Assessing the Potential for Smart Energy Grids in the Northern Periphery

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Energy Grids in the Northern Periphery
sensitive nature that regenerates slowly. All this in an environment characterized by an ecologically local natural resources, causing conflicts related to multiple and competing current economic development gives grounds for an intensive exploitation of strength in the so-called “heavy high-tech” industry. At the same time, the challenges. All are rich in natural resources, with high standards of services, countries of this region, are characterized by a common set of strengths and largest electricity market in the world [4], Finland, Sweden and Norway, the energy market in the northernmost North Calotte Area. Members of the

This project focuses on a geographical area denominated as Northern Periphery (NP) (Fig. 1). Regions comprised in the NP area share important common features in terms of challenging climate, population density, and natural environment. Traditionally very resource intensive, they have been dependent of fossil resource of energy due the challenging topography and harsh winters.

In particular, our work aims to assess the potential for a smart grid based energy market in the northernmost North Calotte Area. Members of the largest electricity market in the world [4], Finland, Sweden and Norway, the countries of this region, are characterized by a common set of strengths and challenges. All are rich in natural resources, with high standards of services, widespread use of technology, high quality of education and a particular strength in the so-called “heavy high-tech” industry. At the same time, the current economic development gives grounds for an intensive exploitation of local natural resources, causing conflicts related to multiple and competing interests. All this in an environment characterized by an ecologically sensitive nature that regenerates slowly.

Micro Energy to Rural SMEs

The aim of the “Micro Energy to Rural Enterprises” (MicE) project [5] is to promote competitiveness through increasing the capacity for innovation and networking in rural and peripheral areas, and strengthening the synergies between environmental protection and growth in remote and peripheral regions. This project seeks to enhance the capacity for self-sustaining business and organisation life in rural NP regions. This can be achieved by developing a service that will make energy from waste technologies for small scale renewable energy generation available to small and medium-sized enterprises (SMEs) in rural NP regions on a viable and economically feasible scale.

References
[3] [http://micre.eu](http://micre.eu)