Is 2015 the turning point for low carbon investment in the UK?

The government's infrastructure pipeline sets out its view of large infrastructure investments that are likely to be made over the course of this parliament and beyond. Green Alliance has analysed the last two iterations of the pipeline, which show the changing pattern of investment across low and high carbon sectors of the economy.

Our analysis of the first infrastructure pipeline, in 2012, showed that the majority of investment planned was in low carbon infrastructure, with energy infrastructure in particular being heavily weighted toward low carbon investment.

The picture in 2014's infrastructure pipeline update was very different: roads spending and oil and gas tax incentives meant that fossil fuel energy investment was projected to be higher than low carbon energy investment.

The most recent update to the pipeline reveals that, in 2015, fossil fuel infrastructure continued to dominate, with 41 per cent of total infrastructure spending directed toward high carbon projects. Just 33 per cent of spending will go to low carbon projects in this year.

However, the balance of infrastructure investment is projected to change dramatically by 2020. By then, 51 per cent of the UK's infrastructure investment will be in low carbon projects, against just 30 per cent in high carbon. Looking only at those projects the government classes as 'priority investments', the picture is even better: 72 per cent of projected total spending in this category is in low carbon infrastructure.

Closer analysis of two key sectors, energy and transport, reveals what will drive this:

Energy

- Oil and gas investment is projected to fall by two thirds, from £12 billion to £4 billion over the course of the parliament.[1] The last published infrastructure pipeline saw a very large spike in oil and gas investment, and it is significant that the Treasury sees North Sea investment decline as a long term trend.

- Low carbon electricity investment is due to peak at £14.1 billion in 2018, driven by private sector investment in offshore wind (£6 billion) and electricity networks (£4.6 billion) in that year. The rise in investment, which doubles from £7 billion in 2015, shows that low carbon investment can replace oil and gas spending, helping to maintain GDP growth.

- By 2020, however, total low carbon electricity investment falls to £8.3 billion, composed mainly of continued investment in regulated network assets (£4.1 billion) and Hinkley Point C (£2 billion). The fall in spending highlights the importance of private sector investment in low carbon electricity. The Treasury's disruption of energy policy can be seen in the sharp decline in projected investment: just £238 million across all renewables is projected for 2020, a staggering 96 per cent fall from its peak in 2017. If this cliff edge in investment is to be avoided, government will need to set out a levy control framework that enables investment to continue up to and beyond 2020.

Transport

- Roads spending is due to rise 73 per cent between 2015 and 2020, with a sharp rise in the final year of the parliament leading to total investment of just under £7 billion on roads in 2020.

- Conventional rail investment is projected to fall by around 30 per cent, from £7.8 billion to £5.6 billion, between 2015 and 2020. However, the planned spending on High Speed Two (HS2) means that overall spending on rail will rise by around 18 per cent over the same period. Overall, by 2020, the construction of HS2 means that investment in low carbon transport will be two thirds higher than investment in high carbon. Without it, falling rail investment would mean infrastructure spending would be evenly balanced between roads and rail.

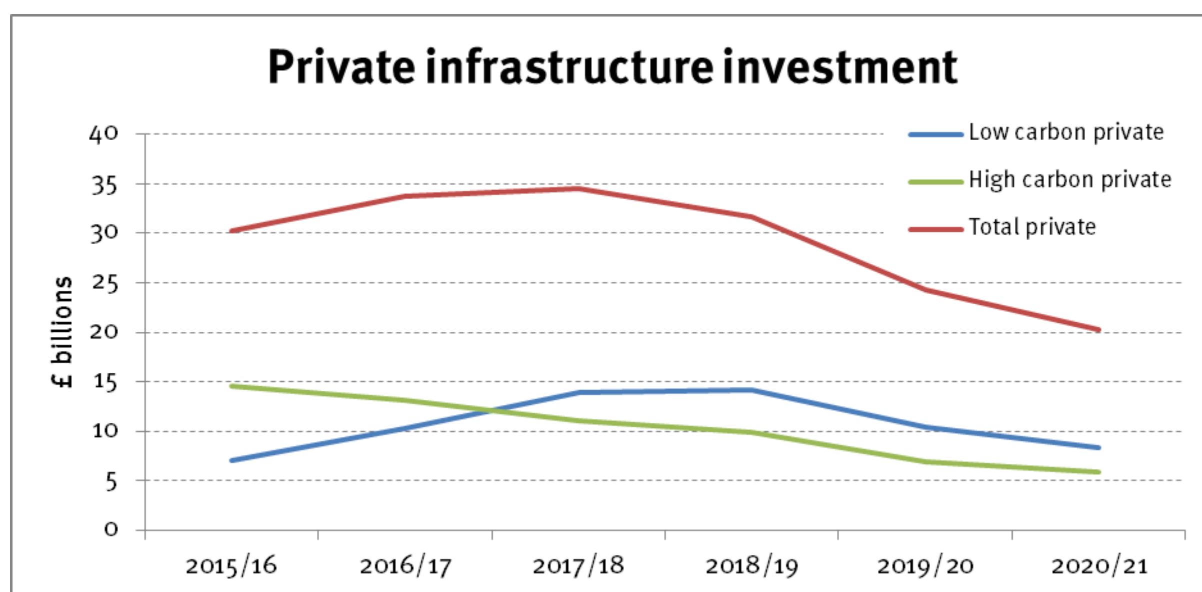
- Around 85 per cent of infrastructure investment in airports (£5.1 billion over course of the parliament) is projected to be spent on London's airports.

Overall, there's a striking difference between how private and public investment in infrastructure is moving in relation to carbon. The private sector is exiting high carbon infrastructure quickly: its spending on high carbon is projected to fall by over half by 2020.

In contrast, public investment is more mixed. Public funding of high carbon infrastructure rises from £4.8 billion in 2015 to £6.4 billion in 2020, meaning public investment in high carbon assets is slightly increasing as a share of total public investment.

The main challenge to the overall investment picture is that the private sector's retreat from high carbon is not being matched by an advance into low carbon investment: overall, private sector investment will be down by around a third, or £10 billion per year by 2020. Increased public spending will not make up the difference.

The National Infrastructure Commission can help to fill this gap if it restates the case for stable policy, but investor confidence will only return if the government sets out a coherent low carbon energy plan and sticks to it.



[1] All prices in this note are constant 2015 prices. All calculations are based on the national infrastructure pipeline, available at https://www.gov.uk/government/publications/national-infrastructure-pipeline-2016.