



Lubricating the future of energy through trade

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Introduction

It is wonderful to be here at this great Livery Company of London.

Livery Companies are of course renowned for their expertise, knowledge and their commitment to advance common good.

But the theory goes that they are also responsible for introducing the phrase: "at sixes and sevens."

You'd be forgiven for thinking this is in reference to the state of today's politics.

But its origin goes back much further – to the 14th century to be precise. And it is regarding a dispute between Merchant Taylors and the Skinners over Livery status precedence.

To settle any potential disagreements, they exchange sixth and seventh place each year.

This gesture is fitting of this great Livery Company's mantra to 'commerce and honest friendship with all'.

But rather the 14th century, World Traders began life far later, in the 1980s and the dawn of globalisation.

Since then GDP globally has increased four times over.

And consumption of energy has increased by 80%.

These developments have gone hand-in-hand with improved living standards around the world.

Because over this period:

Extreme poverty has gone down by half.

Child mortality rates are down – again by half.

And life expectancy increased by around 7 years, on average.

This shows the undeniable link between the energy and human progress.

And there is no question in my mind about the vital role trading has had in lubricating this prosperity.

By taking the energy produced by businesses like BP and placing it in places where it is needed, trading has helped open the door to a world of opportunity for billions of people around the globe.

Because where energy flows progress tends to grow.

But together we have more to do.

Indeed, we see that 80% of the global population live in countries where low energy consumption is hindering their well-being.

This is what the United Nation's Human Development Index points out.

It shows that energy consumption up to around 100 Gigajoules per head are associated with substantial increases in human development and well-being.

Countries like India are at just 24 Gigajoules per head.

So, it is well below the UN's threshold.

The case therefore for more energy is compelling, but it is complicated by the seemingly divergent nature of the two big trends dominating energy over the next 20 years.

They are energy demand and carbon emissions.

With that allow me today to outline in more detail:

- What these trends look like.
- How the future of energy will need to be different.
- And the increasing role for trade in helping shape this future.

Trends

The first trend is with global demand for energy, which is projected to go up by around a third over the next couple of decades, on current trends.

That is like adding another China and India to global energy demand.

This is pertinent given that nearly all demand is coming from emerging markets, with China, India and Other Asia together accounting for two thirds of the increase alone.

And remember, these are countries where populations below that UN gigajoule threshold can be found.

It also shows a remarkable shift from just 30 years ago, when two thirds of energy demand came from non-OECD countries.

By 2040 that trend is almost exactly reversed.

The second big trend relates to emissions, which on current trends are projected to creep up by 7% globally over the next 20 years.

This is better than the 12% increase we saw in just 10 years up to 2018.

And far better than the 33% increase in the decade before that.

But any rise in emissions is not good enough.

What is particularly disappointing about this is that the world was getting to place where emissions were beginning to plateau.

But after creeping up in 2017, they went up again last year by 2% - the biggest rise for seven years.

What this tells us is that the world is not yet on a sustainable path.

If anything, we are moving further away from being on it.

This all presents a dual challenge.

On one hand we need to meet the world's increasing energy needs to progress the wellbeing of billions more people.

And on the other we have to find a way to provide energy with fewer GHG emissions to help combat climate change.

So how do we converge what appear to be divergent trends?

The future of energy

This is where the future of energy will need to be different.

One where trade helps lubricate a more dynamic, diverse and connected local, regional and global energy market.

What does this mean for oil, a fuel that dawned a new age for energy?

And one which followed wood and then the coal that powered the Industrial Revolution to bring new opportunities in the 20th century.

And thanks to energy trading, that opportunity was brought to communities right across the world.

Today oil is still going strong.

In fact, last year the US delivered the largest ever annual increases in oil production.

It did the same for gas too. And I'll talk more about gas in a moment.

Behind this extraordinary growth in the US is the remarkable shale revolution, which is having a profound impact on global trade.

Over the next decade demand for oil looks set to increase before plateauing in the 2030s.

At BP we recognise that oil has a role to play so we are focussed on the advantaged barrels.

The ones that are the most economic to produce, and the lowest carbon from an emissions standpoint.

The International Energy Agency – the IEA shows in its sustainable development scenario that the world can still have 70 million barrels of oil per day and be consistent with the goals of the Paris Agreement.

That is on the condition that we do a number of things.

First, the world must ramp up the use of renewables, as BP has, in wind, biofuels and solar.

And we see that renewables are still the fastest growing fuel, with consumption rising at a rate of nearly 15% last year alone.

China led this effort, contributing more growth than the entire OECD.

And renewables accounted for a third of the net increase in power generation.

With renewables the trend is your friend as around three quarters of the increase in energy is likely to be absorbed by power by 2040, as the world continues to electrify.

That is why it is so important to get coal out of electricity, which last year accounted for largest share of power generation at 38%.

To help achieve this we also need to focus on growing gas – the ideal partner for renewables which are intermittent by nature.

Gas when burned for power emits half the emissions of coal, and is highly flexible, reliable and accessible.

So, one way to help meet the dual challenge is to replace coal in the power sector and substitute it with both renewables and natural gas.

In the US, replacing coal with gas in power generation has helped bring emissions down to levels not seen since the 1990s.

Here in the UK we have gone a century better.

Emissions are back to levels not seen since Queen Victoria was on the throne.

The trading of liquefied natural gas has opened up new opportunities for countries who don't have domestic resources or pipeline infrastructure to transport it.

China is a good example, and where BP was selected to help build the country's first LNG import terminal.

That facility, in Dapeng, was part of China's strategy to increase the share of lower carbon fuels in its energy mix.

From there, the drive for cleaner gas has led to the opening of 21 LNG terminals across the country and demand for LNG continues to rise here and elsewhere.

That growth in LNG is a really important trend for the world as it is expected that global volumes could more than double to almost 900 billion cubic metres by 2040.

Again, this shows the value in trade in helping converge two seemingly divergent trends of increased demand and lower emissions.

Meeting the goals of Paris is also conditional on the deployment of CCUS.

CCUS is technologically feasible, but it needs to be made commercially viable.

Alongside this BP's sees a future where hydrogen as a significant part of the fuel mix.

Where a circular economy is established.

And where land carbon and biodiversity projects take carbon out of the air.

Taking the carbon out of hydrocarbons will help meet the Paris climate goals out to 2050, but is a necessary step if the world is to get to net zero carbon emissions in the second half of the century.

Conclusion: shaping the future

This leads me to one last area I wish to discuss with you today.

And that is carbon pricing, the most powerful lever to meeting the dual challenge.

Why?

Because carbon pricing makes energy efficiency more attractive and low carbon solutions more competitive. Allowing offset trading also broadens the carbon market further and makes it even more efficient.

That is why BP has long advocated for a global carbon price.

And has played a role in helping design the world's largest carbon trading market, the EU Emissions Trading Scheme, as well as emissions trading schemes in China.

This is why we must also ensure that markets stay open and not let trade disputes escalate to the detriment of societal goals.

BP's projections indicate that maximizing energy trade flows and avoiding disruption is good for trade and for global economic growth.

Keeping trade open is also good for the environment, for example in enabling China to access the gas that it needs, as per my points about LNG.

So, this is how we at BP see the future of energy.

A world dominated by two trends around demand and emissions – the dual challenge.

A world where the future energy mix will be different.

And helped to be shaped, as ever, by trade, which offers even more opportunities to lubricate the energy that will help to improve the lives of billions of people around the globe.

I look forward to discussing further with you over the course of lunch.

Thank you.