



REPORTS OF THE DEATH OF COAL HAVE BEEN GREATLY EXAGGERATED

As recently as last year, several commentators in the energy sector were confidently predicting the death of coal. A combination of cheap gas and shiny new renewable energy projects would surely push the dirty old man of the energy industry finally out of existence. Sadly, in the light of this year's events, it would seem fairly clear that such predictions were wrong. In a world of searing summer temperatures in Europe and biblical floods in Australia and America, the return of coal is an unwelcome reminder of our inability to match environmental rhetoric with actual action. But this report deals with reality and, as countries across the world look to dust down previously 'dormant' coal-fired power stations, the reality is that coal is back...

"COAL-GENERATED ENERGY WILL SOON BE A DISTANT MEMORY."

In the run-up to the pandemic, there was good reason, and ample evidence, to suggest that coal was indeed on its way out. The percentage of US electricity from coal-fired generation was around 20% - down from 50% only 15 years earlier in 2005. Several European countries were regularly posting coal-free energy days and the UK, in particular, was running for prolonged coal-free periods. In 2019, Britain went for over 3,000 hours without coal-fired electricity (about 35% of the time) leading one Government spokesman (from the Department of Energy) to publicly declare that "coal-generated energy will soon be a distant memory on our path to becoming a net zero emissions economy".

Sadly, the Russian invasion of Ukraine has upended such sentiment and Europe, in particular, is now fervently stock-piling coal in advance of a much-feared 2022-23 'winter of discontent'. The major coal-producing nations of South Africa, Australia and Colombia have all seen their exports to the EU increase by between 40-50% – an increase of over 40m tonnes. Initially, this volume was to replace boycotted Russian coal that was no longer arriving on European shores (a full European ban on Russian coal kicked in on Aug 10th) but, as power generators clamoured for extra stock, underlying demand was also soon rising. By the mid-point of the year, overall European coal consumption was up by almost 10%. For the producers, of course, this is a bonanza of extra volume and (inevitably) higher prices. In 2021, the price of thermal (power generating) coal in Europe was \$130 per tonne. By June 2022, that price had risen to over \$400...

Even before the current energy crunch however, there were convincing signs that coal - whilst in decline - was still a long way from dying. Firstly, there is the fundamental problem of a continually growing global population and its corresponding increased energy needs. The optimistic interpretation of this situation is that new renewable energy sources can solve this problem. A more cynical (and operationally easier) approach might be to let existing energies take the strain. This means that the likes of coal will continue to play a role in the overall energy solution and a firsthand example of this can be seen in China, the world's largest investor in renewable energies. Pre-pandemic, in 2019, China's renewable energy use grew by 25 %, but this was still not enough to meet rocketing energy demand. Which is why the Chinese Government is still in the process of building 150 (yes, you read that correctly) coal-fired power plants to add to the 600 already in existence. This sounds less like decarbonisation and more like carbonrenewable cohabitation.

If we look ahead, there are also some major potential bumps in the road when it comes to reducing coal usage. Although there is now a fairly clear consensus on the impending electrification of the global car fleet, there is still much disagreement on, and lack of understanding of, the consequences of mass transport electrification. It goes without saying that electric cars can be fully powered by renewable energy (wind, solar etc), but it is looking increasingly likely that electric vehicles will arrive en-masse, far quicker than the renewable energy sources to power them. Automotive analysts point to 2025 as a tipping point in e-mobility, whereas energy analysts are more likely to give 2030 as the milestone for renewable power provision. And, even if we accelerate renewable energy projects, historical experience tells us that the exact matching of energy supply and demand is extremely difficult. Thus, to roll out automotive electrification at a rate that directly correlates with the commissioning of new wind and solar farms will be impossible. The resulting peaks and troughs in energy demand will need to be met by stop-start power sources, of which coal is an old and trusty favourite...

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A combination of short-term crisis requirements, long-term energy growth and the practical implications of the energy transition, all seem to point to a continued and robust use of coal. In the same way that the Saudis are banking on being the last man standing for oil, the Australian, South African and South American coal producers are increasingly taking the same position when it comes to 'Old King Coal'. Yes, the market is shrinking, and is nothing like what it was 50 years ago, but it is still huge and, as the experiences of 2022 have demonstrated, extremely lucrative.

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