

<u>CERA Week Global Gas Plenary,</u> Sam Laidlaw, CEO Centrica - 5 March 2014

Thank you. It is a great pleasure to be back here in Houston, especially for CERA Week which is the pre-eminent global gathering for our industry and this year focuses the big issues of changing markets, technologies and geopolitics.

Much has changed since I was here 2 years ago. Here in the US - whilst the Shale Gale continues and gas production has increased - there are now also real prospects of US gas exports, and talk of a gas glut has receded. Globally, gas demand remains strong, the Japanese have learnt to live with less nuclear, China is facing increasing air quality issues and Latin America is becoming a significant LNG importer.

On the supply side, new developments in Australia and new basins in East Africa are competing for markets.

For our own company Centrica, Houston has become an even more important focus. Last year, the headquarters of our North American business, Direct Energy, completed its relocation here. This move is symbolic of the way Direct Energy is growing and evolving in the North American market.

At its heart are the customers we supply with energy and services. This year, Direct Energy – with its six million residential customer relationships and fast growing B2B business – will sell more gas and electricity here in North America than we do in Britain.

But Direct Energy, like the Centrica Group as a whole, is more than simply a consumer facing business. We are a fully integrated international energy group with activities across the energy chain - from gas exploration and production, to power generation, LNG, trading and storage.

Over the past twelve months we have refreshed our strategy to focus our activities along the gas value chain. And it is here in North America that we have really demonstrated this new strategy in practice.

In early 2013, along with our Qatari investment partners, we completed the acquisition of a package of Canadian gas assets from Suncor which substantially increased our reserve base in North America.

Last year we also bought the energy marketing business of Hess Corporation for 1 billion dollars. This makes us the largest Commercial & Industrial gas supplier on the East Coast of the US. It also allows us to aggregate gas supply from Marcellus producers and others, providing advantaged supply - with storage and transport capacity - to commercial customers in the North East.



But perhaps the most significant long term development for Centrica last year happened along the coast from here, just across the State line in Louisiana. We signed a 20-year deal with Cheniere to export Liquefied Natural Gas from the Sabine Pass facility, with the first cargo (subject to permits) due to be shipped in September 2018.

This is not just a landmark deal for us. Sabine Pass marks a key shift in the global energy market as supplies of North American shale gas begin to flow around the world. I know that Chris will have much more to say about LNG in his presentation.

Yet at the same time that things have moved on positively here in the US over the last two years, the European energy market has evolved too, but in a much more challenging way.

The main underlying challenge has been and remains an economic one, with the Eurozone still struggling to emerge from its debt crisis. This means that growth in many European countries is flat or falling, and so is demand for gas. Even in the United Kingdom, where economic growth is rebounding sharply this year and 80 per cent of homes are heated by gas, energy efficiency is reducing residential gas demand by 3 to 4% every year. So, in looking at the future prospects for gas demand, much depends on the power market.

In the European power market however, the objectives of affordability and decarbonisation have become increasingly incompatible.

Affordability and competitiveness are now the most pressing concerns for households and businesses still facing tough economic conditions. As a result, the consensus over energy policy is breaking down.

Here there are three recent trends which I would like to highlight. The first is the change in sentiment towards renewable energy.

Renewables are proving to be more expensive than we thought. In offshore wind for example, an area where the UK leads the world, costs have not reduced over time as we might have hoped as the technology matures. In fact, as projects move into deeper waters further from the grid, the subsidies required are even greater than they were five years ago.

In Germany, the rapid expansion of renewables capacity is having a profound effect on energy costs. Germany is already committed to an additional 185 billion Euros in renewable support costs over the next two decades. The cost of renewables is pushing up prices for residential customers and damaging the country's international competitiveness.

The second emerging trend over the past two years has been increasing Government intervention in energy markets and shifts in policy. In Spain, France and Germany we have seen political interventions that have contributed to a reduction in value of Europe's utilities by 500 billion Euros in five years.



In the UK, until recently, there was consensus that liberalised markets offered the best solution and we were seen as a safe haven for investors. But the recent threat of an energy price freeze from the opposition Labour Party, which could win power in next year's election, has changed all that.

We could also be subject to a long drawn out Competition Inquiry and - in a world where we need to compete for gas in a global market place - there is also blithe talk of breaking up further an already fragmented industry. Political uncertainty is the enemy of investment. As a result, investment in new UK generating capacity has virtually ground to a halt and, unlike the rest of Europe, reserve margins are becoming uncomfortably tight.

The third trend is that consumers increasingly want to have more control over their energy use. It is a natural reaction to rising costs. Energy efficiency is the one solution that reconciles all parts of the three-way equation of energy security, affordability and decarbonisation. The good news is that technology is evolving to meet this demand. Centrica is at the forefront of this revolution and I'll expand on this later.

So much for recent European trends. But what does the future hold? Well, unlike the US where indigenous resources are abundant, it is vital that we don't forget about security of supply. In the end, everything hinges on this. Security of supply is in danger of becoming the "forgotten priority" of European energy policy.

Events in Ukraine over the past few days have given us a sharp reminder of where our priorities should lie. Fortunately, the work that has been done in recent years to diversify and strengthen European gas supplies – including the long term agreements that we at Centrica have struck with the likes of Norway and Qatar - means that the impact on the market has so far been limited and that we are less exposed to gas shortages or price spikes than we were.

But no country or company controls global events or markets, and domestic energy policies which do not acknowledge these international realities are fundamentally flawed.

In the UK, security of supply needs to be addressed with a new sense of urgency. An estimated 3.7 Gigawatts of coal-fired generating capacity will be shut down by the end of next year as a result of European directives to curb emissions. Our reserve margin is forecast to shrink to a slim 4 per cent, the tightest level recorded, increasing the risk of power cuts. But no material new capacity is being built.

In primary energy, the UK's production of gas is falling rapidly. North Sea oil and gas output has fallen by 38% over the last 3 years. By 2020 we will be reliant on imports to meet up to 70% of the country's gas needs. So, when it comes to security of supply, there is a pressing need for solutions.



The good news for Europe is the diversity of supplies it already enjoys - by pipeline from Norway, Russia and North Africa; and by LNG from Qatar, and West and North Africa. We need to diversify these sources of gas further, and the agreement with Cheniere, which could bring US shale gas to Europe for the first time, points the way to the future.

Although European conventional gas production is declining, the promise of European shale gas should not be written off, despite a slow start and opposition in some countries.

In the North of England, Centrica has taken a stake in the Bowland shale licence and appraisal drilling will get under way this year. Over time, shale gas has the potential to make a significant contribution to the UK's future energy mix. But as yet, that potential remains unproven and many challenges must be addressed.

Europe faces different conditions to the United States in terms of geology, ownership of the mineral rights, population density, planning laws and the lack of a well-developed supply chain. Local community issues will need to be handled sensitively if the industry is to be successful.

But much of Europe is surrounded by gas and it is difficult to see a future where gas does not have a leading role to play. Given the renewed focus on affordability and international competitiveness, it is also hard to believe that Europe will not seek to emulate America's shale success.

In European power generation too, gas will have a vital part to play in providing back up for intermittent renewables. However, new investment will need a support mechanism, either through capacity payments or a very strong carbon price.

But as I look to the future more generally, the biggest influence on our industry will be the need to change the way we think about energy itself.

Energy is evolving from a pure commodity to an enabler of "smarter living". Driven by concerns about affordability and aided by new technology, consumers are taking control of their energy use in ways we have not seen before.

Smart meters are the catalyst for this change. They not only allow instant switching, accurate billing, and real time monitoring of energy use. They are spawning a whole host of innovative new products.

Here in the US, we have introduced an Energy Mobile App which shows customers their consumption, enables them to launch a smart thermostat application, or to locate one of our 4,000 service technicians if their A/C or furnace is not working. And building on that, we are now launching programmes with Honeywell, OPower and Nest that enable us to analyse smart meter data and billing data for all customers, and to offer personalized tips directly to their App. Customers are being put in control. And at scale demand management can make a real difference to the reserve margins that the system operator requires. This feels like a win-win.



In the UK, we have launched Hive Active Heating as the first of a suite of smart products from British Gas. It lets people control their heating and hot water remotely from a smartphone, tablet, SMS or via a website.

What's really important about this development is what customers are telling us about it. They are saving up to £150, or \$250, a year. They are interacting with the product every day, and they like it. It is transforming their engagement with energy use. For the first time they are tailoring the energy in their homes to their busy lives.

It is commonly thought that energy is not a differentiated product, but that gas is gas and power is power. And in regulated markets energy suppliers have largely delivered the same thing to homes or businesses.

Well, I think that the old energy supplier model is dead. Technology and innovation are providing choice and, in the future, we will have to deliver products which are tailored to our customers' individual needs.

They will determine the nature of those products. What they use, when they use it, where they use it, where they control it from; with instant switching, constant visibility, added services, smart appliances and micro-generation. They will be in control.

Can energy companies respond and meet customer needs around how they use and control their energy? We think we can. Securing supplies is vital. But winning in the market place through innovation is equally the key to long term success.

Thank you for listening and I look forward to taking questions in the panel discussion.