

Residential sector: energy consuming device mixes for lighting, water heating and appliances

This lever controls the mix of energy using devices for water heating, space heating, lighting, cooking and general appliances . Most households use electric geysers to heat water, and CFL's or incandescent light bulbs.

Level 1

This level makes no change to the mixture of devices as in the base year. Fluorescents and halogen lamps make up the majority for supplying lighting requirements. Coal and wood is still used mainly for water heating within poorer households. Light bulbs are typically fluorescent or incandescent bulbs.

Level 2

All lights are LED by 2050. Water heating for low income is 50% SWHs and 50% electric geysers with blankets. While mid income groups are 50% heat pumps, 30% SWHs and 20% geysers with blankets. High income groups have 60% heat pumps (the more expensive option) and the remaining 40% is split equally between SWH and electric with blankets. General appliances are energy efficient devices.

Level 3

This brings forward some of the targets by 10 years while some combinations of devices are more strict. Low income sees more poorer households with SWHs – 75%. Mid income households have predominately moved to heat pumps as have the high income groups. All lights are LEDs and all general appliances are energy efficient ones by 2040.

Level 4

This level brings forward the optimal mix another 10years, so the mix of devices is reached by 2030. However all low income groups have SWHs for water heating, and mid and high income groups have moved mostly to heat pumps with the remaining using SWHs.

Technology shares for lever positions									
	Level 2 (by 2050)			Level 3 (by 2040)			Level 4 (by 2030)		
Income group	Low	Mid	High	Low	Mid	high	Low	Mid	High
SWH	50%	30%	20%	75%	30%	15%	100%	30%	10%
electric geyser (with blanket)	50%	20%	20%	25%	5%	5%			
heat pump for water heating		50%	60%		65%	80%		70%	90%