

What is CONCERTO?

"The CONCERTO initiative, launched by <u>the European Commission</u>, is a Europe wide initiative proactively addressing the challenges of creating a more sustainable future for Europe's energy needs. Today, there are a total of 58 <u>communities</u> in 22 projects, each working to deliver the highest possible level of self-supply of energy. CONCERTO is part of the <u>framework research programme</u> supervised by <u>the DG Energy and Transport</u> of the European Commission

CONCERTO IN A NUTSHELL

CONCERTO supports local communities, as clearly defined geographical areas or zones, in developing and demonstrating concrete strategies and actions that are both sustainable and highly energy efficient. Interactions and relevant energy flows between centralised and decentralised energy supplies and demands can be identified, measured and assessed.

The CONCERTO initiative has been only possible as a result of the strong commitment from the relevant, local authorities and includes technical experts, academics, and private companies from across Europe.

Throughout the 22 participating CONCERTO projects the focus is primarily on demonstrating the environmental, economic and social benefits of integrating renewable energy sources (RES) together with energy efficiency (EE) techniques through a sustainable energy-management system operated on a community level.

The CONCERTO initiative provides a platform for the exchange of ideas and experiences between the 58 CONCERTO demonstration communities, and other cities that are committed to introducing similar strategies. Communities participating will benefit from the shared expertise of Europe's most advanced communities, active in the field of energy sustainability.

MOTIVATION BEHIND CONCERTO

CONCERTO is the manifestation of the political desire for further action in the field of sustainable energy competitiveness and the internal market and the environment. The main impulse for this European initiative is the strong desire in all communities, among politicians, planners, energy service providers, and citizens to develop and demonstrate high degrees of decentralised energy supply, integrated with renewable energy sources (RES) as well as the conscientious application of leading energy efficiency (EE) measures in various end use sectors. In this respect, CONCERTO involves the promotion of energy efficient techniques in connection with the promotion of renewable energy sources in the European Union for the future health and wellbeing of all citizens.

CONCERTO FOCUS

Each CONCERTO community addresses its own specific solutions. The initiative as a whole, focuses on the integration of renewable energy sources (RES) and energy efficiency (EE) measures, involves eco-buildings integrating onsite RES with energy efficient building design and management, poly-generation, combined heat and power (CHP) and district heating (ideally using bio-mass). In addition, intelligent management of demand as well as local distribution grids and distributed generation are included. Yet another aspect of intelligent and innovative integration of RES and EE addressed by the CONCERTO initiative is how to tackle the issue of efficient energy storage in order to cover variability of RES supply, be it daily or seasonal.

What does CONCERTO do? CONCERTO ACTIONS

CONCERTO projects are expected to produce well monitored field experience of energy supply and demand patterns to be communicated for the benefit of other CONCERTO projects and serve as a basis for future actions.

In parallel to research conducted on technical aspects of RES, the socio-economic research component will analyse the local trends in energy costs, prices and savings, as well as social impact, quality, and added value of the energy services provided. The promotion of the use of renewable energy sources (RES) brings best results when combined and linked with activities towards energy efficiency.

Therefore, the CONCERTO initiative stresses the significant increase of the share of RES supply (green electricity, heating /cooling etc...) simultaneously with the reduction of energy demand and overall management of energy.

BENEFITS FOR CONCERTO COMMUNITIES

Communities involved in the CONCERTO initiative produce substantial benefits for all citizens at a local, regional, national and international level when fighting the climate change and improve the security of energy supplies.

In return there are a wide range of benefits and incentives for communities, small and large, engaged in the CONCERTO initiative e.g.:

- Communities will benefit from visibility as 'role models' and forerunners in the field of advancing means for sustainable energy management, which contribute to the European Union's global goals to fight climate change and improve the security of energy supplies.

- Involvement in the CONCERTO initiative will provide several opportunities to bring together the CONCERTO communities for meetings. (CONCERTO fora as an occasion to network & exchange information on integrated strategies)

- Inhabitants of all communities benefit from a cleaner more pleasant local environment, thus improving the quality of life and health of citizens.

CONCERTO VISION

Vision

CONCERTO significantly influences all relevant actions and initiatives in the construction and energy supply sector in cities and communities relating to energy performance and use of resources. Politics, regulations, construction, energy industry, finance as well as technology, research and education have been transformed through the initial impulse of CONCERTO and are following the global CONCERTO vision of environmental, social and economic sustainability.

CONCERTO inspires an innovative energy policy on a European level and contributes to create an energy independent Europe. Through functional sustainable solutions Europe positions itself as a pioneer amongst the global players and thus acts as an important role model and source of inspiration for innovative replication in other continents.

Mission Statement

CONCERTO enables all relevant stakeholders to change their attitude and social habits o n a global as well as local level through a European wide network facilitating knowledge transfer and exchange of experiences. The CONCERTO network acts as coach and mentor to all stakeholders and supports relevant decision makers to pioneer innovative solutions.

CONCERTO encourages the industry to reap the benefits of sustainable solutions by investing in economically viable technology and systems to act as driving force in the use, implementation and opening of the markets for new systems.

CONCERTO sets higher performance standards in energy efficiency and integration of renewables and thus drives improved standards and regulations on European, national and local level.

CONCERTO acts as a motivator and driving force in the field of renewable energy by demonstrating that renewables can be implemented in a wide range of applications. Through quality demonstration projects CONCERTO significantly increases the acceptance of renewable energy systems by the end users and thus changes the mainstream.

CONCERTO highlights the demand in particular fields of research in order to further open up the potential for Europe as a leader in the innovation and implementation of new energy technologies. The CONCERTO scientific community facilitates the knowledge exchange within Europe as well as within the global renewable energy expert market thus acting as global multipliers for research in that field.

CONCERTO fosters integrated solutions to combine in a holistic manner all aspects of energy efficiency, poly-generation and renewables with a strong socio-economic and educational focus to facilitate a value for the citizens where the overall benefit is more than the sums of its parts. This presumes that all relevant players at all levels – from the politicians, the energy providers, the developers and planners – play together to achieve this goal of true sustainable construction.

CONCERTO gives new impulses to the regional development encouraging new co-operations between rural and urban areas opening up new renewable energy markets. This strongly strengthens the rural economy and enables technology transfer and new partnerships between the individual regions.