



PORTLAND MARKET REPORT

“IN THE UK, WIND POWER HAS GONE FROM GENERATING 2M TOE IN 2009 TO 13M TOE IN 2019”

October update

Last month to celebrate Portland’s 10-year anniversary, we considered how much change had been experienced in the oil industry over the last decade. This month, we will continue the theme by looking at energy beyond oil, where developments have arguably been even more significant.

Excluding oil, the biggest energy source – and polluter – at the turn of the Millennium was coal. By 2005, coal-fired power generation was hitting record heights, as the likes of China went on a building spree that at one point commissioned 1 new coal-fired power station every month. This had peaked by around 2005 and since that point, coal has experienced a rapid turning of the tide in the face of economic and environmental considerations. This has been particularly true in the West and no country epitomises this decline better than Britain. As recently as 2014, the UK was regularly relying on (imported) coal for up to 40% of its electricity. Today that figure rarely goes above 5% and coal-free days, weeks and even months are regular occurrences. This trend has been replicated in Europe and most importantly in the USA, where annual coal consumption has reduced from 471m tonnes of oil equivalent (toe) in 2009, to 317m toe in 2019.

In China, the picture is more complicated and, on the surface, less heartening. First of all, the figures are a whole lot bigger – in 2009, 1,685m toe of coal was consumed (3.5 times that of the USA), which equated to 87% of electricity generation in China. 10 years later and the consumption figure is actually higher (1,907m toe), which is a reflection of China’s tremendous economic growth over the last decade. However, perhaps a more encouraging measure is that coal’s share of Chinese power generation is declining. The figure today is around 65% (still high), but that is expected to fall below 50% in the next 5 years, as the dire state of local air quality has forced the Chinese Government to shift away from coal.

The two winners from this decline in coal usage are natural gas and renewables, with gas

in particular growing its share of global power generation to above 30% (from 20% 10 years ago). From an emissions perspective, this shift is positive, with gas emitting less than half the CO₂ of the equivalent volume of coal. But for hardened environmentalists, Natural Gas is still not a preferred source of energy. After all, it is still a fossil fuel and by encouraging its consumption, we are simply fostering further hydrocarbon exploration. Taking such a view neatly sums up the conundrum of modern environmental politics, which can be seen as a battle between pragmatism and idealism (as in all politics!). Increasing the use of gas has the immediate effect of reducing CO₂ emissions, versus more common and more polluting alternatives. Against that, it still adds CO₂ to the atmosphere! Businesses such as Portland would always favour realities above ideologies and therefore, we would see gas as the quickest and most straight-forward route to a lower carbon future, as it can easily displace more polluting energy alternatives.

That being said, anti-gas environmentalists still have a point in that simply increasing the use of one fossil fuel over another, hardly signifies a major transition - let alone an energy revolution. However, alongside the gasification of power generation, we are also witnessing the astonishing growth of renewables, which could genuinely be viewed as a 21st Century industrial revolution. Admittedly, renewables were starting from a low base, but even so, growth in this area has been virtually exponential. In the UK, wind power has gone from generating 2m toe in 2009 to 13m toe in 2019. And solar power has increased from a tiny 4,000 toe to 3m toe today – that’s a 646-fold increase!! Across the whole of Europe, the share of renewables in electricity generation has gone from less than 10% in 2009 to over 25% today, whilst in the USA and China, the figures also demonstrate this very clear trend (9% to 17% in USA and 8% to 20% in China). Yes, it has to be acknowledged that renewable energy has often received very significant initial subsidies, but thanks to this (or in spite of this), renewables have gone from being

niche technologies against climate change to today becoming one of the key elements of our energy system. If you had said 10 years ago that by 2020, almost 50% of power generation would frequently be renewable, you would have been laughed out of town. But today it is a reality and the beauty of renewables is that once initial capital costs have depreciated, generation is (give or take) free. This, along with low interest rates and the favouring of infrastructure projects, makes for an extremely attractive long-term investment model.

Finally, we have one piece of the global energy jigsaw that has barely changed over the last 10 years but still should demand attention. Nuclear energy in OECD countries accounted for about 10% of power generation in 2009 and still contributes at similar levels today. As the debate around climate change intensifies to almost frenzied levels, the fact that nuclear energy is seen as increasingly inconsequential is puzzling to say the least. Here is a known and efficient energy source, that has seemingly been written-off, despite the fact that it contributes precisely zero CO₂ into the atmosphere. Portland is neither an expert on, nor a cheerleader for, the nuclear industry, but can it really be sensible to walk away from this endless source of energy? It is said that nuclear waste may take up to 1,000 years to degrade, but if we are truly facing a climate emergency today, wouldn’t we consider prioritising the now above a problem that may or may not affect us at the back end of this Millennium?

For more pricing information, see page 22

Portland Fuel Price Protection
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