



Competitiveness, Carbon, Choice - embracing change

Bob Dudley, group chief executive





Good morning everyone. Thank you for the invitation.

It's a pleasure to be here for one of our industries great global gatherings.

We meet here in London at a very interesting and challenging time for the energy industry - and for the UK as well, of course.

I see the conference theme talks of 'strategies for survival'.

And some days it can feel that way.

On one hand we have seen the price of oil plummet in the last two years and it remains stubbornly low.

On the other hand, the emerging economies continue to grow. Growth in many older economies may have stalled, but growth is still projected to be above 3% per year at a global level until mid-century.

And the global population is still growing.

When the so-called baby-boomers were born, there were fewer than three billion people in the world. Today there are more than seven billion and the UN estimates that the number will grow to 11 billion by the end of the century.

I believe those longer wavelength trends will prove stronger than the forces currently keeping energy prices low.

I don't think demand will fall off a cliff. The issue is one of over-supply.

Our industry has been impacted by our own success, particularly in the shape of the shale revolution.

But long-term demand will keep growing - up by about a third by 2035 on the most likely path.

This is the continuation of growth that is transforming lives. More than half of the increase in global energy consumption in the next few decades will come from power generation, and more than a third of that growth



will be in places where a billion people currently lack adequate access to electricity. In places such as India and Africa.

But it is growth that comes at a time when we are back to a world of volatile and often low oil and gas prices.

And at the same time, we have to help address climate change and make the transition to a lower carbon economy.

So I believe this situation presents us with three challenges. Forgive me if you have heard this in Istanbul last week, but I think of them simply as three 'C's:

- The challenge of competitiveness
- The challenge of carbon; and
- The challenge of choice.

Let me say a few words about each of them.

The challenge of competitiveness arises because we live in an age of plenty, primarily driven by shale.

Demand may be strong, but supply is even stronger, with half a century's worth of oil and gas in country reserves alone.

That is what has led to sustained lower prices and a new and necessary emphasis on competitiveness.

The industry is undergoing profound change - but it is change for the better.

At \$100 oil, industry costs drifted up and all kinds of projects looked attractive.

At today's prices, we have to maximize efficiency and minimise costs. We have to focus on the highest quality projects and develop them with great capital discipline.



Every dollar we have is scarce and we must invest it wisely and carefully. The world is now hyper competitive for capital.

This is driving a lot of innovation and reform in our industry. And there will be a good future for the most competitive businesses.

Those will be businesses that stand the test of time and are resilient to price cycles.

They will be businesses that can adapt to the relentless increase in clock speed, that are agile, and take opportunities to improve and strengthen safety and reliability.

So, what does this mean in practical terms?

It means working as an industry to standardise what we do. To manage procurement specifications more rigorously - making things safer, simpler and cheaper.

It means developing new markets and new partnerships to distribute energy more economically and more widely.

It means finding new ways of working. One example in BP's world is our recent agreement with Det Norske in Norway.

We have combined the strengths of both of our companies in a new business called Aker BP.

This will bring together Det Norske's streamlined operating model with BP's technical skills, global experience and local offshore knowledge.

Today's world also requires us to be very customer focused and offer overall energy solutions to partners and governments. That could mean integrated offers that are across Upstream and Downstream.

We also need to recognise the way consumer preferences are changing. More and more people want to buy from companies that demonstrate good social and environmental stewardship. That's understandable.

Today's circumstances are proving the truth of the old saying that "necessity is the mother of invention". And that's quite literally true in terms of technological innovation.

This tough economic environment is coming at the same time as extraordinary technological change - a new Industrial Revolution - and we must embrace it.

We have spent a century devising and using our own industry's oil and gas technologies, but now we can harness a wave of new technologies that apply across sectors - digital technology, big data, artificial intelligence, robotics, virtual reality and materials science.

Our industry is playing catch-up, but catching up fast.

Technology is also relevant to the second challenge - the carbon challenge.

As energy companies, we have a major part to play in the transition to a lower carbon economy.

We have an important role in providing heat, light and mobility for a growing and changing world.

But at the same time, we must help to bend the curve of greenhouse gas emissions down.

This issue is bigger than any single business or any single sector.

It requires action on many fronts, and by many parties. Governments have a major part to play and it's very good to see last year's Paris Agreement will soon formally enter into force.

And to see this weekend's agreement in Kigali on HFC's.

We should recognise the Paris Agreement is high level. We still need to see policies and actions that will help move us towards its aims.

I believe that the most important step governments can take to put that agreement into action is to introduce more widespread carbon pricing to incentivise low carbon energy and energy efficiency.

The industry can also act in several ways, all of which can be supported by new technology.

Most certainly, we can act to reduce the emissions from our operations.

We can provide products - such as advanced fuels and lubricants - that help customers reduce emissions.

We can invest in natural gas as a substitute for coal in power and industry, and as a back-up for intermittent resources in power

We can invest in carbon capture, use and storage to support the important role that gas has to play.

And we can invest in renewable energy and reduce the carbon intensity of the energy we supply.

We can also work together, as we do in the Oil & Gas Climate Initiative - or OGCI - which came into being at the World Economic Forum in Davos. It brings together ten national and international companies that collectively produce over 20% of the world's oil and gas.

Let's just focus on gas for a moment, as it's the lowest carbon of the three fuels that provide the bulk of the world's energy.

It burns with about half the carbon of coal.

However, to fully reap the benefits, it's important to reduce methane emissions from natural gas production.

Every step we take to reduce methane emissions increases the advantages of natural gas over coal and helps to realise its potential to limit carbon emissions at scale while helping to meet demand in an affordable way.



And we can make progress on this much faster by working together to share what we learn and improve operating practices. This is why BP is also an active participant another important collaboration, the Oil and Gas Methane Partnership.

And we would encourage other companies to join. You will hear more about this partnership from my colleagues, Eldar Saetre of Statoil and Patrick Poyanné of Total later during this conference.

Finally comes the challenge of choice - the third C.

As an industry we need to make tough choices to remain competitive while also participating in the transition to a low carbon economy.

The scale of energy demand means that the world will continue to need energy from all sources, but the balance of the energy mix will need to change.

For the next few decades, oil and gas can remain the dominant form of energy powering the global expansion, and we'll see less coal and more gas.

Last year gas use grew 1.7% while coal declined by 1.8% - the largest fall on record.

While gas provides an increasing share of power, oil has continuing role as a transport fuel, for its huge advantages, of energy density, ease of transport and use, and the compatibility with existing infrastructure.

Renewables are the fastest growing source of energy at nearly 7% a year - but are only expected to reach 9% of the fuel mix by 2035 as they are growing from a low base.

That future is reflected in the choices we have made in BP.

We're about 50% natural gas right now and heading towards 60% by the end of the decade as new projects come on stream.



That includes projects in Trinidad & Tobago, Oman, Egypt and the massive Shah Deniz 2 project in Azerbaijan from which gas will be piped 3,500 kilometres. From Azerbaijan through Georgia, Turkey, Greece, Albania and Bulgaria to as far away as Italy via the Southern Gas Corridor system.

We are also continuing to develop our considerable interests in wind, biofuels and venturing, which give us more options for the future.

Let me conclude with a few words that are not so much about what we do as how we do it and the qualities we need to survive and succeed.

I think we face two particular issues - an issue of trust, and one of talent.

Trust is not just an issue for oil and gas leaders.

There is a lack of trust across society, in corporations, but also in governments, and big institutions such as the EU, the UN, even in sporting bodies.

In BP we have had our own experience with this after the tragic Deepwater Horizon accident in 2010. We retained the support of important partners - though it was touch and go for a while - but we have had to rebuild trust.

The lesson for us has been that you can rebuild trust, but it takes time.

Each of us in industry can help with our industries if we behave with integrity, if we listen, if we treat people with respect and if we act as good ambassadors for our companies.

If people in business and public life behave in that way, then gradually we can establish a new contract between customer and supplier, between shareholder and institution, between voter and government - and, very importantly, between our companies and those we hope to recruit.

A great industry needs great people.

We need people who are curious, people who can challenge the status quo and come up with new solutions.



But young people have their own expectations. A recent McKinsey article underlined the fact that the millennial generation don't just want career growth; they also expect to make a positive contribution to society.

14% of these millennials say they would not work in the oil and gas industry today because of its negative image - the highest percentage in any industry.

So, we need to do a better job of talking about the prosperity we bring to countries, about the community development projects we deliver, about the work we are leading to address carbon emissions, and about our commitment to the energy transition.

We can be proud of what we do. Our industry is a great industry. We should not apologise for what we do.

It has fuelled an era of unprecedented growth. It has helped to raise living standards and lift people out of poverty.

Today we face new challenges - the challenges of competitiveness, of carbon and of choice.

But I believe that we will make the right choices and meet those challenges.

We will attract great talent. We will play our part in the journey to a low carbon economy. We will win back trust.

We will do more than survive. We will build an industry that is sustainable - economically and environmentally.

I am confident we have the ability, in this hall and around the world.

And I hope this conference will act as an inspiration to all of us to renew our commitment to building that 21st century energy industry.

So have a great conference. Have a great time in London - and thank you very much.