

'Factories of the Future', 'Energy-efficient Buildings', and 'Green Cars'

Three new European Technology Platforms are started this year

Nanoelectronic systems are building the physical fundament for Information and Communication Technologies (ICT). The European Commission (EC) is funding Public Private Partnerships (PPP) to foster the evolvement of European markets by European Technology Platforms (ETP). This article gives an overview about three new ETPs where nanoelectronic R&D is required to fulfil some of the overall goals.

Themes are part of a classification scheme in FP7. Cordis organizes information using a subject index classification scheme (SIC). More information about themes can be found here: http://cordis.europa.eu/themes/home_en.html

More information about EeB can be found here: http://ec.europa.eu/research/industrial_technologies/lists/energy-efficient-buildings_en.html

Nanoelectronic design is a success story over several decades. The bases to create new applications are laid down by the inspiring innovation rates of technology and its enabler electronic design automation (EDA). First markets – like personal computers, automotive electronics or mobile phones – are deployed. New markets are on the horizon – like ICT based energy management. To be successful in the future nanoelectronic design automation needs to step closer to application to fit the technology opportunities to the market requirements.

The technical requirements of new markets will lead into several application specific design platforms. In this article three new ETPs are presented that started this year

- » Factories of the Future (FoF)
- » Energy efficient Buildings (EeB)
- » Green Cars (GC)

Like in ENIAC, the new ETPs will be funded partly by the EC. Other funding will be carried out by national governments of the R&D partners and the industry itself. Several coordinated calls for the three new ETP proposals are already launched in summer this year.

Energy-efficient Buildings (EeB)

Energy-efficient buildings (EeB) is target to boost the construction sector, and aims at promoting green technologies and the development of energy efficient systems and materials in new and renovated. Buildings represent 40 % of energy use and 33 % of Green House Gas emissions. The objective is: Developing building and district concepts with the potential to reduce energy use. Calls will be published together with the themes: "Nanosciences and nanotechnologies, Materials & new Production technologies" (NMP) Energy" (ENERGY), "Information and Communication Technology" (ICT), and "Environment including Climate Change" (ENV). Results with an ICT focus are expected in:

- » Monitoring tools: Rapid on-site measurement of actual performances
- » Systems and equipments: Integrated Photovoltaic (PV) solutions and ICT for energy efficiency

- » Demonstration: Integration of innovative technologies

Green Cars (GC)

The Automotive sector gives jobs in the EU directly to 2 million people. In Europe 73 % of oil is used in transport. It is urgent to find alternatives to fossil fuels. The target of the European Green Cars initiative (EGCI) is to support the development of new forms of road transport. EGCI is supported by the European Road Transport Research Advisory Council (ERTRAC) which was established to meet the continuing challenges of road transport. The scope of this initiative is very broader and research is just one part of it. One objective is: Supporting the emergence of more efficient and sustainable hybrid and electric cars. Calls will named together with the themes "Transport including Aeronautics" (TRANSPORT), NMP, ENERGY, ICT, ENV. Results with a focus on ICT are expected in:

- » Electrification of road & urban transport: Efficient components and their integration within vehicles, along with vehicle-to-grid interfaces
- » Logistics & co-modality: Optimisation of global transport systems and traffic flows

More information about GC can be found here: http://ec.europa.eu/research/industrial_technologies/lists/green-cars_en.html

newsletter edacentrum - Probeauszug

Bestellen Sie sich den kompletten Artikel über newsletter@edacentrum.de

edacentrum, Hannover, Oktober 2009

More information about FoF can be found here: http://ec.europa.eu/research/industrial_technologies/lists/factories-of-the-future_en.html

Author & Contact (European Projects)

Dr. Volker Schöber
fon: (05 11) 7 62 – 1 96 88
schoeber@edacentrum.de