• Ladies and gentlemen, thank you.

• Let me take just a few minutes to comment on the unconventional oil and gas revolutions that are sweeping energy markets.

• A look at the data makes it clear that the European Union is – and is set to remain – a major global player in energy markets. That is thanks to its role as a technology leader, but also as a massive importer, particularly for fossil fuels.

• The EU is the largest import market for natural gas, and will soon become the largest importer of oil.

• To maintain energy security, Europe will continue to have to focus on issues such as
  • the management of supplier relationships,
  • enabling investment in critical infrastructure,
  • achieving diversification of supply,
  • and preparing adequately for potential supply disruptions.

• Unconventional resources can be an important part of the solution. But if Europe is to avoid missing out on the unconventional revolution, it will need to focus on gaining public support and getting regulation right.
The global energy map is changing, and that will not only affect energy economics and pricing.

There is much talk about the “reindustralisation” of the United States as a result of the unconventional gas and oil booms.

But for most European consumers, energy prices have remained stubbornly high, acting as a brake on economic recovery.

Also, we continue to see persistent symptoms of an unsustainable energy system.

That means that we are all facing critical choices in reconciling energy, environmental & economic objectives.
• But let’s look at those unconventional revolutions, and what they mean.

• In the United States, a combination of horizontal drilling and hydraulic fracturing is unlocking massive amounts of resources.

• Conventional oil and gas output has long been in decline in the US, but that is more than compensated by a surge in unconventional oil and gas that we see extending well into the 2020s.

• With our current knowledge of the resource base, we don’t expect the growth in Light Tight Oil to be as large or as sustained as the growth in production of shale gas…

  • But light tight oil will help to ease global oil markets over the medium term – a welcome development following years of market tightness.

  • Already we have seen some easing of prices, and light-tight oil is a contributor.

  • And our projections show the United States becoming the largest global producer of both oil and gas by the end of this decade - a development that was all but unthinkable a few years ago.
• When it comes to natural gas, that has helped to drive significant regional price differentials.

• For the moment there are three major regional markets – America, Europe and Asia-Pacific – and the very large price variations between them affects competitiveness.

• What we anticipate is that – over the coming decades – the connections between these markets will grow.

• As unconventional gas grows and as the terms of international gas trade evolve and become more flexible, we anticipate that this will put continued pressure on conventional gas suppliers and on traditional oil-linked pricing mechanisms for gas.

• The development of an Asian gas trading hub, for example, could markedly improve the region’s competitiveness.
• The development of Europe’s sizeable resources of unconventional gas could play a role in bolstering and diversifying sources of supply. But Europe will need to establish and maintain social acceptance through transparency and good regulation.

• The industry will need to work on development techniques that minimalise land use impact due to more difficult land access. Governments and industry needs to work together to develop the cost efficient service capability that has been key to the US success. This will take time, and speaking frankly, is unlikely to mirror North America.

• Mobilizing Europe’s unconventional resources would also put pressure on conventional gas suppliers – a necessary step lest Europe’s rising gas imports come at too high a cost to maintain competitiveness.

• Already the advances we see in European gas market integration are improving pricing mechanisms, but while that hard work must be applauded, the work is not finished.
• In terms of competitiveness, disparities in gas prices are not the only issue – in fact they are largely important because of how they impact power.

• And there are considerable differences in electricity prices between regions. The highest prices persist in the European Union and Japan, well above those in the United States and China.

• That is due to higher fuel costs, higher capital costs, and renewables subsidy costs that are passed to consumers through the electricity price. Indeed, we expect that by 2020, renewables subsidies add 15% to residential electricity prices in the European Union.

• And looking forward, electricity prices are expected to increase across the world, by 15% on average, as those costs rise.
• There are clear prospects for natural gas to potentially enter a golden age, and unconventional oil will help to ease a tight global market.

• But the policy choices are tough, and Europe will need to confront those choices if it is to fully take advantage of these unconventional revolutions. For the moment, our projections for unconventional gas in Europe are simply not optimistic – and that is only partly geological.

• Public acceptance will require abiding by “golden rules” for responsible production. And issues like water management must be closely followed.

• This is the key reason why the IEA has set up a high level Unconventional Gas Forum, in line with the G8 conclusions at Camp David, that strives to foster the adoption of the IEA’s “golden rules”.

- Factors on both the supply & demand side pushing gas towards a higher share in the global energy mix
- Changing patterns gas production & use have profound implications for global gas trade, pricing & economic competitiveness
- Light, tight oil is helping to ease global markets
- Improperly addressed, social & environmental concerns could hold back the unconventional oil and gas revolutions
- The IEA’s “Golden Rules” and “High-level Forum” can help
• The technology and know-how exist to apply those rules in a way that meets social and environmental challenges – and we calculate that the costs of sound oversight and the adoption of the highest standards would only raise the price of gas by about 7%.

• That represents a win for European sustainability, a win for the gas industry, a win for consumers, and a win for European competitiveness.

• Natural gas is not a panacea for climate change, but it can help while also maintaining that competitiveness. And light-tight oil is similarly providing much-needed breathing room in the oil market. For Europe to benefit, particularly in terms of developing its own gas resources, it must foster public confidence underpinned by robust regulatory frameworks and exemplary industry performance.

• Thank you.