Small Hydropower stations

As at 2010 Nigeria had 0.064 GW capacity of small-scale. The small-scale hydro consist of power plant below 10MW and all the existing small hydro power plant are not connected to the national electricity grid. Rather, they are connected to specified area (mini grid).

Level 1

Level 1 assumes that the total small hydropower capacity is maintained at the 2010 level of 0.064 GW. This will generate approximately 0.28TWh of electricity at 50% capacitor factor.

Level 2

Level 2 assumes that the small hydropower capacity reaches 0.53 GW by 2050 through investment in building new small scale hydropower plants. This will generate approximately 2.32TWh of electricity at 50% capacity factor.

Level 3

Level 3 assumes the total small hydropower capacity reaches 1.75 GW by 2050. This capacity represents 47% of the country's small hydropower potentials. The capacity will generate about 7.67TWh of electricity.

Level 4

Level 4 assumes the hydropower capacity reaches 3.5 GW by 2050, through utilising about 95% of the country's hydropower potentials. This capacity can generate 15.33TWh of electricity. This can be achieved through public private partnership (PPP) due to high investment cost that is required in the implementation.

Small Hydro Power Plant