# *Electrification of cooking*

Currently all lighting and most appliances are powered by electricity; for cooking there is a choice between gas and electricity. In 2013, 65% of commercial cooking and 28% of domestic cooking was on gas, with the balance of 35% and 72% using electricity.

In the 2050 Calculator the lighting and appliance sector's future energy use is determined by:

- electrification (described here) and
- demand and efficiency (described on the 'Lighting and appliances' page).

The choice here is of different pathways rather than an increasing scale of effort. It is not to be seem as like Trajectories 1-4 for other sectors and have therefore been labelled as 'A' and 'B" rather than '1' or '2' i.e., Trajectories A and B.

## *Trajectory A*

Trajectory A assumes that in 2050 the cooking energy mix remains the same as in 2013; 65% of commercial cooking and 28% of domestic cooking is by gas and the rest is by electricity.

## *Trajectory B*

Trajectory B assumes that in 2050 all commercial and domestic cooking is electrified. Gas hobs and ovens have been replaced with traditional electric, induction or microwave alternatives.

## *Interaction with other choices*

The 2050 Calculator allows biogas to be used to replace natural gas in cooking. This can be chosen by dedicating land to biocrops and then choosing to turn those biocrops into gaseous fuel. However biogas is very limited in quantity and there are many other competing uses for biofuels across the transport, heating and electricity generation sectors.