



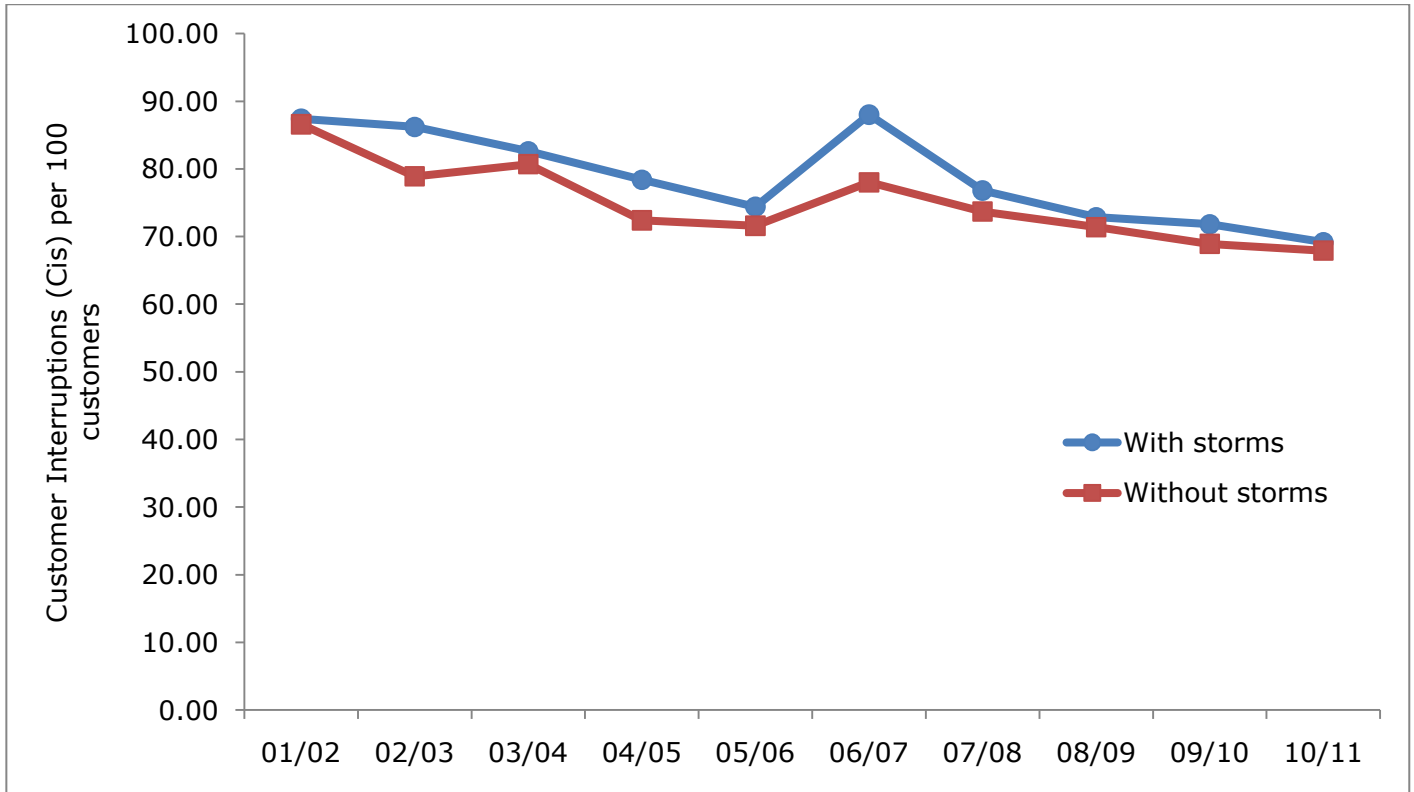
The UK Government and Devolved Administrations set out a strategy for sustainable development, *Securing The Future*, in 2005. Drawing on this framework and stakeholder feedback, we focus on the five themes which we think capture how the Gas and Electricity Markets Authority should contribute to the sustainability challenges of the 21<sup>st</sup> century.

The fourth of the five themes is ensuring a secure and reliable gas and electricity supply. Our regulation of the electricity and gas networks, and our commitment to sustaining a regulatory environment that supports investment, underpin our goal to ensure that cost-effective, reliable and diverse energy supplies are always available to consumers.

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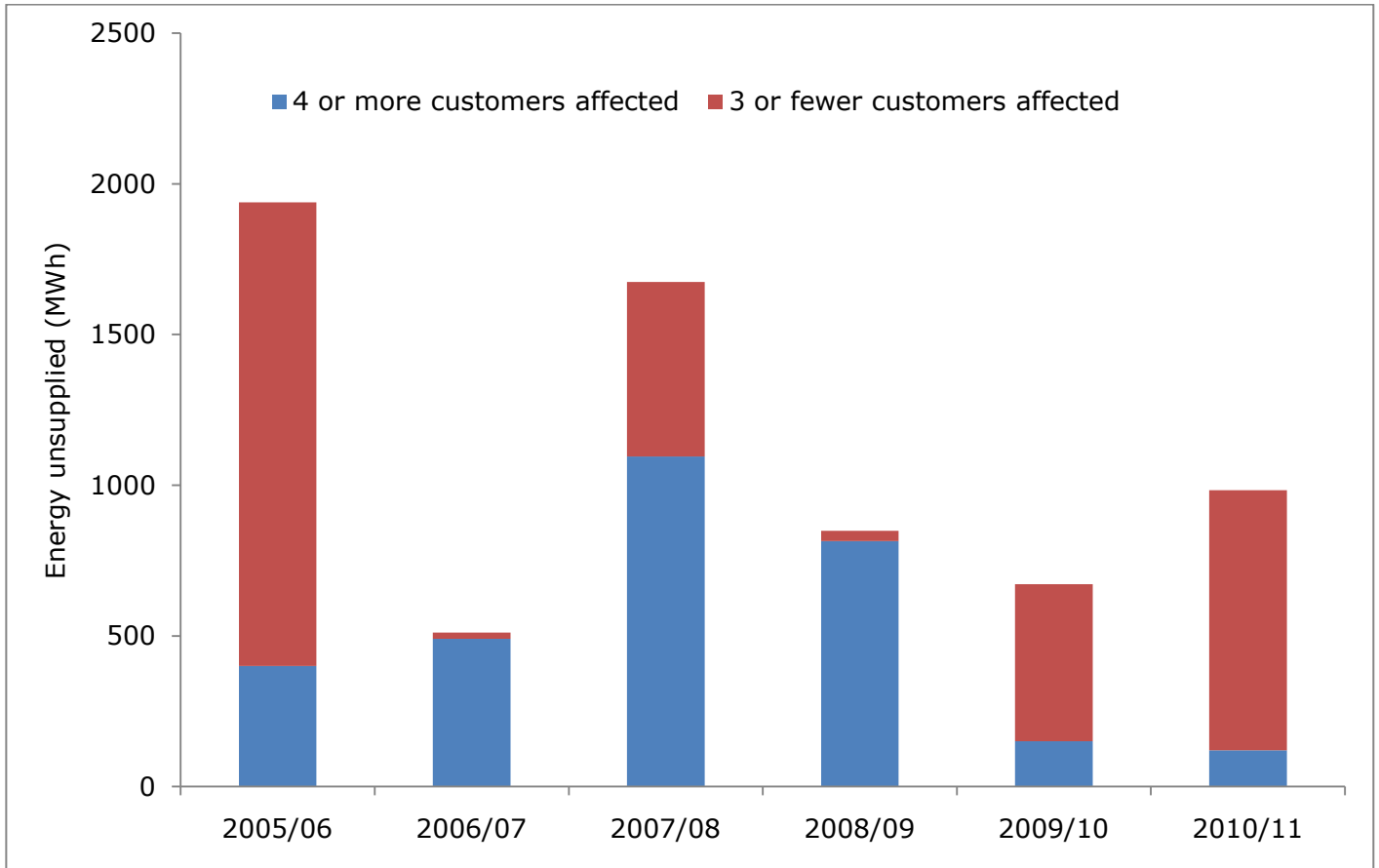
## Indicator 12: Reliability of supply – network performance



**Figure 20 - Average electricity customer interruptions (CI) per 100 customers (updated January 2012)**

Source: Ofgem data

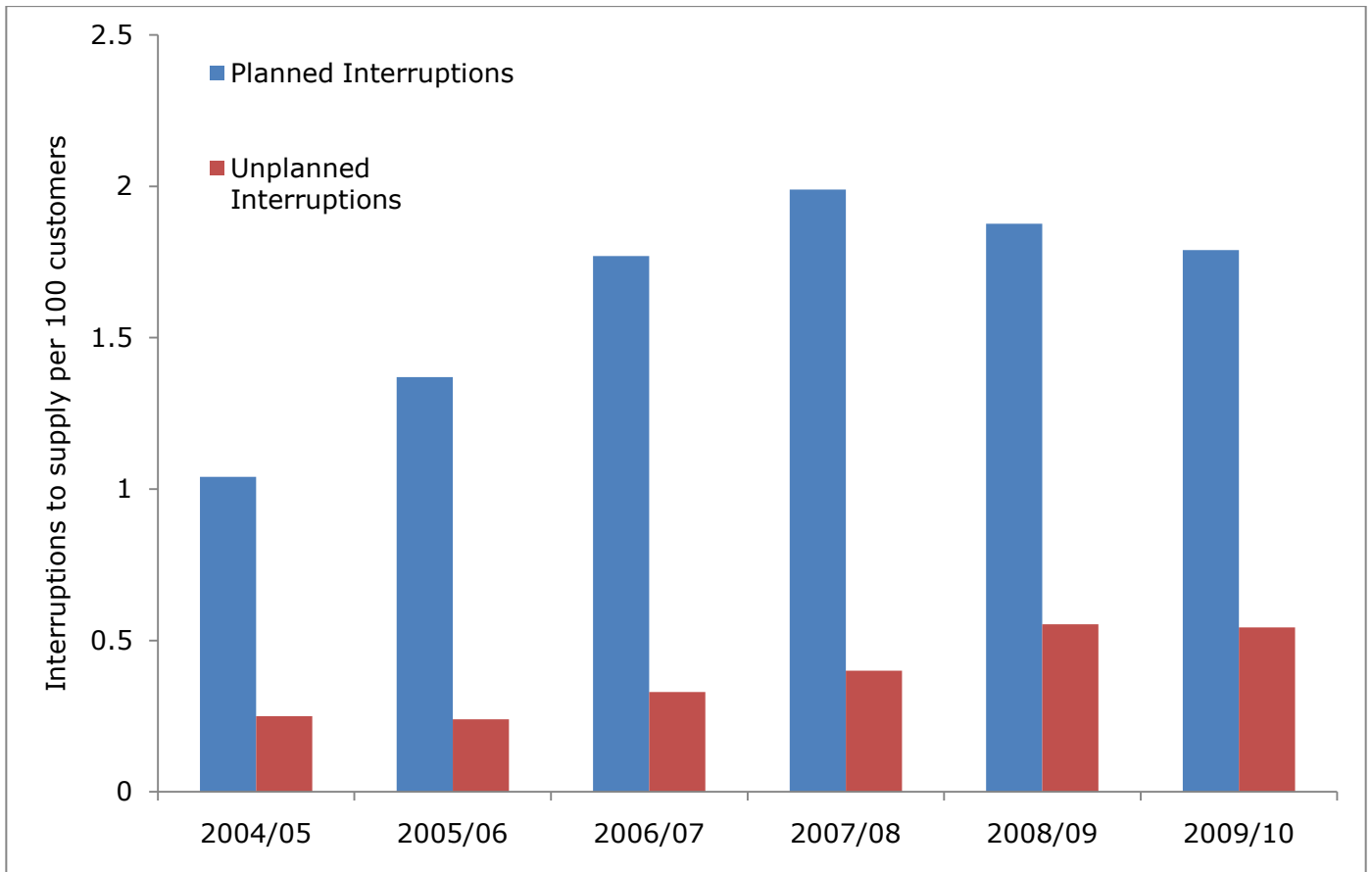
The average number of electricity customer interruptions has fallen for the past 3 years. In the 2010/11 reporting year there were 18 fewer interruptions per 100 customers than in 2001/02 when quality of service incentives were introduced.



**Figure 21 - Energy unsupplied due to transmission network faults (updated January 2012)**

Source: Ofgem

There has been a slight reduction in energy unsupplied to 4 or more customers in the last year. The power cuts that occurred this year typically affected 3 or fewer customers; the increase in this category was mostly due to incidents in Lackenby, Hartmoor and Cockenzie where system trips coincided with planned maintenance.

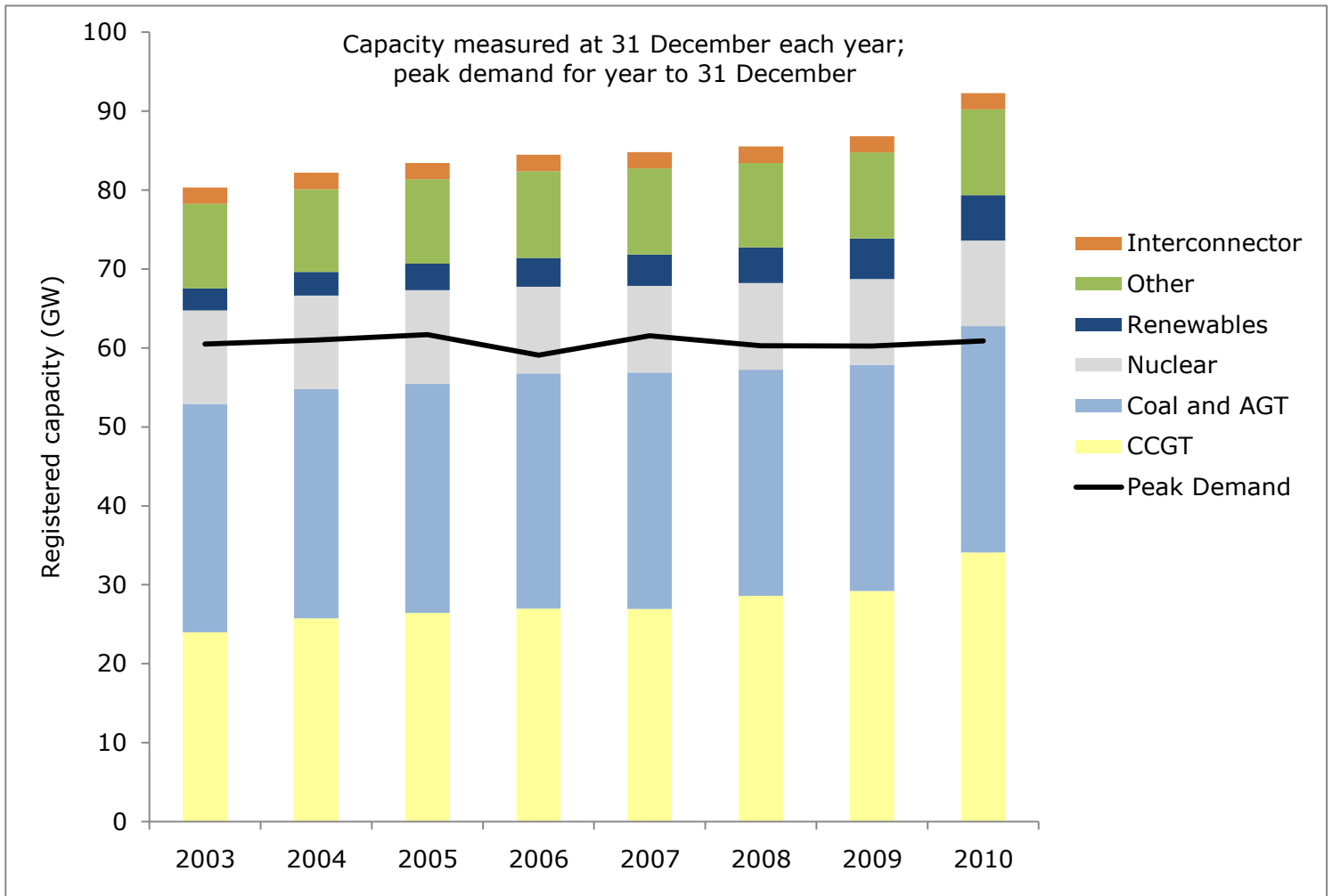


**Figure 22 - Average gas customer interruptions per 100 customers (updated January 2012)**

Source: Ofgem data

The graph shows that planned interruptions have fallen since 2007/08, and unplanned interruptions also fell last year. Improvements to the reporting of interruptions data have been made since 08-09 and this has improved both the accuracy and completeness of data reported. It should therefore be noted that some of the trends apparent in the data may be put down to an increase in reporting accuracy, rather than genuine changes in performance.

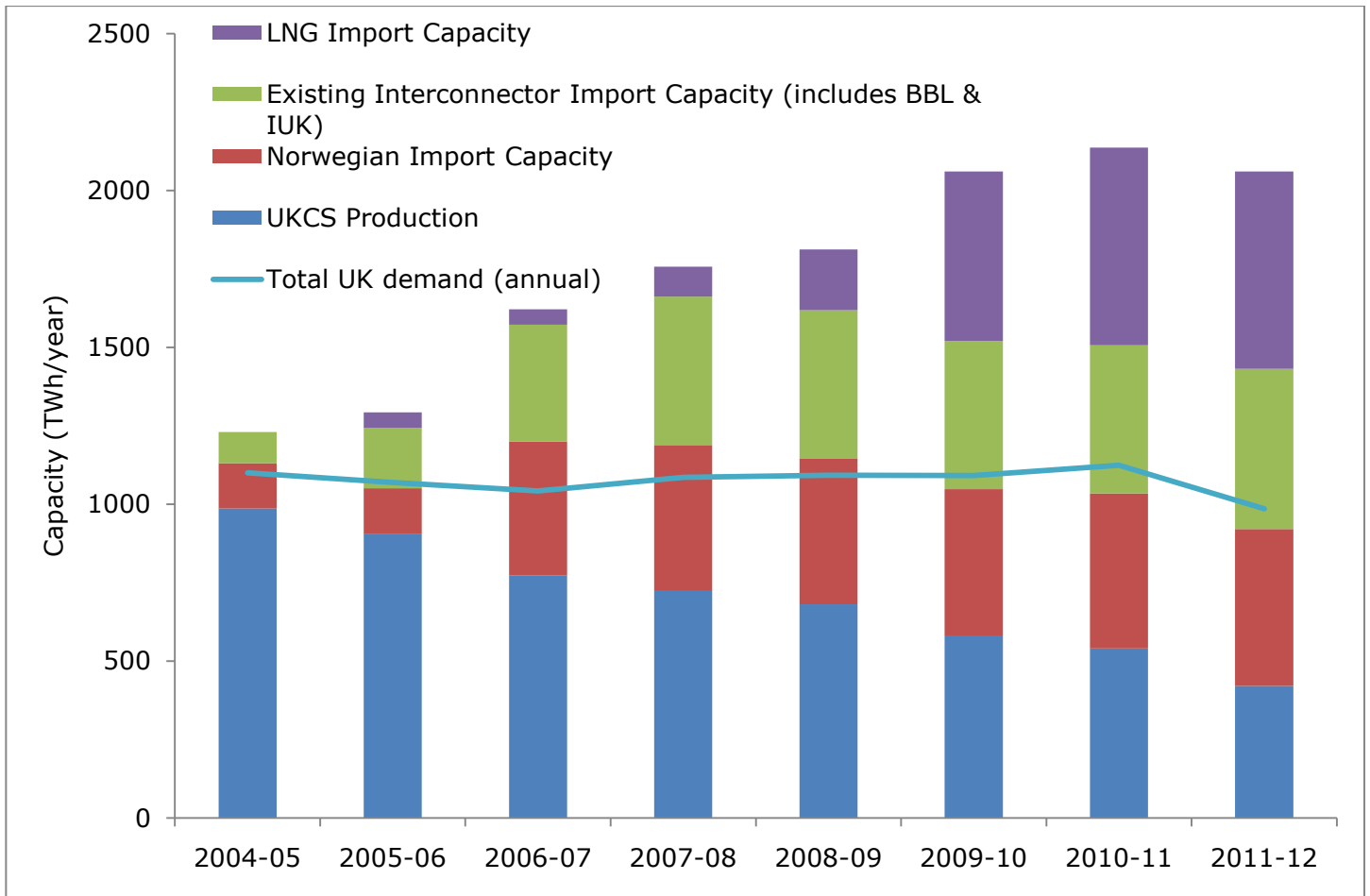
## Indicator 13: Security and diversity of supply – market response



**Figure 23 - The UK electricity generation mix (updated October 2011)**

Source: DECC DUKES

5 new Combined Cycle Gas Turbine stations opened in 2010, producing nearly 5,000MW capacity between them, whilst capacity from other generation sources remained stable. The UK's maximum demand in 2010 represented 66 percent of all registered generation capacity. This relatively high capacity margin becomes necessary as intermittent generation sources, such as wind, form a greater part of the generation mix.

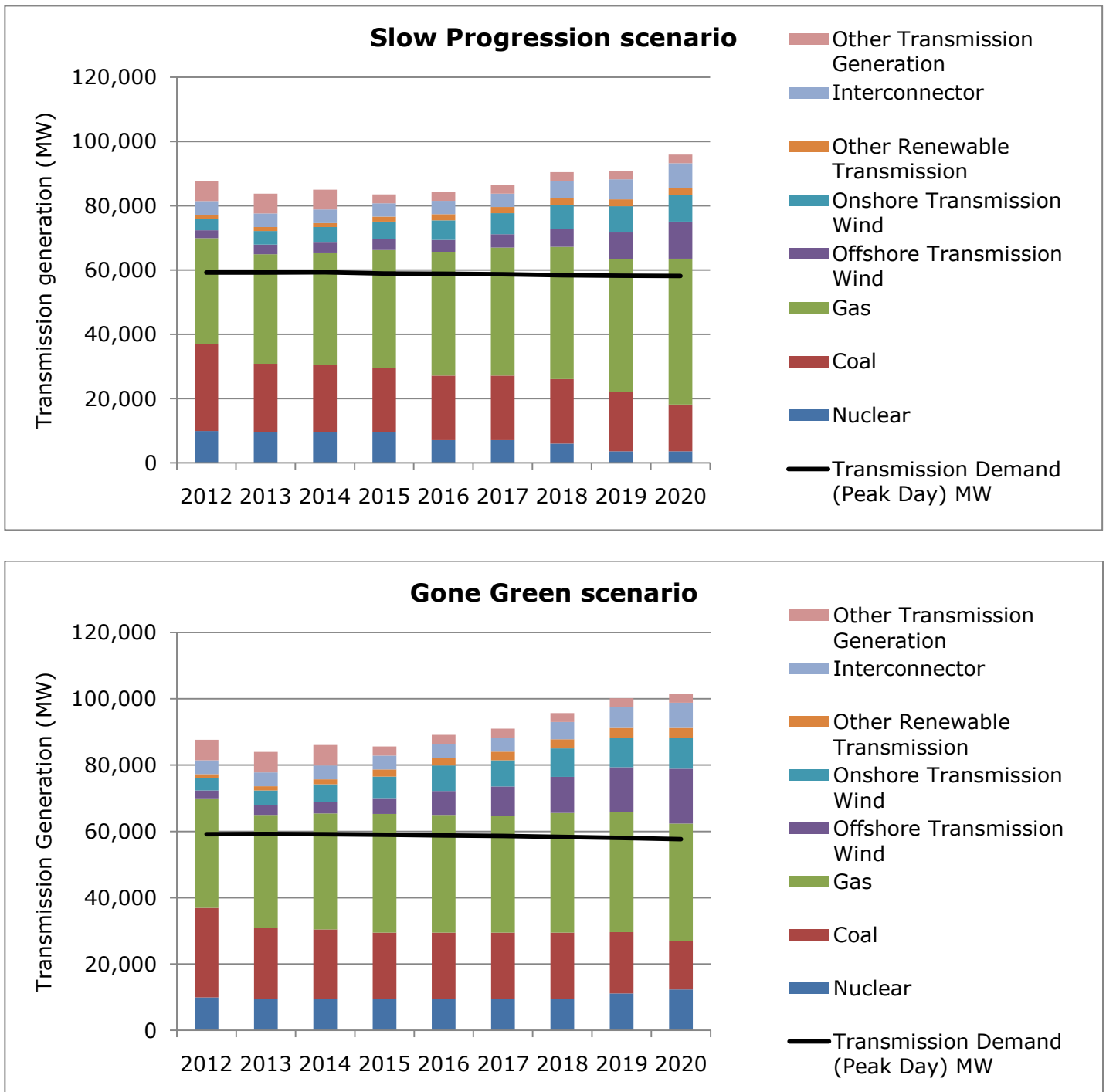


**Figure 24 - Gas supply capacity in the UK (updated July 2012)**

Source: National Grid

UK continental shelf (UKCS) gas production continues to decline, but in the last year there has been an increase in our existing interconnector import capacity and our Norwegian import capacity.

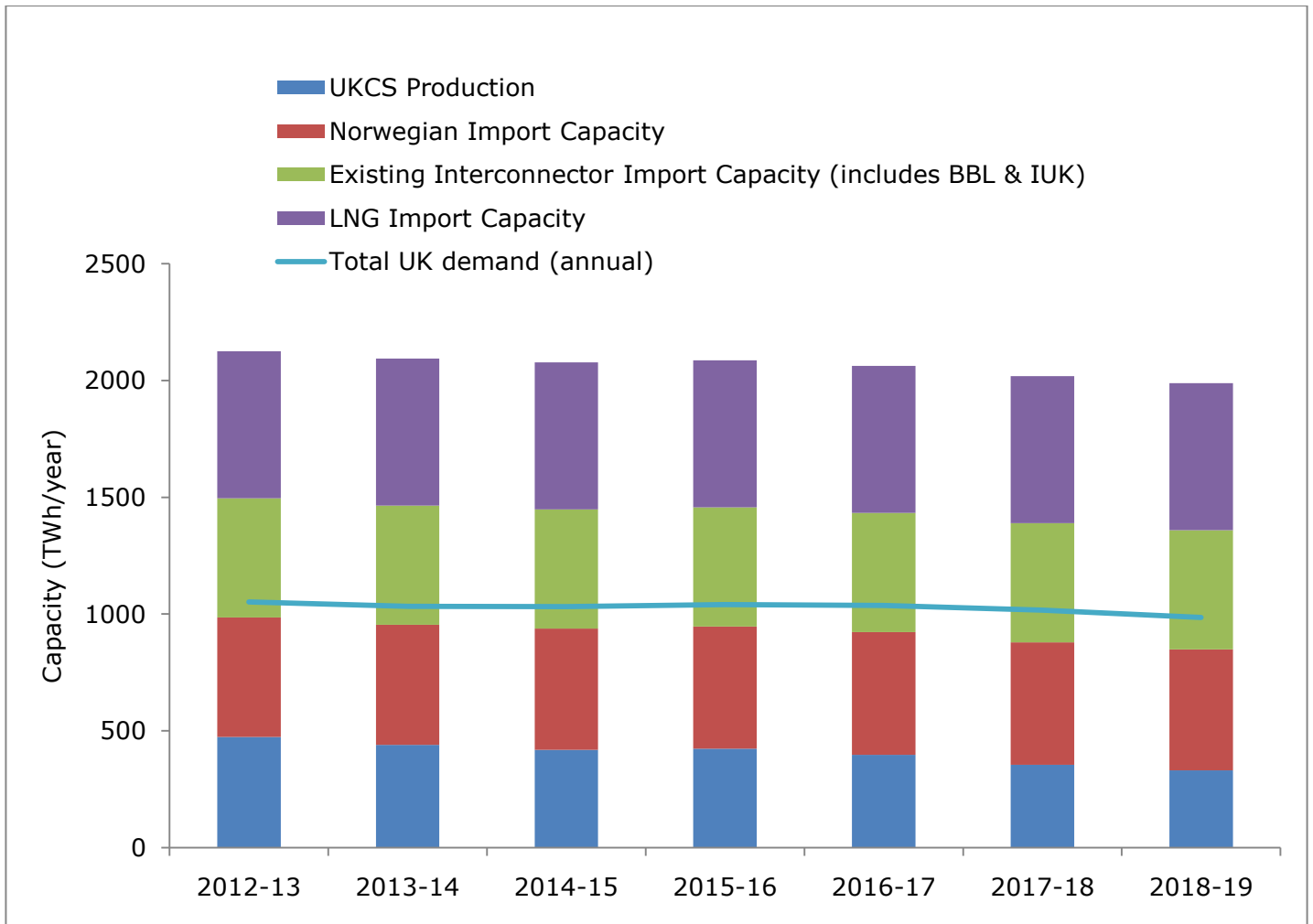
## Indicator 14: Future supply capacity mix



**Figure 25 - Projected UK electricity generation mix (updated July 2012)**

Source: National Grid Future Energy Scenarios, published November 2011

The graphs show two possible scenarios for the future of the UK's electricity generation mix compared to the projected peak demand. The 'Gone Green' scenario involves significantly more nuclear and offshore wind than 'Slow Progression', but nearly 10MW less gas generation by 2020. Both scenarios provide more than 35MW capacity over the anticipated peak demand by 2020, with slightly lower demand and higher total capacity under 'Gone Green'.



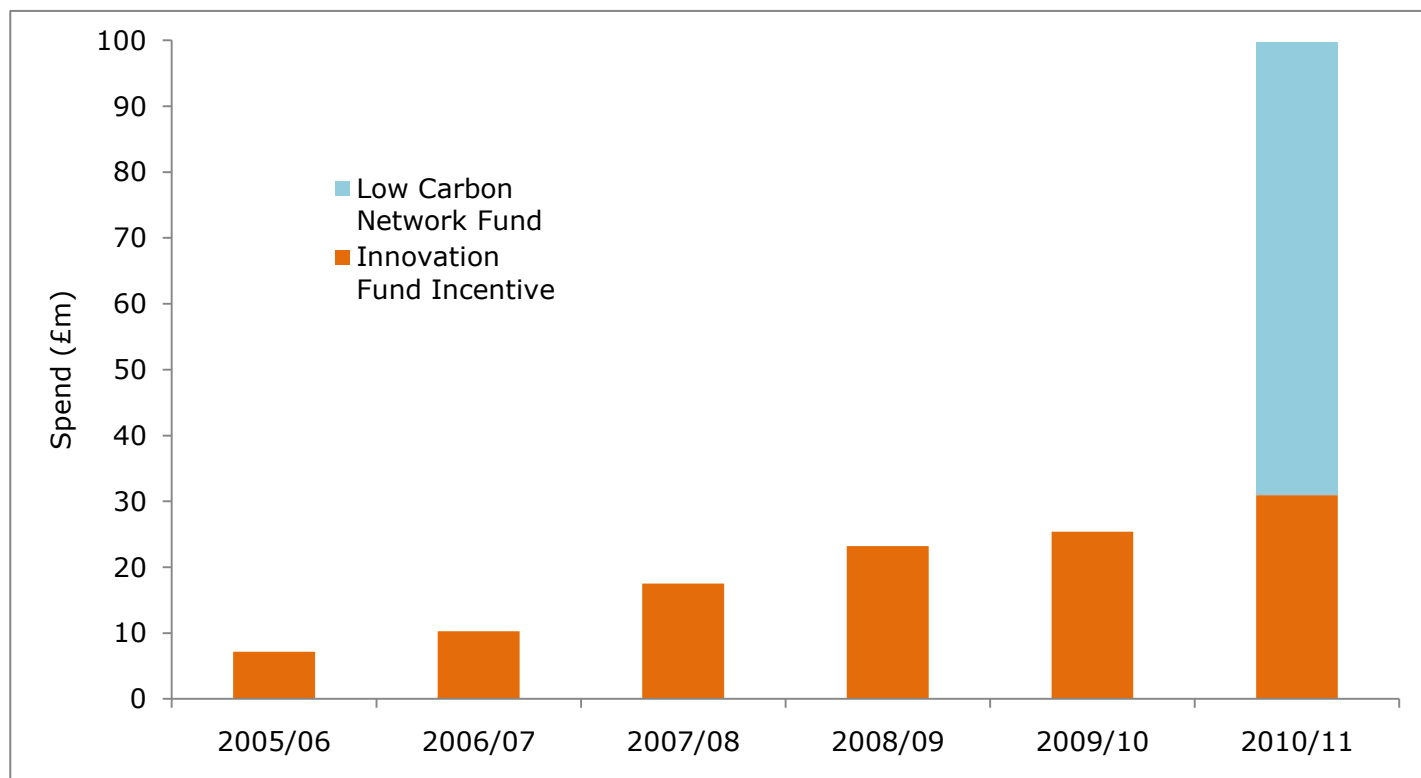
**Figure 26 - Projected future gas supply capacity in the UK (updated July 2012)**

Source: National Grid

UK continental shelf (UKCS) supplies are expected to continue to decline as we move towards 2020. UK import capacity is forecast to remain stable from 2017-18 to 2018-19, but demand is forecast to fall from 2015-16 onwards.



## Indicator 15: Product Innovation



**Figure 27 - Innovation funding (updated October 2011)**

Source: Energy companies and Ofgem data

The Innovation Fund Incentive (IFI) has been growing since its conception in 2005, boosted by the inclusion of transmission companies from 2007. The IFI will remain in place until 2013 for Gas Distribution, Gas Transmission and Electricity Transmission Companies. It will continue until 2015 for Electricity Distribution Companies.

The second tier of the Low Carbon Network (LCN) Fund can allocate up to £320m during the price control period or up to £64m each year. In the first year, a total of £63.6m was awarded to innovative projects.