

Biomass Residue end-use

Around 33% of agricultural residue is used as fodder. Of the remaining, 62% is used for cooking, 16% is used for electricity and remaining is used for other applications. This lever makes the shift from end use of biomass in low-value applications to high-value biofuels and more use in electricity from level 1 to 4.

Level 1

Level 1 assumes that the share of non-fodder agricultural residue for household cooking decreases from 62% in 2015 to 44% by 2050. Further biomass based power generation capacity increases from 0.5 GW in 2015 to 1.2 GW in 2050, resulting in increase in biomass consumption from 5 million tons to 11 million tons. Liquid transportation fuel from agricultural residue is produced from 2020 onwards reaching up to 7% by 2050.

Level 2

Level 2 assumes that the share of non-fodder agricultural residue for household cooking decreases from 62% in 2015 to 25% by 2050. Further biomass based power generation capacity increases from 0.5 GW in 2015 to 1.9 GW in 2050, resulting in increase in biomass consumption from 5 million tons to 14 million tons. Liquid transportation fuel from agricultural residue is produced from 2020 onwards reaching to 15% by 2050.

Level 3

Level 3 assumes that the share of non-fodder agricultural residue for household cooking decreases from 62% in 2015 to 1% by 2050. Further biomass based power generation capacity increases from 0.5 GW in 2015 to 4 GW in 2050, resulting in increase in biomass consumption from 5 million tons to 24 million tons. Liquid transportation fuel from agricultural residue is produced from 2020 onwards reaching to 22% by 2050.

Level 4

Level 4 assumes that non-fodder agricultural residue would not be used for cooking purposes. Biomass based electricity generation capacity increases from 0.5 GW in 2015 to 3.4 GW in 2050, as higher share (36%) of agricultural residue is used for liquid fuel generation.

