Biomass Residue end-use

Around 33% of agricultural residue is used as fodder. Of the remaining, about 40% is used for cooking, 59% is used for electricity (including bagasse residue used for cogeneration plants) and the 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 to generate liquid fuels like biodiesel level 1 to 4.

Level 1

Level 1 assumes that the share of non-fodder agricultural residue for household cooking decreases from 40% in 2015 to 20% by 2050. Further biomass based power generation capacity increases from 1.6 GW in 2015 to 1.65 GW in 2050, resulting in increase in biomass consumption from 15.54 million tons to 16.1 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 40% in 2015 to 25% by 2050. Further biomass based power generation capacity increases from 1.6 GW in 2015 to 1.77 GW in 2050. 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 40% in 2015 to 20% by 2050. Further biomass based power generation capacity increases from 1.6 GW in 2015 to 2.07 GW in 2050, 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 1.6 GW in 2015 to 2.19 GW in 2050, and higher share (38%) of agricultural residue is used for liquid fuel generation.

