

Residential Lighting & Appliances

The residential electricity consumption in Nigeria is estimated to be about 58% of the final electricity demand as at 2010. Lighting and major appliances like ceiling fans, televisions, refrigerators and others account for about 60% of electricity consumption in the residential sectors. The technologies employed are mostly less efficient types. With the rising population and more access to electricity the demand for energy in the residential sector will continue to rise. The electricity demand per person for lighting and appliances is 131kWh.

Level 1

Level 1 assumes an increase in lighting and appliances and 100% access to electricity, the demand for energy in the residential sector will increase significantly with increase in population, change in life style due to increase in income and economic activities. The electricity demand per person for lighting and appliances will be 2,525kWh.

Level 2

Level 2 assume that 20% of inefficient appliances will be replaced by efficient types. i.e. LED TVs, refrigerators. Government, through its policies will encourage efficient use of energy for lighting/other appliances, building designs and orientation. The use of incandescent bulbs is reduced while that of CFL is increased along with a small share of LED lights, as well as the use of natural lighting and motion sensors facilities for lighting will further decrease electricity consumption. The electricity demand per person for lighting and appliances will be 1,894kWh.

Level 3

Level 3 assumes that the use of inefficient appliances decreases by about 50% with efficient technologies by 2050. The electricity demand per person for lighting and appliances will be 1,263kWh.

Level 4

Level 4 assumes 100% total penetration of highly efficiency technologies in the lighting and other appliances use for residential sector. The electricity demand per person for lighting and appliances will be 631kWh.



Lighting and appliances

