elementenergy

UK Microgeneration Market Modelling

client: Energy Saving Trust.

client brief: Identify CO_2 savings from potential policies based on microgeneration modelling.

our solution: Detailed techno economic modelling of a range of microgeneration technologies including extensive industry peer review. Assessment of UK housing market and consumer behaviour. Uptake modelling using a multinomial Logit approach.

description: For microgeneration to contribute greatly to the UK's energy mix and CO_2 reduction targets, substantial uptake is required.

This project examined which policies are most likely to stimulate mass uptake for different microgeneration technologies up to 2050. The analysis considered heat pumps, biomass heating, solar thermal, micro-wind, photovoltaics, and microCHP systems including fuel cells and Stirling engines. These were compared against conventional alternatives including oil, natural gas, LPG and electric heating.

The results will be used by the EST to understand the most effective policies to encourage renewables/microgeneration technologies to lower CO_2 emissions.