

# December 2014: Revised low carbon investment in the Treasury's infrastructure pipeline



The Treasury publishes a list of pipeline infrastructure investments to provide a strategic overview of the large infrastructure investments planned by the private and public sectors.

In 2013 Green Alliance conducted a thorough [analysis](#) of the first release of a detailed pipeline in December 2012 and celebrated the fact that the majority of plans were in areas which should help with our transition to a low carbon economy. These included major investment plans for public transport and renewable energy, particularly offshore wind.

Much of this was to be delivered by the private sector and the scale was sufficiently large to make an important contribution to economic growth.

Subsequent releases of the pipeline (in December 2013 and summer 2014) have reported a scaling down of planned investment in renewable energy up to 2020.

With the December 2014 [update](#) of the pipeline there is an opportunity to take stock of the changes over the past two years, focusing on the two biggest items: energy and transport. The key comparisons between the December 2012 and 2014 pipelines are shown in the tables on page four.

## Transport

In relation to transport there have been significant increases in planned spending on both public transport and roads and airports, particularly in the next parliament. Planned spending on roads has been revised up from £4 billion to £5.1 billion in 2014-15 and from £1.6 billion to £32.7 billion in 2015-20. Similarly, investment in public transport has been revised up from £10.3 billion to £11 billion in 2014-15 and from £18.3 billion to £57.0 billion in 2015-20.

## Energy

In relation to energy, there has been a marked rise in expected investment in fossil fuels and a decline in low carbon energy.

Spending on fossil fuels has been revised up from £2.2 billion to £15.2 billion in 2014-15 and from £10.6 billion to £48.8 billion in 2015-20.

By contrast, spending on low carbon energy has been sharply revised down from £24.9 billion to £9.8 billion in 2014-15 and slightly up from £92.5 billion to £94.1 billion in 2015-20.

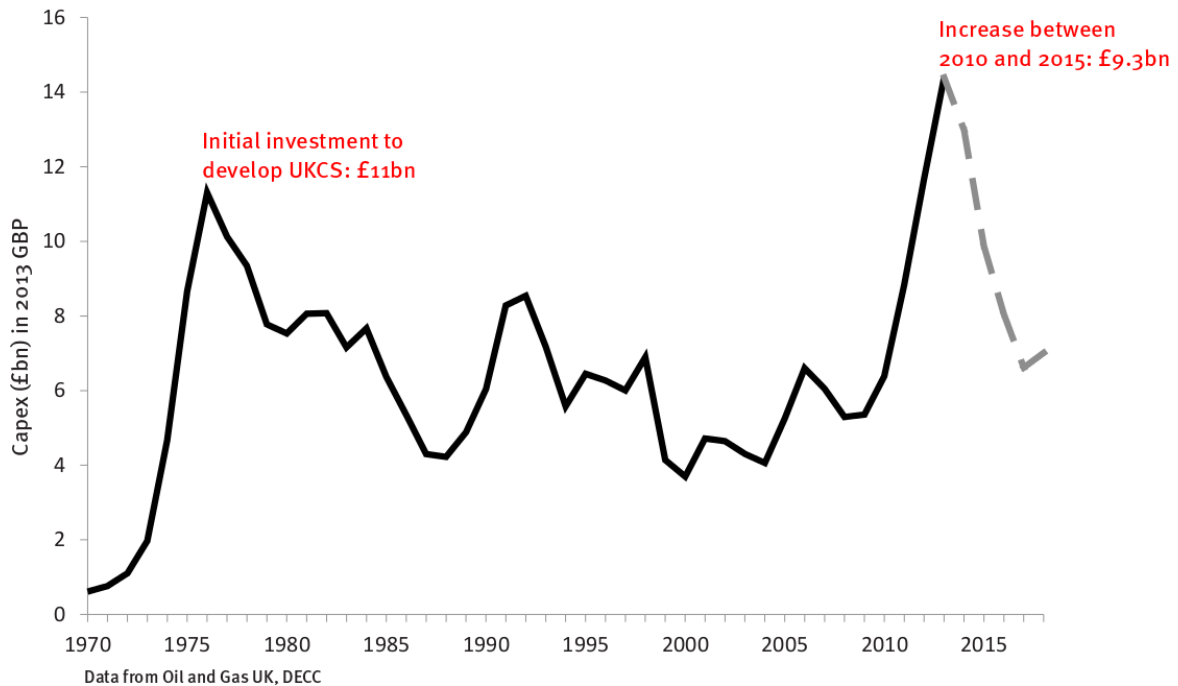
Given the magnitude of these changes in energy it worth looking at the main drivers:

## Fossil fuel:

The upward revision in fossil fuel spending is entirely driven by additional oil and gas investment and does not include exploration for shale gas. The majority of this investment arises from the inclusion of large scale UK continental shelf (UKCS) oil and gas expenditure.

- Investment in the UKCS has risen nearly as fast over the past five years as it did when the UK first began to drill for oil and gas in the 1970s.

### UK Continental shelf investment since 1970



- It is unclear how far policy has driven investment in the UKCS over this period, as the industry is investing to delay rapidly declining production and has had the incentive of very high oil and gas prices. However, a short timeline of oil and gas announcements shows that policy has attempted to encourage investment:

March 2011: Additional £2bn levy from oil and gas production

July 2011: £50m reduction in the £2bn levy, following industry criticism

March 2012: £3.15bn tax breaks for oil and gas production

Dec 2012: Gas generation strategy

March 2013: Decommissioning tax relief, worth over £20bn<sup>1</sup>

June 2013: Wood review set up to maximise UKCS production

July 2014: UK government welcomes the Wood review as “good for our energy security, good for the economy and good for jobs.”<sup>2</sup>

Dec 2014: Additional £430m in tax breaks for oil and gas production

- Furthermore, government has claimed that roughly half of UKCS investment was directly incentivised by the government’s tax changes.<sup>3</sup>

## **Low carbon energy:**

The composition of low carbon energy has also changed:

- Expected spending on renewables has been revised down by £11.3 billion in 2014-15 and £9.3 billion in 2015-20.
- Expected spending on nuclear has been revised down by £4.7 billion in 2014-15 and £11.2 billion in 2015-20
- These downward revisions have been partly offset by an upward revision of £2.9 billion in other low carbon energy investments (such as smart meters) between 2015-20.
- There have also been substantial increases in planned spending on electricity infrastructure which has been revised up by £0.8 billion in 2014-15 and £19.1 billion in 2015-20. These investments – in both distribution and transmission - can be seen as providing infrastructure which can assist with decarbonisation.

These changes have affected the composition of the infrastructure pipeline and significantly reduced the extent to which it is focused on activities which may be seen as low carbon:

- The share of total energy and transport spending on fossil fuels, roads and airports has been revised up from 15 per cent to 49 per cent in 2014-15 and from ten per cent to 34 per cent in 2015-20.
- The fossil fuel share of total energy spending has been revised up from eight per cent to 61 per cent in 2014-15 and from ten per cent to 33 per cent in 2015-20.
- The roads and airports share of total transport spending has been revised up from 28 per cent to 31 per cent in 2014-15 and from eight per cent to 36 per cent in 2015-20.

**Transport infrastructure pipeline, showing 2012 publication and 2014 revision**  
£ billion, 2013-14 prices

	2014-15	2015-20
<b>Roads and airports</b>		
- 2012 pipeline	4.0	1.6
- 2014 pipeline	5.1	32.7
<b>Public transport<sup>4</sup></b>		
- 2012 pipeline	10.3	18.3
- 2014 pipeline	11.0	57.0

**Energy infrastructure pipeline, showing 2012 publication and 2014 revision**  
£ billion, 2013-14 prices

	2014-15	2015-2020
<b>Fossil fuels<sup>5</sup></b>		
- 2012 pipeline	2.2	10.6
- 2014 pipeline	15.2	48.8
<b>Low carbon energy<sup>6</sup></b>		
- 2012 pipeline	24.9	92.5
- 2014 pipeline	9.8	94.1

**Low carbon energy pipeline, showing 2012 publication and 2014 revision**  
£ billion, 2013-14 prices

	2014-15	2015-20
<b>Renewables<sup>7</sup></b>		
- 2012 pipeline	14.8	42.0
- 2014 pipeline	3.5	32.7
<b>Nuclear<sup>8</sup></b>		
- 2012 pipeline	5.3	37.2
- 2014 pipeline	0.6	26.0
<b>Electricity<sup>9</sup></b>		
- 2012 pipeline	4.8	13.3
- 2014 pipeline	5.6	32.4
<b>Other<sup>10</sup></b>		
- 2012 pipeline	0.1	0.0
- 2014 pipeline	0.1	2.9

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<sup>1</sup> Estimated value over a 30 year period:

[www.slaughterandmay.com/media/2003911/decommissioning-relief-deeds.pdf](http://www.slaughterandmay.com/media/2003911/decommissioning-relief-deeds.pdf)

<sup>2</sup> [www.gov.uk/government/news/government-commits-15m-to-kickstart-new-regulator-in-response-to-wood-review](http://www.gov.uk/government/news/government-commits-15m-to-kickstart-new-regulator-in-response-to-wood-review)

<sup>3</sup> See section 8.23 of the National Infrastructure Plan 2014

<sup>4</sup> Largely rail

<sup>5</sup> Investment in oil and gas extraction, gas infrastructure and generation

<sup>6</sup> Largely renewables, nuclear, electricity infrastructure

<sup>7</sup> Offshore and onshore wind, hydro, PV, biomass, and unspecified renewables

<sup>8</sup> Nuclear generation and decommissioning

<sup>9</sup> Electricity infrastructure investment relating to transmission and distribution

<sup>10</sup> Includes smart meters and CCS