

ENERGY CONSUMPTION

OVERVIEW



In 2011 the per capita consumption of energy, expressed as kilograms of oil, in the developed world was 4,820kg - over four times the figure in the developing world of 1,127kg.

In the same year, the developing world's population of 5.651 billion was 4.5 times larger than the developed world's statistic of 1.235 billion.

These enormous disparities mean that economic shifts in the developing world will see significant increases in demand for and consumption of energy.

ENERGY EFFICIENCY

Energy efficiency, already an economic imperative, will increasingly play a central role in the infrastructural development, urban planning, food production and in technological innovation. It has three principal aspects:

- 1) using less energy - in buildings, transportation systems, lighting and industrial control systems
- 2) moving less - to access raw materials and to produce and distribute finished goods using new 3D printing technologies, geospatial systems, organic foods, lightweight materials and batteries
- 3) less with more - the application of cloud computing and sensors to create SMART cities and power grid management.

RENEWABLE ENERGY

The increasing demand for energy is seeing an accompanying increase in demand for renewable and alternative energy and increased pressure for its costs to come down. Our focus is on all renewable and alternative energy sources:

- Wind
- Solar
- Fuel cells
- Hydro electric
- Tidal power generation
- Geothermal
- Forestry

Our approach takes into consideration the whole value chain and the manufacture of specialist components.