

Abstract for the Conference Theme 'Towards Low-Carbon Energy Systems ' at the STS Conference in Graz 2014

Barriers, Success Factors and Policy Measures for the Decarbonisation of Neighbourhoods across Europe

Buildings currently represent almost 40 % of total final energy consumption in Europe. Therefore reducing the energy consumption of buildings and resulting emissions is crucial, if a transition towards a decarbonised energy system is to be achieved. Tackling whole neighbourhoods, rather than individual buildings, can bring advantages, for example due to economies of scale and scope for load balancing. In 58 sites projects have benefited from EU-funding and implemented a combination of sustainable construction measures, the implementation of renewable energy sources and efficiency measures to existing and new buildings within neighbourhoods. Awareness and acceptance measures aiming at behavioural change were core elements of these projects. Usually, they were closely linked into regional strategies and climate policies. Due to their size number and ambition, these pilot projects helped to build a critical mass of low carbon neighbourhoods and many had impacts on policy developments. Analysis of these projects and their socio-political context gives insights into technical, social and economic barriers and success factors for tackling emissions on neighbourhood level. Based on these, recommendations have been compiled by the authors in order to develop better climate change mitigation and energy policies and action plans at local, national and EU level.

The presentation will highlight experiences and results of the accompanying research gathered from 58 projects in 23 European countries.

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