Can Fossil Fuels really disappear?

UK Media Focus

When climate change is promoted in the UK, most people think of:-

Or even

These are climate activists who've been reasonably successful at highlighting the problems that the burning of fossil fuels provide, but in terms of solutions, very little is provided or there is a call for a radical change in people's lifestyles - stop eating meat, stop going on holiday, stop buying fast fashion etc.

What there is much less of a focus on is that UK companies across the board have made huge reductions in their use of fossil fuels and this trend is likely to continue.

Coal - the fossilised fossil fuel

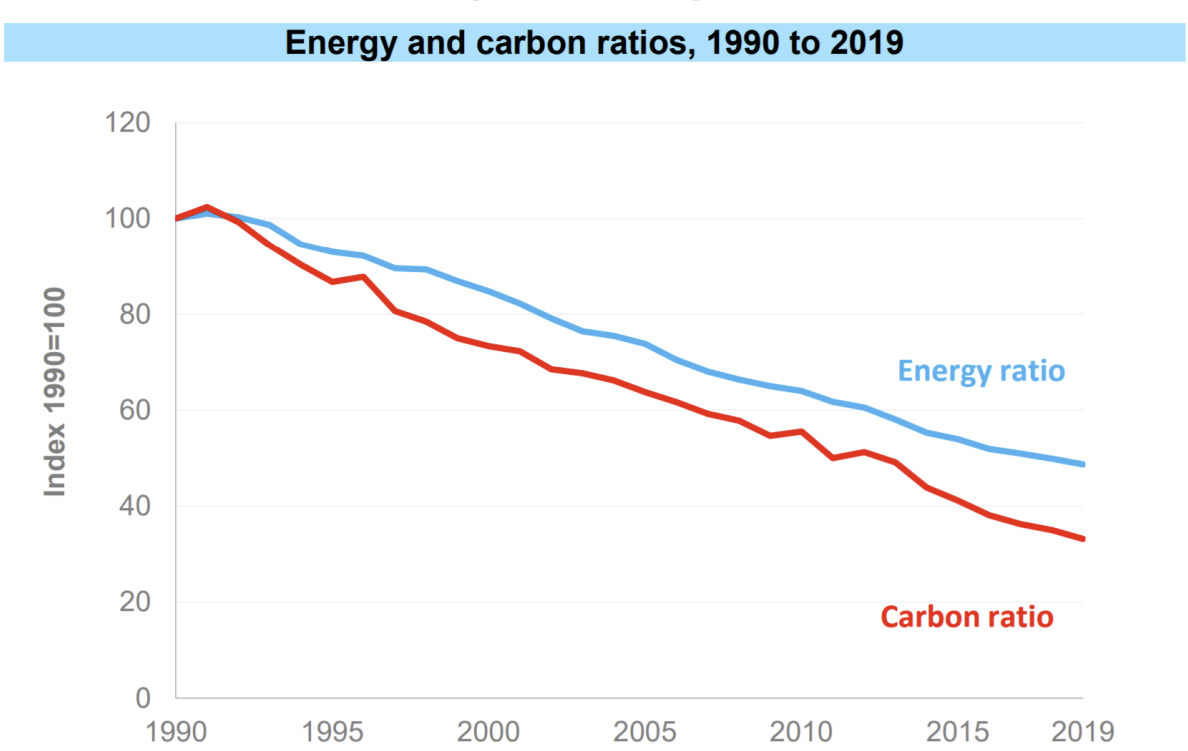
If you think about it, the UK kicked off the industrial revolution using a fossil fuel that is pretty much not used anywhere in the UK now - coal. The UK government announced in February 2020, that Coal will completely disappear as an energy supply by 1 October 2024 at latest. Up until the 1950s, coal was the main form of domestic heating, powered trains as well as industry, so it's amazing how quickly it's disappeared, and does anybody mourn it's loss? The evidence of coal is gradually disappearing even from the landscape. Pits have been closed down, slag heaps grassed over and the effects of smoke on buildings sandblasted away. London's reputation as a city of permanent smog is confined to the history books.

Oil & Gas

Oil & Gas have more than displaced Coal in terms of energy supply, but Oil has rapidly been displaced by renewable energy in terms of electricity supply, already. It's increased use is mainly due to Transport

The energy ratio (consumption divided by GDP) has fallen to less than 50% of 1990 levels. The ratio of carbon has fallen by 2/3. This has been achieved whilst still growing our economy

OVERALL ENERGY

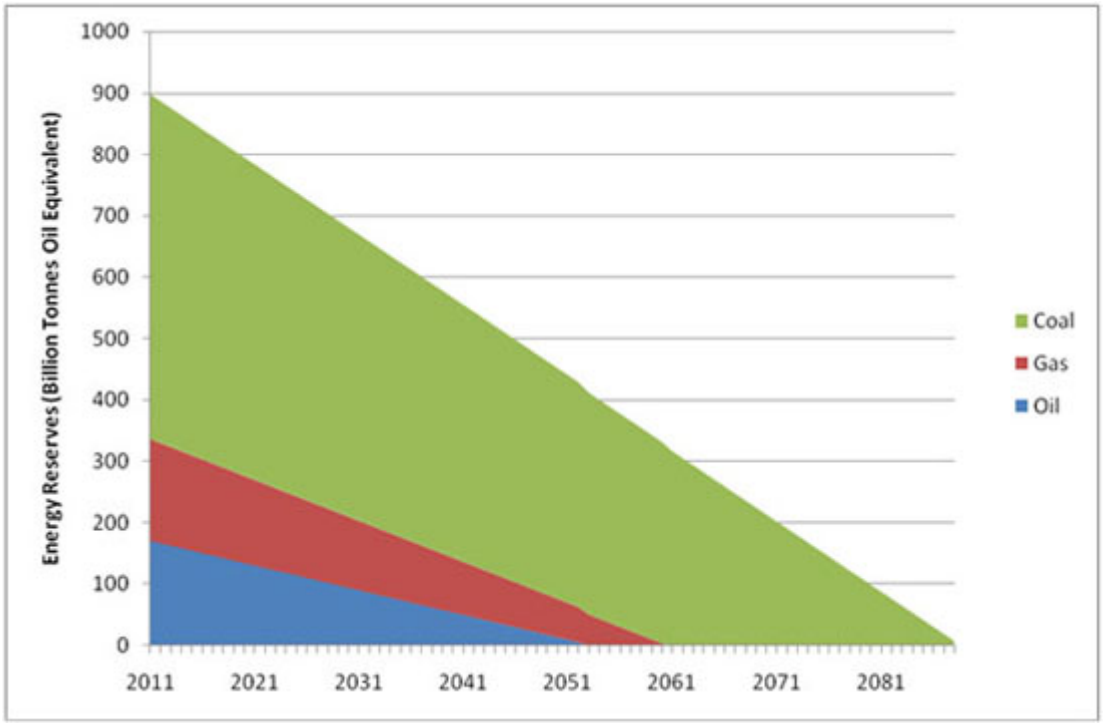


	Index 1990=100				
	1990	**2000**	**2010**	**2018**	**2019**
Primary energy consumption*	100	108.4	96.4	87.5	86.5
Carbon dioxide emissions	100	93.7	83.7	61.4	59.0
GDP	100	127.9	150.7	175.3	177.8
Energy ratio	**100**	**84.7**	**64.0**	**49.9**	**48.6**
Carbon ratio	**100**	**73.3**	**55.5**	**35.0**	**33.2**

* Temperature corrected primary energy consumption.

Can we burn fossil fuels indefinitely?

The answer is no, fossil fuels are created over millions of years from initial decomposition of animal & vegestation and pressure. It's not possible to reproduce this, and identifying and extracting new sources of fossil fuels gets more difficult over time. So even if we set aside all of the environmental arguments for ending fossil fuels, the reality is that we are likely to run out of them within the next 100



Isn't it incredibly expensive to transition to renewable energy?

I think there are some perspectives that need to be considered when answering this question

> Even if the effect on the earth's climate of burning fossil fuels hadn't been identified as an issue by scientists, the fact remains that the supply of fossil fuels is due to run out within the next 100 years with oil & gas due to run out in the next 50 years. Even if the move to renewables means that the time that fossil fuel reserves are exhausted is pushed back, it won't be for long, so we need a solution to meet our energy needs.
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> As human beings, our basic needs are simply shelter, food & air. The rest of the economy is there to meet our higher desires. This added value is driven by capitalism, and consumerism in particular. Going out on the high street in the UK in the 1980s wouldn't look particularly different from going out today. Indeed in some respects things have gone backwards as we've become less competitive. Most of our consumer led economy has moved online. Where we do still go out, events & hospitality tend to be rebrands of what was essentially there 40 years ago. Now capitalism has always had a need to re-invent itself. We moved from a feudal system to an agrarian revolution to an industrial revolution to a digital economy. Capitalism is not about staying still or considering transitions to be simply about costs. Consumers are interested in exciting new products & ideas. The move to renewable energy has already delivered transformative ideas in the electrical supply & transport sector which have driven the economy forward with genuinely new innovations rather than simply a marketing exercise.
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> If we are able to go truly zero carbon by 2050, this would be a major transformation of our world, not just because it would be cleaner but because we'd have energy security and the knowledge that mankind is capable of improving the earth. This seems to me to be a bigger deal than landing a man on the moon was or getting to Mars.