

## **Green energy hubs for local integrated energy communities**

Local energy communities are collective energy actions that include citizen participation in the energy system and from which benefits are derived for members of local communities. They represent a crucial element for a bottom-up strategy of building the energy infrastructure and to develop innovative nanotech tools for better planning and performance of local energy communities, integrating distributed energy resources and multiple energy carriers at various levels. By promoting the notion of the Energy Hub as a conceptual model for controlling and managing multi-vector and integrated energy systems, this tools will promote tangible benefits in terms of sustainability and energy security for all stakeholders in local energy communities. The results will benefit local prosumers by reducing energy costs and promoting local low-carbon energy.