

**Final  
Chief Executive's opening remarks**

**BP Energy Outlook 2035 – January 2014**

Hello everyone, and thank you for being with us today – in person and online.

This is just the fourth edition of the Energy Outlook we have published.

It's a great piece of work by our Economics team led by Christof Rühl. And it is clearly generating a lot of interest around the world.

I believe we have people joining us online right around the globe – so welcome.

Perhaps the first thing to say is we've got a slightly new name this year.

It's now the BP Energy Outlook 2035 – as opposed to 2030.

We decided we needed to extend our gaze out a bit further.

It's important to give the crystal ball a regular shake.

You may think things don't change much year-on-year in the energy business. But the past decade has shown that's not the case.

The US shale boom, for example, wasn't really on the radar 10 years ago.

Now it means the US is weaning itself off imported energy – with profound global implications.

Hence the value of an annual outlook. And the insight it brings for our planning.

## **Overview**

By pushing the horizon out to 2035 we're seeing some really interesting new angles on where energy demand is going.

The last two decades saw growth in energy demand of over 50 per cent.

Over the next two, out to 2035, it will be about 41 per cent.

Still growing – but a bit less strongly.

Nearly all of that growth is accounted for by emerging economies – China and India particularly.

And what we can now see more clearly is that we are part way through a big hump in energy demand – largely created by the growth of industry in China.

Detail aside, the projection says demand will increase substantially for the foreseeable future.

That leads us to three big questions – each of which we address in the Outlook.

Number One – Can there be enough energy to meet growing demand?

Number Two – Can we meet demand reliably?

Number Three – What are the consequences of meeting demand?

In other words, is the supply sufficient, secure and sustainable?

And in the briefest of terms, the Outlook says ‘yes’ to Number One, ‘maybe’ to Number Two, and ‘not at the moment’ to Number Three, based on accepted climate science – although the potential direction of travel is becoming clear.

Some important detail is needed on each of those. Most of which I’ll leave to Christof in a moment.

## **Sufficiency**

But looking briefly at sufficiency first, the picture in terms of resources in the ground is good one. It’s very different to past concerns about supply peaking. The theory of peak oil seems to have – well – peaked.

New technologies mean we can get more from existing sources.

And multiple new sources are opening up, notably shale gas, tight oil and deepwater fields.

We had a great 2013 ourselves, with seven new discoveries in deep water.

So the energy resources are there.

That's not to say there aren't plenty of challenges involved in getting them produced and delivered affordably – but we are confident that production will be able to keep pace, given the trends in technology, investment and policy.

## **Security**

Our Outlook predicts challenges ahead as well for energy security – our industry carries bigger risks than most.

But we do see grounds for optimism.

Many countries are opening up their domestic resources – the US particularly from shale, but also India and places like Oman, where we signed a major agreement in December to develop the Khazzan tight gas field.

This is all about turning on more taps. And the more taps running the less danger of the energy supply being turned off.

From the data captured by the Outlook, we can anticipate how this diversification will continue to develop – with the world moving for the first time – following the eras of wood, coal and oil - to a state where no single fuel is dominant.

Gas and oil from shale will be a big influence.

As the US becomes increasingly self-sufficient in energy, so Asia is going to become the world's big importer, followed by Europe.

This need not be a cause for concern if the market is allowed to do its work, shifting things around, with new supply chains opening up to these big consuming regions.

Piping Russian gas to China in big volumes is already being discussed and planned.

And last month we announced a massive project for BP and our partners to supply gas to Europe through what we call the 'Southern Corridor.'

We'll be bringing the gas from Shah Deniz, a giant field in the Caspian Sea off Azerbaijan.

So overall, we are optimistic about prospects for energy security. Although of course disruptions will still occur.

Those disruptions can have human consequences - and here in BP we are reminded of the tragic events at *In Amenas* exactly a year ago tomorrow, when four of our employees and 36 colleagues from contractor companies were murdered.

Our thoughts remain with their loved ones. And we will be remembering them with a moment of silence across BP tomorrow.

## **Sustainability**

So returning to those three big questions - so far we have one 'yes' and one 'maybe.'

The third question – the carbon challenge – is the one where steps are needed to change the forecast.

Carbon emissions are currently projected to rise – by 29% by 2035 we estimate in the Outlook.

A consequence of the 41% rise in energy demand.

But a projection doesn't have to come to pass.

It wasn't projected five years ago that 2012 emissions in the US would be below 1994 levels. Hands up if you predicted that one.

That's been down to two big factors – energy efficiency improving rapidly and the shale boom allowing cheaper, cleaner gas to displace coal in US power stations.

And it contrasts with an upturn in emissions in 2012 in the UK and Germany – a consequence of that displaced US coal becoming a cheaper alternative to gas in Europe – despite the many green incentives there.

The obvious conclusion to draw from this is that a profound reduction in emissions is possible. And that the composition of the fuel mix matters – and deserves more attention.

This can happen spontaneously through competition and the power of the market, as in the US. But to be sure it will work – we believe – you need carbon pricing. Universally accepted carbon pricing.

Otherwise, you risk playing energy *Whac-a-Mole* – knocking emissions down in one country with low carbon gas only to see them pop up in another with displaced coal.

That's for the longer term. Meanwhile we see two shorter term priorities.

One is maximising energy efficiency – especially in developing economies where most of the growth is going to come from.

The other is encouraging the switch from coal to gas.

In 2035, we project that gas and coal will account for 54% of global energy demand. While renewables will grow rapidly, their share will reach just 7%.

The sheer numbers tell us that there is a larger—and more cost effective—prize to be won in shifting from coal to gas in power generation.

Tempted as I am to say more, Christof has a series of insights on this in a moment.

My summary is that there are plenty of questions raised by the data and the analysis. And plenty of challenges as well.

But there are also answers, potential solutions, and plenty of food for thought.

The big questions it addresses are all bigger than BP alone.

Which is why we publish the Outlook, why we share it, and why we are happy to answer any questions you may have about it.

Before that though, over to you Christof...

**ENDS** (~1,300 words/~10 mins)