

## ZEROPOWER

### Co-ordinating Research Efforts Towards Zero-Power ICT

A European Coordination and Support Action to facilitate broader interaction among the communities of scientists interested in energy harvesting at the nanoscale, low power devices and energy-sustainable ICT.



#### Contacts

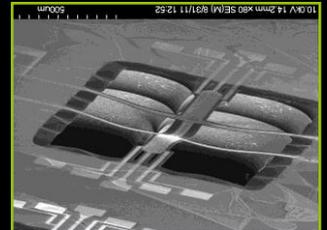
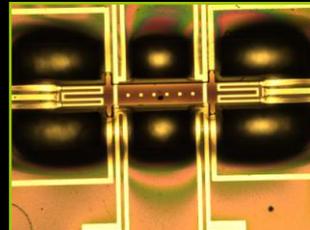
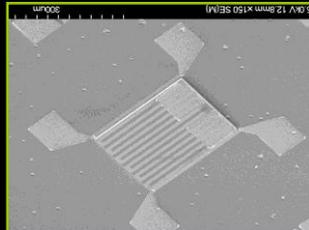
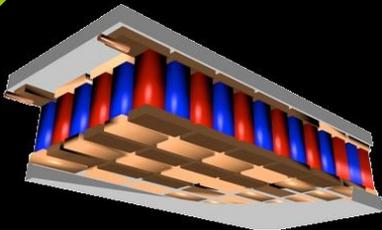
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[www.zero-power.eu](http://www.zero-power.eu)

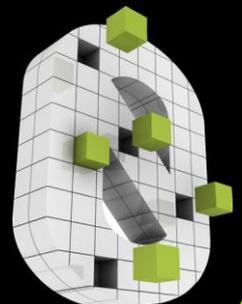


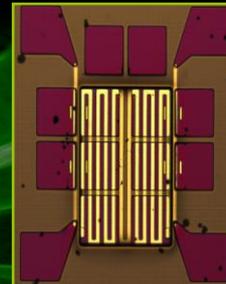
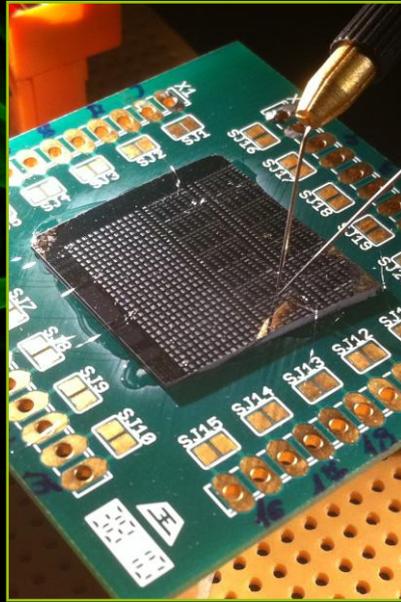
#### Funded by

**European Commission (GA n. 270005)**  
 FP7 – Future and Emerging Technologies



- Promotion of European research on ICT-Energy related issues
- Increase of collaboration between partners and international stakeholders
- Definition of a Strategic Research Agenda on energy-sustainable ICT
- Dissemination of knowledge and results
- Training and outreach activities





### NiPS Laboratory (Italy)

Università di Perugia <http://www.nipslab.org>  
project NANOPOWER: <http://www.nanopwr.eu>



### Tyndall National Institute (Ireland)

University College Cork <http://www.tyndall.ie/>  
project SiNAPS: <http://www.sinaps-fet.eu/index.html>



### NANERG LAB (Spain)

Universitat Autònoma de Barcelona  
<http://grupsderecerca.uab.cat/nanerglab/>



### School of Engineering (United Kingdom)

University of Glasgow  
<http://www.gla.ac.uk/departments/electronicseletricalengineering/>  
project GREEN Silicon: <http://www.greensilicon.eu/GREENSilicon>



## Mission & Partners

The goal of this project is to create a **coordination activity** among consortia involved in "Toward Zero-Power ICT" research projects (FET proactive call FP7-ICT-2009-5, Objective 8.6) and communities of scientists interested in **energy harvesting** and low power, **energy efficient ICT**. This activity is aimed at assessing the impact of our research efforts and proposing measures to increase the visibility of ICT-Energy related initiatives to the scientific community, targeted industries and to the public at large through **exchange of information**, dedicated **networking events** and **media campaigns**.

## Energy from the Microworld

Interpreting and modeling thermodynamic processes at nanoscale is one of the strategic goals of contemporary science. Heat transfer, light absorption and thermoelectric effects at the nanoscale together with a new paradigm to study and use the apparently useless noise, are some of the topics of the research on microenergetics that can trigger the XXI century industrial revolution.

## Communicating Zero Power Culture

Tiny, invisible green resources are hidden at the bottom: microenergies. The challenge is both to understand them scientifically and to describe them to stakeholders and citizens. New landscapes are about to be described that will be relevant for everyone.

## Zero Power Technologies

Smart devices for automotive, nano sensors for healthcare or environment, intelligent pills to explore the human body from the inside or sensors to monitor complex structures such as giant bridges and buildings are some of the technologies we are looking for in that chase for a more sustainable life and for an efficient ICT world.

