

RENEWABLE ENERGY

Electricity Requirements

The International Energy Agency (IEA) estimates over 87% of world energy consumption is derived from the combustion of fossil fuels and global energy consumption is projected to increase by 50% from 2005 to 2030 with non-OECD countries increasing by 85%, compared with an increase of 19 % in the OECD countries.

Energy consumption is loosely correlated with gross domestic product (GDP), however, differences may be observed between the most highly developed countries, such as Japan and Germany with 6 kW per person and United States with 11.4 kW per person. In developing countries such as India, the per person energy use is closer to 0.7 kW.

The US consumes 25% of the world's energy (with a share of global productivity at 22% and a share of the world population at 5%) however the most significant growth of energy consumption is currently taking place in China, which has been growing at 5.5% per year over the last 25 years and with its population of 1.3 billion people it is consuming energy at a rate of 1.6 kW per person.

In developing markets with strongly growing GDP, such as Qatar, Saudi Arabia and India, installed electricity capacity will require growth of over 400% by 2030 in order to sustain demand.

