

Smart metering and home heating

The National Smart Metering Programme, initiated in 2007, plans to roll out smart electricity and gas meters to households in Ireland. These will help consumers to manage and use energy more efficiently. Over 10,000 electricity customers and 2,000 gas customers in Ireland had smart meters installed in Phase 1 of the project. The average recorded reduction in electricity consumption was 2.5% per year, with savings of up to 9% observed during peak hours. Average reduction in gas demand was 3% per year.²¹ A national roll out of electricity and gas smart meters for all residential customers is expected to commence in 2018.²²

Trajectory 1

Trajectory 1 assumes no further roll-out of smart meters.

Trajectory 2

Trajectory 2 assumes that all homes will be installed with a smart electricity-meter by 2025 and 60% of homes that use gas have a smart meter in 2050. The average energy demand for electric space heating in homes with meters installed is reduced by 3% per year and 2.4% per year for those relying on gas.

Trajectory 3

Trajectory 3 assumes that smart meters for electricity are installed in all homes and that 70% of homes have one for gas. In conjunction with sophisticated direct (real-time) feedback interventions, the average annual energy demand for heating in homes with meters is reduced by 6.4% for those relying on electric heat and 5.1% per year for those using gas.²³

Trajectory 4

Trajectory 4 assumes that by 2050 smart meters for electricity are installed in all homes and that 90% of homes have a smart meter for gas. As users become more aware of their consumption and billing information, through better energy management and conservation, in-home displays, and a higher share of properties switching to electric heating enabling demand shifting during peak periods, savings reach 9% on average.²⁴



Figure 8. Home energy demand under smart meter lever, (TWh/yr).

Note: BER lever set at Trajectory 1
Share of electrification set at A (<10%)
Fuel choice set at A (mainly gas, biogas if available)

