

# Application Network Energy

We all use energy - every day, directly and indirectly. Limited reserves of fossil fuels and increasing environmental pollution require using energy more efficiently. World energy consumption is currently based almost to 80 % dependent on fossil fuels, with half of the total energy is consumed by nearly one-sixth of the industrialised world population. The high energy consumption, particularly in industrialised countries has negative consequences: climate change, pollution, land and resource consumption, economic dependence and costs. On the other hand saving energy, energy efficient and renewable energy production and use offer great potential for cost reduction, environmental and climate protection and economic development. The world's economically exploitable deposits of oil, gas and coal are limited. The limited resources and environmental pollution, especially the climate-changing CO<sub>2</sub> emissions, require the transition to economical energy technologies and renewable energies. (Source: [www.thema-energie.de](http://www.thema-energie.de) <sup>[1]</sup>)

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Global energy consumption is increasing by about 2 % per year. According to the current information from the International Energy Agency (IEA) an annual growth by 2.5 % is being expected. The increasing energy consumption by 2 - 2.5 % annually does not appear dramatically in the first instance. However, if it would continue at an unabated pace we already had a requirement of about 5'700 Peta watt-hours (PWh) per year in 2200, which means a 45 times higher energy consumption than today (125 PWh). It can not be predicted yet, where the world's energy consumption will eventually level off. Surely it will be higher than today's 125 PWh year and lower than would be expected according to the extrapolation of the current trend (about 5700 PWh in 2200).

Reducing energy consumption is one of the most important global issues that, for Germany play an important role in our time. One way to reduce energy consumption is to use intelligent electronic components and systems. According to the Multi-Annual Strategic Plan (MASP), which was published by ENIAC, up to 0.7 million GWh calculated from today's energy consumption can be saved. (Source: [www.thema-energie.de](http://www.thema-energie.de) <sup>[2]</sup>).

## Organisations

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**Source URL:** <https://project.edacentrum.de/en/networks/applications/energy>

### Links:

[1] <http://www.thema-energie.de/>

[2] <http://www.thema-energie.de>