Groeningen field was already producing in Europe, but gas was largely a regional affair. LNG was in its infancy, and the major interregional pipelines were not yet built. Gas was something of an ugly duckling next to oil.

Today, that duckling has become a swan: the ratio of oil demand to gas is down to 1.6, and the gap is closing rapidly. The coming quarter century will be marked by the rapidly increasing share of gas in the global energy system. According to our World Energy Outlook, while oil will remain the single largest energy source, gas will supply a third of the incremental energy needs of the world economy. Another third will be renewable energy, which has a natural partnership with gas. Oil, coal, and nuclear will share the last third.

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Gas is the “lucky fuel”. It may not be ideal, and it might not be the first choice of policymakers, society or the media. That first choice is often renewable energy, domestic coal or nuclear, depending on the political context. Indeed, gas is rarely the cheapest, cleanest, or most secure energy source - but its key advantage is that it is a good combination of compromises.

Gas is cleaner than coal and less geopolitical than oil. It is widely available, so most countries can have a good combination of domestic production and diversified imports. Whereas oil is all about transport and coal is all about power generation, gas is advancing on all fronts.

Its growing role in power generation is well-known, and its future there looks bright. With the combined-cycle gas turbine, gas can play a key role in providing flexibility for renewables, an attractive alternative to coal, and diversification in emerging economies. But gas is also growing in the buildings sector, in industry, in chemicals, and it even has the potential to challenge oil in transportation.

Crucially, gas is also the “universal back-up”. It is the answer to every energy policy question starting with “what if”: if offshore wind deployment is delayed, if nuclear production falls, if energy efficiency does not improve as we hope – in all these cases, the answer is more gas.

But there are challenges ahead. A Golden Age of Gas could bode well for energy security and for sustainability, but its coming is not guaranteed. A major challenge is the capital intensity of gas infrastructure. For each dollar spent on upstream investments, only 3 cents are needed for transport infrastructure like pipelines and tankers. Oil investment is completely dominated by upstream. For gas that figure is 40 cents per dollar of upstream investment – a dollar which is worthless without sufficient transport capacity. The costliness and difficulty of transportation brings rigidity to gas and segments markets – singling out gas among major commodities.
for its lack of a global market. For gas to achieve its bright future worldwide, it will need a proper global market, with adequate infrastructure and efficient pricing.

Even with these infrastructure investment needs, the majority of the value chain remains upstream. Until quite recently, we would not have pondered a “Golden Age of Gas”. With conventional gas production in North America and Europe in terminal decline, and with conventional production increasingly concentrated in the CIS countries and the Middle East, many energy security problems loomed for gas. It was the advent of unconventional gas which transformed the United States from an inevitable importer to an inevitable exporter, and made Australia a major LNG player. It is unconventional gas which has laid the foundations for a Golden Age.

The most important obstacle to unconventional development in many regions, including North America, is public concern about the environmental and safety aspects of hydraulic fracturing, or fracking. The issue is addressed in a special report launched last week in London entitled “Golden Rules for a Golden Age of Gas”. I should start with the good news: the technology for safe shale gas production is tried and tested - we know how to do it, and with proper management and regulation there is no reason for unacceptable risks. But the industry should not be complacent. Policy makers and industry need to work together to ensure that unconventional development follows these golden rules. Because public concerns have the potential to end the non-conventional revolution. And as our analysis shows, a scenario marked by reduced non-conventional gas production is clearly detrimental in terms of climate change - three quarters of lost gas production is replaced by coal.

Let me tell you about another report that highlights further prospects for gas, and the challenges to be overcome. The Medium Term Gas Market Report 2012 aims to contribute to market transparency through a comprehensive analysis of gas supply, demand, and trade over the next five years. It is being launched here, at the World
Gas Conference, and I want to thank the International Gas Union for hosting that launch.

Like our previous research, it points toward a bright future for natural gas as we see gas demand increasing at 2.7%/y to 2017 to reach above 3900 billion cubic meter, faster than the 2.4% annual growth we predicted last year. That change comes from events in North America, where not only is production booming, but low prices are supporting a progressive switch from coal to gas in the power sector, and also support growing demand in industry.

Another country of special focus is China. The unabated demand growth there will continue, and China emerges as a key global player, becoming the third largest importer of both LNG and pipeline gas by 2017.

While Medium-Term Gas Market Report 2012 sees growth for natural gas in most regions, low economic growth, relatively high gas prices and strong growth of renewable energies will limit demand in Europe.

The report identifies future sources of supply, with most incremental gas production coming from the Former Soviet Union (FSU) and North America. But in the short term, LNG markets are set to progressively tighten, as the next wave of LNG export capacity is not expected to start production before the end of 2014.

The most important message in the report is the prospect of market divergence. North America, where the unconventional revolution is in full swing, will enjoy the benefits of low gas prices. At the same time, in Europe and in parts of Asia will continue to import from high-cost projects, stunting the growth of gas demand - especially in the face of stiff competition from coal. Again, climate change mitigation would be the loser.

Thank you for your attention.