Lecture Announcement

**Towards Sustainable Energy Systems in Europe**

**– A Challenge for Research and Development**

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**Abstract**

A sustainable energy supply is a must for Europe’s economy, citizen and our societies. As well as from an ecological but also economic and social point of view our energy future has to be based on available resources, not damaging the environment and to be achievable and reliable for everybody and all business. This is a big challenge for all actors in this field but especially the contribution of research and development has to be directed to the future of energy supply. This lecture will focus on general issues of energy systems, highlighting the issue of renewable energies, energy efficiency and energy systems in context with special questions of socio-economic importance such as public acceptance. The road map of German policy on the transition of its energy system is regarded as a template for any transformation of energy systems Europe. Germany decided in 2011 to shut down its nuclear base load power plants within a decade, simultaneously still meeting the goals of reducing carbon footprint and maintaining the reliable energy supply to its industry and society. In Europe we are facing the European Strategic Energy Technology Plan (SET Plan) as an agenda towards the sustainable energy supply in 2050. Not all European member states have the same strategy and it is quite clear that individual solutions will differ. But it is a common understanding that Europe’s future will need not only excellent technologies but human resources which are able to speed up innovation pathways. Young scientists and engineers have to understand the requirements of innovation processes, the needs of successful economic implementation and therefore the thinking in the dimension of entrepreneurship. This is a special paradigm of the European Institute of Innovation and Technology (EIT). Greece as a member of the European Union offers a huge variety of potential solutions for this innovation pathway for a sustainable energy future and also business creation in this sector. Greece is compared to Germany blessed with much more solar energy and wind input. It should use its intellectual and natural potential to contribute to the European energy roadmap. This lecture is also an invitation to increase the cooperation between Greece, its researchers and industry and its European partners.

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