

Energy Efficiency – the Role of Power Electronics

Energy saving, improved energy efficiency and environmental protection are ubiquitous topics in society, in Europe and globally. Despite many efforts to save energy, demand for electricity is expected to grow and much faster in comparison with other energy sources over the next three decades. Today 40% of all energy consumption is in electrical energy, but this will grow to 60% by 2040. On the other side, the share of electrical energy which will be controlled by power electronics e.g. in variable speed drives will

increase from 40% in 2000 to 80% in 2015. Power electronics is the key technology to control the flow of electrical energy from the source to the load precisely according the requirements of the load. It is responsible for the reliability and stability of the whole power supply infrastructure in Europe from the sources, the energy transmission and distribution up to the huge variety of applications in industry, transportation systems and the home & office appliances.

The position paper from ECPE summarises the results and key statements from the European Workshop on 'Energy Efficiency – the Role of Power Electronics' held on 7 February 2007 in Brussels with 125 participants from 20 European countries. The presentations from the workshop are available for download on the ECPE web site.
http://ecpe.org/power_electronic/power_electronic_e.php

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