



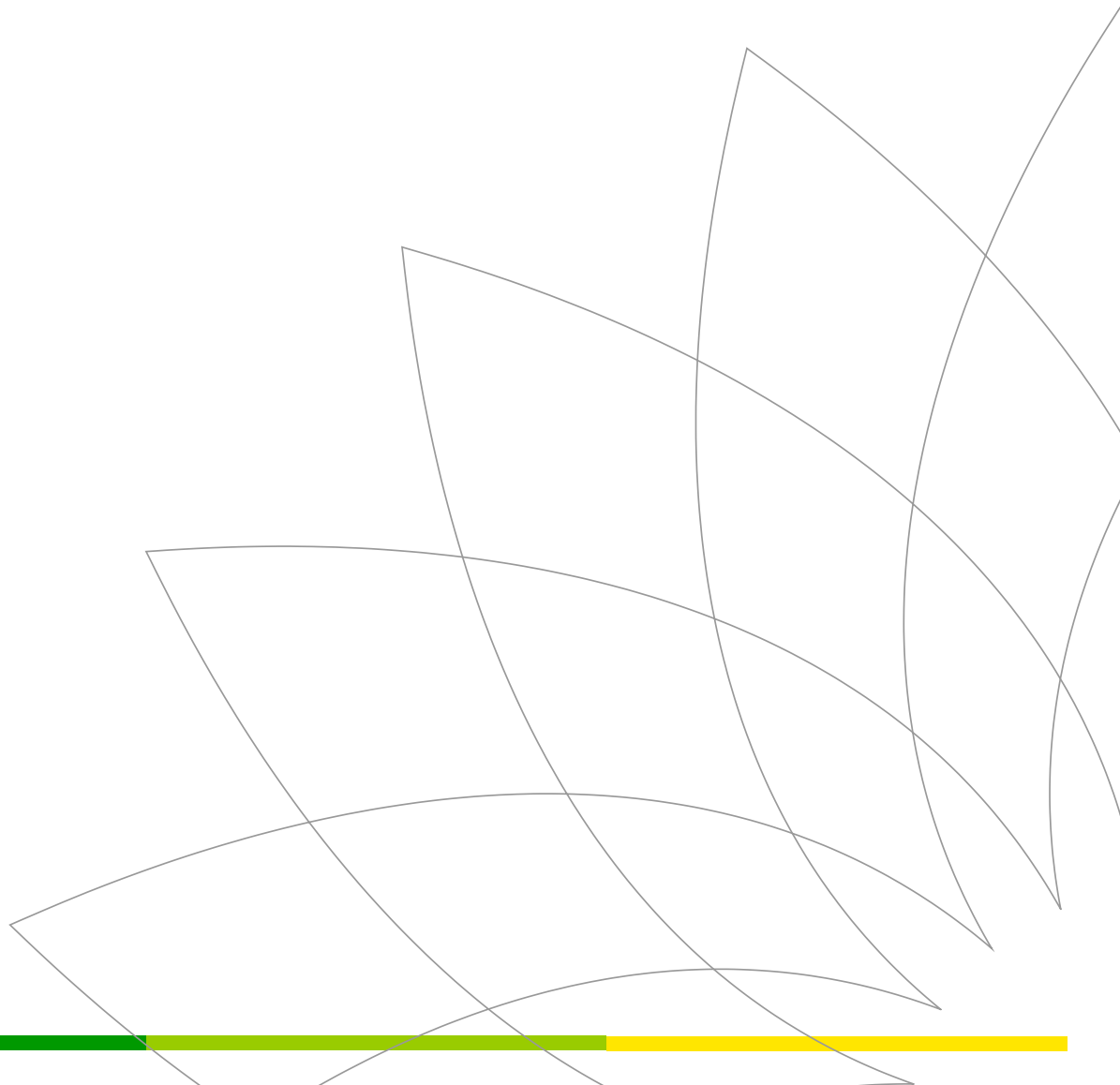
# FT Energy Transition Summit remarks

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Good afternoon.

Thank you for the opportunity to speak today on the energy transition.

I'd like to begin with some reflections on where the energy industry has come from – to see if we can learn from previous energy transitions, particularly here in the developed west where we sometimes take energy for granted - we assume it will always be there at the end of a switch, unless of course you remember the 1970s, power cuts and oil rationing.

If we look back there have been at least two major energy transitions, maybe three if you include the non-OECD growth wave since the 1990s.

The first was from wood to coal in the nineteenth century and ushered in the first major industrial revolution - powering electricity, mass production, assembly lines and economic growth.

The second was from coal to oil, around the Great War and the mobility revolution that followed driven by the internal combustion engine. The versatility of oil enabled people and goods to move around the world like never before.

More recently, natural gas has moved into the fuel mix and China has been a major source of overall energy demand growth.

If we look back, since 1950:

- The world population has more than tripled to 7.6 billion today;
- while those in absolute poverty fell from over 60% of the population to less than 10%.

Energy has been a key enabler, with a six-fold increase in global energy consumption over this period.

We are now entering a third transition towards a lower carbon fuel mix.

By looking back, we see that all of these transitions overlap, they are all incomplete and they don't happen overnight.

What they do show is that human progress in the last 200 years is inextricably linked to energy;

- as a fundamental building block for economic growth,
- moving people out of poverty and driving global prosperity.

So how should we think about the transition we are entering now?

Energy markets are facing a dual challenge:

FIRST, to meet continued energy demand growth.

Over the next 20 years, total energy demand is expected to grow by about a third;

- as 2.5bn people move from low to middle incomes;
- and the world population adds a further 2bn people.

The SECOND challenge is to achieve the Paris goals on climate change;

- reducing greenhouse gas emissions to limit the global temperature increase to well below 2°C above pre-industrial levels.

So how is the world going to deliver this?

We should be optimistic.

- technological progress has enabled the energy industry to meet the enormous challenges of the past, delivering affordable energy at scale;
- and there are many exciting technologies that show huge promise, as we laid out in our Technology Outlook a couple of months ago
- for example, digitally enabled efficiencies have the potential to lower overall net electricity demand by more than 25% by 2050.

But we also need to be pragmatic.

- the challenge for renewables is that they start from a low base and the global energy infrastructure can't be changed overnight;
- but that's OK, because it's not a race to renewables but a race to lower emissions across all types of energy;
- for example, growing natural gas or improving transport fuel efficiency.

In this context, at BP we have set out a clear set of objectives we call the RIC ...

- Reduce emissions in our own operations;
- Improve our products to help customers lower their emissions; and to
- Create new low carbon businesses.

The frame we have laid out has taken the lessons from our past;

- 20 years ago the focus for BP in this space was on alternative energy;
- now it's across all of our businesses.

Let me give you some examples.

We are growing gas in our portfolio while working to limit the impacts of methane;

6 / 7 major projects last year were gas.

We're increasing our oil production, but doing so in more efficient, cleaner and better ways.

We're expanding our existing renewables businesses and looking to create new low carbon businesses through venturing and innovative partnerships;

we re-entered the solar market last year with our Lightsource BP joint venture.

We have also set targets on BP's emissions;

including an overarching target of zero net growth in emissions out to 2025;



and a sustainable reduction in greenhouse gas emissions of 3.5 million tonnes by 2025.

So, we are in action across all of our businesses – and we see tremendous opportunity for BP and its shareholders in the changes and challenges that lie ahead.

What gives us confidence is this next phase is likely to benefit from human ingenuity in many areas across the fuel mix -

from AI and digitisation;

to carbon capture, use and storage;

and smart grids, to name just a few.

Thank you