

## THE WEEK IN ENERGY: A LOOK AHEAD TO 2019\*

## 1) Global coal demand will remain stable

World coal consumption has never been higher than it was in 2013-14, but it seems that that level was a plateau rather than a peak. After declining over 2014-16, global coal demand started to pick up in 2017, and rose again last year. From now until at least 2023, the International Energy Agency has predicted, it will remain roughly stable, rising or falling only slightly each year.

2) The US will be an increasingly important gas supplier to the world, in terms of both deliveries and contracts for the future

This is going to be a big year for the first wave of US LNG export projects. Two large new plants, Cameron LNG in Louisiana and Freeport LNG in Texas, are scheduled to come into service, along with a smaller one at Elba Island in Georgia. By the end of the year, US LNG export capacity is expected to have more than doubled. The country will be the world's third-largest exporter of LNG, behind Qatar and Australia, with implications for its relationships with gas consumers around the world, and with other large producers including Russia.

3) The costs of renewable electricity and energy storage will continue to fall

The decline in the costs of electricity from renewable sources has not always been smooth. The database kept by Irena, the International Renewable Energy Agency, shows that the global average cost of power from onshore wind levelled off in 2014-16, for example. But over longer periods the decline, driven by economies of scale and incremental improvements in the technology, has been inexorable. The falling cost of renewables has already had a huge impact on global investment in power generation. Meanwhile, the costs of energy storage are also expected to decline, if at a slower pace than earlier in the decade. The price of lithium ion batteries dropped by 80 per cent over 2010-17, according to Bloomberg New Energy Finance, opening up a new range of possible uses. Even at these rates of decline, lithium ion batteries are a very long way from being a viable complete solution to the problems created by the variability of wind and solar power.

4) Electric car sales will keep rising as a wave of new models hit the market . . .

Electric car sales continued to jump in 2018, blowing past expectations. Total sales of light electric vehicles, including cars, SUVs, and smaller trucks and vans, are expected to have reached about 2.1m, up about 64 per cent from 2018, taking the total number of plug-in vehicles on the roads to about 5.4m. Sales are expected to grow again this year, with Tesla launching its new Model 3 in Europe and China, and a number of new models from manufacturers including Porsche, Mercedes, Audi, Renault, Hyundai and Kia. In China, which is the world's largest car market and accounts for roughly half of



all electric vehicles sold worldwide, new mandates for the production of "new energy vehicles" take effect this year.

5)  $\dots$  But the health of the world economy will have a bigger impact on oil demand this year

If sales of electric vehicles continue to grow rapidly, it will not be long before they start to have a perceptible impact on global oil demand. The IEA has projected that consumption of oil-based fuel for passenger cars could peak in the second half of the 2020s. That is a very different thing from projecting peak demand for oil overall, however, because petrol and diesel for cars account for only about a fifth of global oil consumption. In the IEA's "new policies scenario", reflecting announced government commitments and existing technologies, total oil demand is projected to keep rising to 2040, albeit at a slower pace than in the past 25 years. In the near term, a much more important factor for global oil demand will be the health of the world economy. The last time world oil consumption fell was in 2008-09. The world economy shrank by 2.1 per cent in 2009, making it the worst downturn since the Great Depression, and oil consumption dropped by 1.7 per cent. A repeat of that slump seems highly unlikely, but in October the IEA and Opec both cut their forecasts for oil demand growth in 2019, because of concerns about the impact of higher prices and a deteriorating economic outlook. Since then, prices have fallen, which will help support consumption, but expectations for the world economy have become more gloomy.