

Cooking Demand

This Lever controls the sub-levers shown on the table, the ambition level is for the end year 2050.

Cooking demand is mostly fueled by traditional biomass mainly using the three stone stove. As at 2015, the rural area mostly depended on (98%) traditional biomass for cooking, while the urban area cooking is about 68% fueled by traditional biomass and the use of Liquefied Petroleum Gas (LPG) for cooking is about 10% while Electricity is only 5% mainly localized within the urban areas. This can be attributed to cost and availability among other reasons.

With expected economic growth and urbanization, this sector is expected to witness a gradual shift from traditional fuel (biomass) to more efficient clean technology and electricity only in ambitious scenario coming from other renewable sources reducing emission and pollution rate.

Key Interactions:

The use of efficient cooking(stove) technology reduces the energy demand for cooking and amount of fuel consumed for cooking which reduces the rate of deforestation there by reducing the rate of emission.

Level 1

Shows continuation of inefficient practices and therefore assumes the same percentage penetration of traditional biomass fuel for cooking as in 2015.

Level 2

Assumes a significant decrease in biomass fuel with about 20% from replacement of traditional stove to the use of efficient cooking stove, increase LPG use, introduction of new technology such as hydrogen fuel and biogas technology to further reduce the level of kerosene use to about 10%.

Level 3

This level will witness a further decrease in biomass use with about 40% from ban on use of open fire cooking technology to most efficient stove, increase in share use of cleaner fuels; biogas, hydrogen fuel and LPG to further eliminate kerosene fuel use.

Level 4

This assumes complete fuel switched to electricity for cooking with about 80% of it from renewables (solar, wind, biomass and nuclear plants).

Default Timing Start Year: 2015 End Year: 2050

Sub-Lever		Default Timing; Start Year: 2015 End Year: 2050					
Residential Cooking Demand	Type of Fuel	Unit	2015	level 1	level 2	level 3	level 4
	Biomass	share	0.65	0.35	0.30	0.20	0.00
	Kerosene	share	0.20	0.20	0.10	0.00	0.00
	LPG Gas	share	0.10	0.40	0.30	0.15	0.00
	Electricity	share	0.05	0.05	0.15	0.30	1.00
	Hydrogen	share	0.00	0.00	0.05	0.10	0.00
	Biogas	share	0.00	0.00	0.10	0.15	0.00
Non-Residential Cooking Demand	Biomass	share	0.65	0.35	0.30	0.20	0.00
	Kerosene	share	0.20	0.20	0.10	0.00	0.00
	LPG	share	0.10	0.40	0.30	0.15	0.00
	Electricity	share	0.05	0.05	0.15	0.30	1.00
	Hydrogen	share	0	0	0.05	0.10	0.00
	Biogas	share	0	0	0.10	0.25	0.00

COOKING DEMAND - DOMESTIC

