

CONCERTO offers innovative approaches for smart cities and communities:

ENERGY EFFICIENCY MEASURES

Innovative technologies ready to be applied

SUSTAINABLE BUILDING AND DISTRICT DEVELOPMENT

Reduce fossil energy and increase renewable energy in new eco-buildings and refurbished buildings

MANAGING CHANGE

Integrated planning for "smart cities"

AFFORDABLE ENERGY

Finance comprehensive energy efficient refurbishments through energy savings

RECONCILING FINANCIAL INTERESTS

Investment and life cycle costs considered at project start ensure equal benefit for users and investors

ENERGY TRANSPARENCY FOR CITIZENS

Built examples show the benefit of change to end users

Innovation in 58 cities in 23 countries today – smart solutions applied EU-wide tomorrow

CONCERTO at a glance

- 1,830,000 m² of low energy consumption buildings built or refurbished
- 530,000 tons of CO₂ emissions saved per year
- 5.2 million people living in CONCERTO cities/communities

CONCERTO has shown that

- Innovative technologies are available and ready to be used
- The built environment can cut its CO₂ emissions by up to 50%
- Affordable infrastructure to produce, supply and distribute clean energy for the built environment can be implemented
- Renewable energies can be integrated into the urban environment

CONCERTO cities are role models for smart cities and communities

Find more on: www.concerto.eu



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Role models for smart cities and communities

Cities and communities can meet the energy and climate challenge

Directorate-General
for Energy



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Cities are facing common challenges:

HIGH ENERGY DEMAND

Cities account for about 70% of total energy use in Europe¹

WASTED ENERGY

Huge amounts of energy are wasted in the existing building stock and old energy supply infrastructure

LACK OF INTEGRATED PLANNING

Too little coordination among key stakeholders often leads to an insufficient integration of energy aspects when planning and building in cities

LACK OF CAPITAL

Essential investments are missing to match the enormous needs for refurbishing the existing building stock and infrastructure

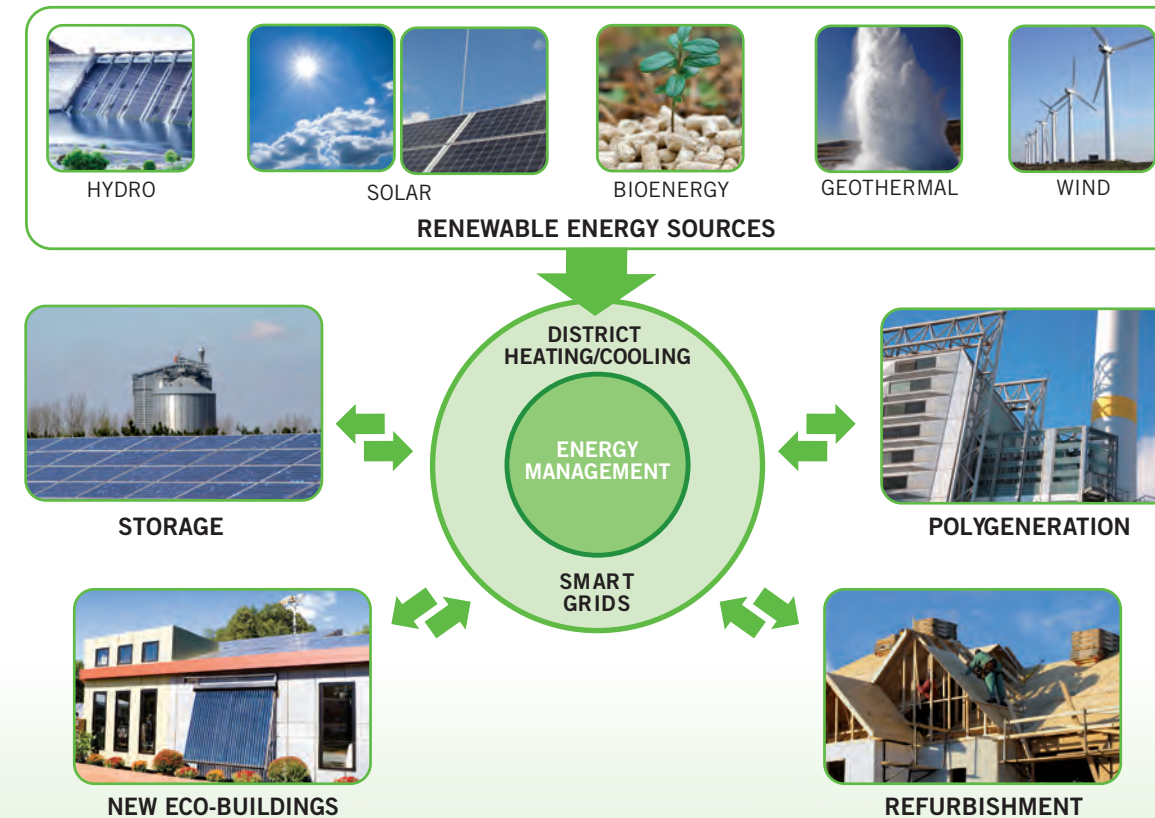
CONFLICTING FINANCIAL INTERESTS

Investors, owners and occupants often have different financial interests and return horizons

RELUCTANCE TO BEHAVIOURAL CHANGE

End users do not easily embrace changes even though they bring about lower energy costs and more comfort

Integrating multiple technologies



Integrating all aspects

CONCERTO cities and communities work together to create and implement innovative solutions for energy efficiency and increased use of renewable energy:

- Design and retrofit of high performance buildings that need as little energy as possible to power their heating, lighting and cooling systems
- Intelligent energy management systems for optimised energy balance
- All actors take planning decisions with long-term energy implications together to guarantee sound implementation
- Monitoring and analysis of energy performances, emissions, social, environmental and economic benefits



¹ Source: International Energy Agency, 2008, Data 2006, World Energy Outlook 2008, 1e edition, Paris, IEA