

Transcript: Energy Transition

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Thanks so much. It's a privilege to be a part of this important briefing. I want to build on what Angela has already said by focusing on a central preoccupation for most people across the UK at the moment, and that is the price of energy. In the last few years, our skyrocketing energy bills have been a major factor driving inflation and the cost of living pressure felt by so many people and businesses.

It is turning into a significant political risk for the energy transition. Unless we ensure that renewable energy and electrification, which are the best route away from fossil fuels, are more affordable for people than the status quo, it's a genuine threat - I would say - to the public mandate for decarbonisation. Thankfully, the evidence is clear that an energy system powered by renewables will indeed be more affordable and more economically secure.

And I want to say a bit more about why that's true on multiple levels and on the political choices that are open to us, to ensure that this is the case in both the short and long term. First of all, zooming out, our dependency on fossil fuels has been responsible for huge economic shocks in the last 50 years.

In fact, around half of the UK's recessions since 1970 have been caused by fossil fuel price shocks. Most recently, while it didn't cause a recession, the spike in wholesale gas prices, and to a lesser extent oil, caused by Russia's full scale invasion of Ukraine, resulted in the Government spending ££64 billion to help households and businesses who would otherwise be overwhelmed.

That is more than the UK's annual defence budget. In addition to that, the extra cost of gas, electricity and fuel for households was another ££60 billion.

What that translates into, in very human terms, are the people who are forced to take shelter in the winter in the designated community warm spaces that they can access because they can't afford to turn on their heating.

According to the UN Fuel Poverty Coalition, there are now more than 12 million households across the UK who are struggling to pay their energy bills. That is where our current energy

mix has gotten us. Even today, gas prices remain double the levels that they were before this crisis began. And given our exceptional dependency on gas, including the fact that it's how we heat more than 80% of our homes across the UK, this has led to an intolerable financial crisis for countless people.

The question, then, is whether or not shifting away from fossil fuels towards increased electrification and renewable energy will change that picture. And again, I want to start here by zooming out. An energy system based on renewables offers countless obvious economic advantages over one that runs on fossil fuels. Most obviously, the input - sun or wind - is free forever, whereas if you buy a barrel of oil, as soon as you burn that you need to buy another one. And the price that you pay for it is determined by a cartel of petrostates or subject to the whim of dictators.

Further, the price of key technologies for a renewables-based power system has steeply declined in recent years, with the cost of electricity from offshore wind dropping more than 50% in the last decade, more than 70% in the case of solar, and the price of battery storage dropping more than 80% in that same period.

Just as importantly, renewables are also vastly more efficient than fossil fuels. A typical petrol car only uses about 25% of the energy in its fuel to actually move its wheels. Most is lost as heat, and the fossil fuel system as a whole wastes about two thirds of the raw energy that goes into it. So, unsurprisingly, it's better not to dig up and burn million year old fossilized remains of plants and animals when renewable energy, which doesn't involve combustion and therefore constant heat loss, is so much more efficient.

The reality, though, as we know, as Angela has also touched on, is that we're now at that point in the transition when we need a whole lot of upfront investment to shift our infrastructure to support clean electricity, whether that's upgrading our grid or switching to heat pumps.

But these are the equivalent of growing pains, not a sign that we should stop what is absolutely the right direction of travel, especially when, as we've heard repeatedly this morning, delaying this transition only risks adding to its costs.

More importantly, the scale of those costs and who bears them are ultimately political choices. For example, other countries have found ways to lower the cost of capital for some of the big investments that we'll need to make, whether that's through the use of central bank tools or their equivalent of our newly established national wealth fund.

As for our household and industrial energy bills, as we saw in yesterday's budget, there are ways of structuring our bills so that they reflect the true cost of the lower costs of renewable power - not that I would necessarily endorse exactly how it was done yesterday.

But my point is that there is no shortage of innovative, credible ideas for doing this in the short term, including breaking the link between gas and electricity prices by taking gas powered stations into public control. Not least, we've known for a long time that one of the fastest ways to bring down bills is by insulating our homes so that they don't leak energy out of our roofs and windows.

And yet we still have some of the drafty, coldest housing stock in Europe. The other huge economic upside to this transition is the potential to create good jobs in the parts of the country that desperately need it most. For example, it's an incontrovertible geological and economic reality that jobs in the North Sea oil and gas industry are now, and have been for a while, in decline.

Even with hundreds of oil and gas licenses issued in the last decade, the jobs supported by that sector have halved. What we now need is a proper plan to ensure that clean energy jobs offer decent conditions, and that they're in the places that they are needed the most. But the good news is whether you're talking about Hull or Aberdeen, many of these places are already connected to our best renewable resources, including the massive amount of offshore wind we have in the North Sea.

And yet it took until this year, a quarter of a century after we switched on our first offshore wind farm in Northumberland, for the Government to publish a comprehensive plan for creating almost a million clean energy jobs. Now, for those jobs to actually materialise, we need that plan to be backed by investment and to support workers and supply chains to pivot to these new industries.

Again, none of this is impossible, and the rewards on the other side are enormous. I understand that it may feel at this point, like getting to an electrified energy system anchored in renewable energy requires too much planning, too much infrastructure, too much investment.

And so I want to end by reminding you that after the discovery of North Sea gas in the 1960s, the British state executed a massive conversion of our energy infrastructure to accommodate natural gas over gas coming from coal.



Over about a decade, we retrofitted or replaced more than 30 million appliances, constructed a vast new transmission network, and rebuilt regional gas distribution. When the opportunity for a vastly superior energy system arose, we grasped it.

Of course, although it was done in a way at the time that was fair for consumers, we all know that the shift away from coal was devastating for miners and for their communities.

This time around, we not only have the opportunity for a better energy system - one that is safer, cleaner, cheaper and more reliable - but we also know how to get to that ambitious goal in a way that is genuinely just for ordinary people.

There is no bigger prize than that. So we can and must seize that opportunity again.

Thank you very much.