Residential sector: Energy consuming device mixes for space heating, cooking and refrigeration

Description

This lever controls the mix of energy using devices for space heating, cooking and refrigeration. The lever adjusts when a more optimal mixture of technologies is reached – 2050 for level 2, 2040 for level 3, and 2030 for level 4.

Level 1

This level makes no change to the mixture of devices as in the base year. In the base year, heating is mostly electric, with wood and coal being used mostly by poorer households (low income). In terms of cooking, again mostly electric with some wood stoves being used for poorer households. Refrigeration is of standard efficiency fridges (around 70 efficient).

Level 2

In this level, an optimum mix of more efficient devices is obtained by 2050. In Space heating – people shift to using electric heaters and heat pumps (more efficient) and LPG heaters. In cooking people shift to using electric or LPG for cooking purposes.

All fridges are energy efficient fridges.

Level 3

This level brings forward the device mix by 10years – so the level 2 tech mix is reached by 2040 and not 2050.

Level 4

This level brings forward the optimal mix another 10 years, so the mix of devices as in level 2 is reached by 2030.

Technology shares									
	Level 2 (by 2050)			Level 3 (by 2040)			Level 4 (by 2030)		
Income level	low	mid	high	low	mid	high	low	mid	high
Electric cooker	40	40	60	40	40	60	40	40	60
LPG cooker	60	60	40	60	60	40	60	60	40
Electric heater	40	40	40	40	40	40	40	40	40
LPG heater	60	60	30	60	60	30	60	60	30
Heat pump heater			30			30			30