



Briefing Note (March 2013) Policy Brief: A UK 'dash' for *smart gas*

Headline issue

Shifting from coal to natural gas for electricity generation can help the UK power sector to decarbonise in the near term. With good planning and investment natural gas can support the development of a low-carbon power sector by providing essential backup for intermittent supply from renewables, and could play an even bigger role if gas-fired power stations are fitted with carbon capture and storage (CCS) technology. But, the suggestion that shale gas could make supplies cheap and plentiful in the future has generated enthusiasm for natural gas to play a much bigger role in electricity generation. However, rigorous analysis shows that a new 'dash' for gas on the assumption of low prices is a risky economic and environmental option for the UK. A lower risk option is a 'dash' for *smart gas*, where natural gas is used judiciously in those areas where it offers the greatest value in decarbonising the power sector.

Key points

- Natural gas will continue to play an important role in the UK energy mix over the coming decades, for both heating and electricity generation.
- Low gas prices are not guaranteed and there are large uncertainties around future price forecasts. Several estimates, including by the International Energy Agency, indicate that gas prices in the UK and European Union are more likely to increase than fall over the next two decades.
- Extensive deployment of gas-fired power stations would not be consistent with the UK's carbon targets, unless it is accompanied by the widespread introduction of CCS.
- There is great uncertainty around the actual size of UK shale gas reserves that can be commercially extracted. The potential of shale gas is worth investigating, but future exploration and production will have to be subject to policy and regulation to minimise visual impacts and maintain strict environmental, health and safety standards.
- Shale gas is not expected to render the UK energy independent and free from the need to import natural gas. Prices on the UK market are therefore likely to remain largely driven by wholesale prices charged by foreign suppliers. The effect of UK shale gas on household and business electricity bills could therefore be limited.
- Investment in complementary technologies will be essential to ensure that future UK electricity generation is consistent with the emissions targets. In particular, it is important to find out as soon as possible whether gas-fired power stations fitted with CCS can become economically viable within the next decade or so.
- Inconsistencies between the Gas Generation Strategy and UK decarbonisation ambition, combined with uncertainty regarding the outcome of the review of the fourth carbon budget in 2014, could be perceived by the private sector as a significant policy risk and could discourage investment in both low-carbon energy sources.