





# CONCERTO 🔀

POLICY RECOMMENDATIONS PUBLICATION EXECUTIVE SUMMARY



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# WHAT IS CONCERTO?

The CONCERTO initiative was established in 2005 by the European Commission. During its creation, the defining concepts in mind were sustainability, replication and cost effectiveness, and the project aimed at revolutionising and modernising communities' energy systems.

With an initial network of 27 cities, the CON-CERTO concept ignited, and five years later 58 cities in 23 countries across Europe are demonstrating and over 70 associated communities benefit from the growing stock of knowledge. The CONCERTO initiative highlights the role and contribution of local authorities (primarily city administrations) as coordinators of integrated actions for sustainable urban development with a focus on energy issues. The cities have a mission to research and demonstrate how energy efficiency and renewable energy use can be incorporated into cities' buildings on a large scale. CONCERTO is itself in every sense on a large scale, with CONCERTO cities comprising a population of approximately 5 Million people with about 500,000 inhabitants directly - or indirectly - affected by CONCERTO activities.

In 2010, after five years of CONCERTO, the results, findings and recommendations are available in several reports and publications:

- ¥ The CONCERTO Guide
- ✗ Planning and implementation process assessment report & Executive summary
- ✗ Report on the quality of the integration of renewable energy supply with energy efficiency & Executive summary
- ✗ Report on the assessment of the overall energy performance of the CONCERTO I communities & Executive summary

- ✗ Report on the socio-economic assessment & Executive summary
- ✗ Publication on policy recommendations & Executive summary
- **x** 3rd CONCERTO DVD, including all above mentioned publications in electronic format

The purpose of the publications is to share the results of the CONCERTO initiative. The different publications will provide information to relevant actors aiming to implement sustainability projects in cities across Europe. By sharing this knowledge, the publications will provide an outline of what can be done and how local sustainability can become a reality. All publications can be accessed via the European Commission's DG ENERGY website at http://ec.europa.eu/energy/renewables/concerto\_en.htm

#### The CONCERTO initiative at a glance

- ✗ 58 cities in 23 countries, close to 70 associated communities
- ¥ 1,830,000 m² of buildings built or renovated
- ¥ 530,000 tons of CO₂ emissions saved per year
  - ✗ 5,2 million people live in the CONCERTO cities



## **1.** TARGET GROUP

The Publication on policy recommendations is relevant to all cities that are presently fulfilling GHG and fossil fuel reduction requirements by increasing energy efficiency and renewable energy technologies. The report provides an overview of new mechanisms tested by CON-CERTO concerning ways to include energy planning in the urban decision making process, how to collectively combine and commit stakeholders during the design, planning and implementation phase, how to combine funding schemes, when and how to use socio-economic and dissemination measures. It is addressed to a wide range of stakeholders typically involved in the CONCERTO projects, and more generally policy makers and top administrators on the local, regional, national and European level.

## **2.** STRUCTURE

The Report is based on a logical step approach as presented in the graph below. The main questions asked as part of the policy analysis included:

 whether the cities are on the way to achieving the initially stated targets;

- ✗ The role played by stakeholders to ensure that targets are achieved;
- **X** Type of barriers that have prevented cities from achieving their targets;
- ✗ The combinations of policy instruments and measures most effectively used to achieve targets;
- X Whether CONCERTO projects generated innovative policies for larger scale replication.

Concerning the set of policy recommendations, a methodological bottom-up approach has been used by analysing the impact of European legislation on CONCERTO cities. This has been done in conjunction with effective policy measures derived from national and local legislation and also coupled with economic funding schemes.

#### I. Role of Stakeholders

The involvement and pro-active attitude of stakeholders is a key factor that has contributed to the success of any project realisation. The main challenges encountered by CONCERTO cities have been how to bind local stakeholders in the initial phase in order to fix ambitious targets and how to keep the mix of stakeholders' committed and motivated for energy measures implementation in the long term.

From a policy perspective, the analysis has identified the degree of energy policy awareness in all typologies of stakeholders involved contractually or on a voluntary basis in CON-CERTO projects and their ability to affect the implementation of energy policies.

Figure 3 synthesises the most influential stakeholders in CONCERTO according to those with the highest levels of leadership, power, knowledge, influence and interest in energy policy. Four boxes classify groups of stakeholders, ranging from medium to high interest, knowledge and power.

The stakeholders identified in the orange box are defined as the most influential. In CON-CERTO projects results show that the projects which experienced a smooth implementation are those led and coordinated by local and regional authorities. This group of stakeholders is the one with a political mandate to govern and guide their territories, provide services, and manage municipal and regional assets. They also have the legislative power necessary to implement changes in their own operations and can activate funding schemes supporting urban and regional sustainable initiatives in their community. The most common policy instruments used by public authorities in CONCERTO projects to bind and involve a large number of stakeholders have been voluntary agreements such as a "Charter", a "Manifesto" or the creation of an association.

In the CONCERTO implementation phase, the housing, environmental or urban regeneration departments of municipal and regional administrations, acted as supervising bodies by managing, control and monitoring the process. Energy agencies, municipal utilities, public social housing companies, ESCOs, building constructors and housing cooperatives included in the blue box, are key actors in CONCERTO project's implementation with high interest and knowledge on energy policy issues and access to low-cost capital. They have been contractually involved in the projects as executors.

In particular, in CONCERTO projects energy agencies have proven to play a dual strategic role towards public administration through mid-term action plan agreement and towards citizens, with the main goal to promote sustainable acceptance.

Municipal utilities present in 42% of the projects provided support by negotiating with building owners and also by helping to overcome legal barriers resulting from difficulty to enforce the use of community energy systems. Social housing cooperatives and ESCOs commitment have been the link between tenants and home-owners, la last one as service providers thanks to long term contracts.

Stakeholders in the green box have low to medium power, interest and knowledge in policy







Figure 3: Effectiveness of stakeholders' involvement



implementation. This is the case for funding organisations, other utilities and energy supply companies. Social housing associations, private real estate, home owners, co-ownerships and tenants associations have been affected by CONCERTO projects but not directly involved in the implementation phase.

#### II. Present Status Of Concerto Projects And Main Barriers Encountered

The comparative analysis of CONCERTO cities has shown that the current real-estate and financial crisis, together with the increasing oil prices, is one of the main reasons for project implementation delay. This had a strong impact on private investors. Many of them encountered difficulties in respecting construction deadlines, especially in Spain and the UK. Furthermore, some countries had to shift financial support towards increasing employment measures instead of renewable and energy efficiency. This had a substantially negative impact on the sector, slowing the development of new energy technologies and supplies.

There are also other barriers related to external factors independent from CONCER-TO cities. These include socio-economic factors as well as the status of technological development in a given country or region. The complex nature of administrative procedures for construction authorisation, environmental permits and grid connection time lag, remain the major bottlenecks according to the CON-CERTO projects' experience.

The typology of barriers encountered by CONCERTO cities are illustrated in Figures 4.

As indicated in the graph above, the most common barriers encountered by CONCER-TO projects occurred in the initial phase. In particular they have been related to a lack of knowledge on innovative solutions, especially in the construction of renewable energy plants. Acceptance on changes by citizens, local environmental associations as well as technical experts has been overtaken thanks to the support of accompanying socio-economic activities to inform about the projects as well as free consulting initiatives. The presence of "Energy Managers" within municipalities as a result of some CONCERTO projects has fostered a pro-active relationship with local stakeholders both for CONCERTO and municipal buildings in general.

The development of training models devoted to the all chain of local actors and the set up of regular meetings between experts have improved the information exchange between designers, operators and other project local actors.

Additionally, interesting research studies and simulation models evaluating energy districts needs have been developed in some CONCERTO cities solving the problem to set up preliminary studies that analyse the feasibility of using local energy sources and installations and verifying whether or not targets can actually be achieved.

Legal and economic barriers encountered are typically related to the characteristics of a country. CONCERTO cities have experimented interesting solutions successfully adopted and ready for replication. These are described in depth the report and in the recommendations addressed to local authorities.



### **3.** MOST EFFECTIVE POLICY INSTRUMENTS USED IN CONCERTO

One of the major strengths of CONCERTO projects has been the "smart" use of policy instruments. This has involved the use of regulatory and financial instruments available at national, regional and local levels in combination with innovative models developed by CON-CERTO projects. This integration of existing instruments and CONCERTO facilitated innovation has contributed to the introduction of energy criteria in urban planning activities, to the development of new standards and to technology demonstration. The projects were successfully implemented when barriers were rare and effective support instruments were present. Combining support instruments affecting each phase of project (from commitment until the replication), guaranteed the success. This success can be expressed by adherence to deadlines and achievement of quantitative and qualitative targets.

Figure 5 illustrates how CONCERTO cities have combined policy instruments in the commitment, planning, implementation and replication phases of the project.

In the majority of CONCERTO cities a combination of six important groups of instruments could be detected. These groups are: vision and targets, political commitment, planning and regulations, funding used, administrative and institutional factors for operating and soft measures. In over 60% of cities, instruments from all these groups could be labelled as highly important, strongly influencing the project's operation. CONCERTO cities identified, thanks to a selfassessment within the six groups of instruments, the most effective combinations that supported their project development.

#### I. Visions and planning

Cities with visions, objectives, and targets generally established these aspects in their action plan. The cities' visions have varied significantly in terms of time-frames as well as the area of interest (e.g. reduction of energy consumption, energy autarkic,  $CO_2$  neutrality, sustainability in mobility, waste management, and social aspects). Strong political commitment (from 2020 to beyond 2050) occurs in all CONCERTO cities that have defined medium or long term action plans towards environmental and energy targets achievements.

Generally speaking, local energy planning is completed before entering the implementation phase, in order to define priority areas for technologies on the basis of pre-feasibility studies.

#### II. Regulatory aspect

In several countries, a stable national regulatory framework supported by devoted funding schemes for achieving Kyoto targets has played a fundamental role in encouraging participation in the CONCERTO programme. This scenario applies to cities in Denmark, France, Germany, Italy, Norway, Spain and The Netherlands. In all these countries, stricter national regulations on Energy Saving (e.g. in Germany, Norway, Spain and France) or new legislations supporting heat supply systems and natural gas supply systems like in Denmark combined with local planning tools in line with national requirements have guaranteed more ambitious pathways towards energy saving and renewable energy source development.

73% of CONCERTO cities report that the principal added value of participation in the CONCERTO programme has been the possibility to incorporate high energy efficiency standards and the promotion of renewable energy technologies in local planning instruments. This has been the result of the CONCERTO programme requirement for cities to demonstrate such commitment right at the beginning of the projects.

#### III. Funding schemes aspect

The comparative analysis has showed that the majority of CONCERTO cities have benefitted from national support schemes as a consequence of aforementioned regulatory aspects. National funding schemes used by CONCERTO projects corresponded with measures put in force by every single government.

The presence of national and regional funds has been crucial in determining participation in the CONCERTO initiative, and CONCERTO funding also had a positive role to play. CON-CERTO financial resources enable the completion of more complex projects, filling the gaps in national and local funding schemes. Multi-funding schemes in relation to the territorial scope and targets have been evaluated by the CONCER-TO project as the most effective instrument.

The real added value of CONCERTO has been the possibility of public authorities to act as project coordinators, adopting a "stick and carrot method" using additional CONCERTO funds as an incentive for forcing local stakeholders to introduce energy criteria into the building requirements. In some cases, the measures have been implemented voluntarily, but the most advanced cities have included contractual obligations regarding quality standards for construction companies and building developers. Comprehensive building renovation activities have shown to be successfully implemented when housing associations and companies committed themselves to implementing ambitious renovation programmes in their own building stocks as a condition for obtaining additional financial subsidies (including CONCER-TO funding).

The "stick and carrot" method has also been used to convince tenants associations to accept the introduction of renewable energy and energy efficiency technologies in their daily life to compensate for rent cost increases.

# IV. Administrative and institutional factors for operating

The main challenge encountered by CONCER-TO cities has been how to bind local stakeholders together during initial commitment phase in order to fix ambitious targets and subsequently how to keep the mix of stakeholders committed and motivated to implement energy measures in the project and beyond. In the implementation process three management typologies have been used to implement CONCERTO projects: 1) direct management by public authorities; 2) management by public companies such as Municipal utilities or private and public companies; 3) management by private companies.

Ambitious energy performance requirements could be successfully implemented when:

- Public institutions were developing their own building projects;
- Private building developers were included as contractual partners in the CONCERTO projects and driven by the additional CON-CERTO financial incentive;
- Private building developers were already convinced by the general approach of sustainable building thanks to experiences from previous projects (only one example in CONCERTO);
- Private building developers were highly motivated to build in the neighbourhood (good market perspectives for the real-estate project because of neighbourhood location, prestigious eco-neighbourhood projects, etc).

#### V. Soft measures

CONCERTO cities are implementing a variety of soft measures aimed at increasing awareness, social acceptance of the measures, and disseminating projects' ideas and results. As described in Fig. 5, soft measures are present in all 4 phases of the CONCERTO project cycle.

During the commitment phase, public authorities involved in CONCERTO have launched communication campaigns and plans, seminars and public hearings devoted to a large number of stakeholders. These stakeholders include citizens and pupils. The aim has been to inform them on the type of engagement that the public administration intends to pursue. This activity has been very important in order to achieve public acceptance from the outset, especially from environmental organisations, on the use of natural sources or for the utilisation of certain wind and biomass technologies.

During the planning phase, activities focussed mainly on seminars and training devoted to urban planners and city council departments in order to introduce energy criteria and targets in operational plans.

The implementation phase has been characterised by training activities devoted to all actors involved in the design, planning and construction phases. For retrofitting projects, targeted seminars for tenant associations and home-owners as well as ad hoc counselling activities and energy checks have proven to be very effective instruments. They increase the

#### Figure 6: CONCERTO Roadmap

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COMMITMENT PHASE	1 <sup>st</sup> STEP	COLLABORATIVE AGREEMENT	
	2 <sup>ND</sup> STEP	IDENTIFICATION OF CHALLENGES	]
	3 <sup>RD</sup> STEP	SETTING THE VISION	]
	4 <sup>th</sup> STEP	LOCAL/REGIONAL ANALYSIS	]
	5 <sup>™</sup> STEP	AGREEMENT TO SPECIFIC LOCAL REALISTIC TARGETS	]
	6 <sup>™</sup> STEP	LONG-TERM COMMITMENT TO THE DELIVERY OF THE VISION	]
PLANNING Phase	7 <sup>™</sup> STEP	LOCAL/REGIONAL STRATEGIES; LOCAL ENERGY PLANNING: INDICATIVE MASTERPLANNING	RISK ASSESSMENT
	8 <sup>™</sup> STEP	DEFINITION OF SPECIFIC MEASURES AND PROJECTS WITH HIGHER PRIORITIES	
	9 <sup>™</sup> STEP	COMBINATION OF EFFE CTIVE NATIONAL AND REGIONAL	← EFFECTIVE COMBINATION OF FUNDING SCHEMES
IMPLEMENTATION PHASE	10 ™ STEP	ADMINISTRATIVE AND INSTRUMENTAL FACTORS FOR	
	11 ™ STEP	SOFT MEASURES	]
REPLICATION Phase	12 ™ STEP	RESULTS REPLICATION AND DISSEMINATION	]

likelihood of acceptance and success for energy efficiency and renewable technology measures. Finally dissemination of CONCERTO results is presently the priority of all CONCERTO partners. Most of the projects have organised conferences, press related activities and study tours for other administrations and professionals in order to show concrete results and highlight the use of new technologies.

From the CONCERTO cities' perspective, socio-economic activities have brought the most benefits to CONCERTO as they contributed to:

- **x** Improving energy consumption awareness;
- Obtaining wider acceptance and satisfaction for implemented measures;
- Building up knowledge about the economic and environmental impact of the CON-CERTO measures and about effect on the quality of life;
- Changing attitudes and behaviour regarding renewable energy sources and the rational use of energy.

#### VI. Replication aspect

A founding purpose of the CONCERTO initiative is to provide the stimulus and the right environment for innovation, not just in terms of technology, but also in terms of political and social measures which make cutting edge energy efficiency and renewable energy use a realistic option on a large scale. In some parts of Europe, CONCERTO projects are now becoming valued partners of regional and national governments, advising them on ways to extend energy efficient measures even further. The replication effect could be achieved mainly due to:

- $\mathbf{x}$  General transfer of experiences
- X Promotion of best practices
- $\pmb{\varkappa}$  Education and training activities repetition
- 🗙 Building institutional capacity
- $\pmb{\varkappa}$  Information dissemination
- ✗ Development of new national/European standards

### 4. <u>RECOMMENDATIONS</u> <u>FOR LOCAL AUTHORI-</u> <u>TIES ENGAGED IN</u> <u>ACHIEVING AMBITIOUS</u> <u>SUSTAINABLE TARGETS</u>

As a result of the analysis, a CONCERTO roadmap has been elaborated with the collection of the most effective actions undertaken in the 27 cities in order to improve the process in the initial, design and planning phase and speed up the achievement of targets.

The following set of recommendations elaborated by CONCERTO plus corresponds to the messages that CONCERTO cities intend to disseminate. This message will address all cities that are presently engaged in fulfilling GHG and fossil fuel reduction requirements by increasing energy efficiency and renewable energy technologies.

Based on the twelve aforementioned steps highlighted in the CONCERTO Roadmap, recommendations focus on new mechanisms tested by CONCERTO. This includes: how to incorporate energy planning in the urban decision making process;

- how to effectively bind together local stakeholder during the commitment, design, planning and implementation phases;
- \* how to combine funding schemes;
- ✗ when and how to use socio-economic and dissemination measures.

In the **commitment** phase the following measures have proven to be effective within CONCERTO cities, producing very positive outcomes. CON-CERTO initiative **recommends:** 

- Strengthening the relations between public authorities and local energy agencies, research centres or universities. An expertise on VII. Framework Programme and Competitive and Innovation programme can be very useful for guiding municipalities in sustainable policies in accordance with European strategies and future projects.
- II. Signing a collaborative agreement as a first step with main local private and public stakeholders outlining the willingness of the different parties to devote time to the initiative. The use of voluntary agreements like a "charter" a "manifesto" have been the most common instruments established in CONCERTO.
- III. Directly involving regional authorities in this phase. It can improve policy coherence from the outset, and ensure a better use of natural resources and more comprehensive energy infrastructure planning as it encompasses relationships between the city and its surroundings.
- IV. The identification of challenges to face from the very beginning with an effort geared towards combining "collective advantages" such as "fighting against climate change / fossil fuels" and "individual advantages" such as "improving citizens' social and environmental wellbeing and quality of life".
- v. Setting a clear vision which responds to

identified challenges and ensuring that this is in line with National and Regional strategies. The vision can be elaborated under the form of a slogan, which proves easier to remember and can be used for dissemination campaigns.

- VI. The preparation of an analysis including state of the art of main infrastructures, energy requirements in buildings and renewable resources available at regional and local levels together with a analysis of CO<sub>2</sub> consumption. This has proven to be a determinant preliminary activity in order to set realistic and achievable CO2, EE and RES targets at local level. Such an analysis in CONCERTO projects has mostly been carried out by technical partners such as universities, energy agencies and local research centres.
- VII. A long term political commitment is a logical consequence of the previously undertaken steps. This aspect must be put into context considering the political commitment and legal rules of a given country.
- VIII. Participation in European networks and initiatives such as Covenant of Mayors, ICLEI, AGENDA 2I, ENERGY CITIES. It has proven to be a valuable support tool, used to help municipalities to establish methodologies towards political commitment and achieving targets.
- IX. The use of "soft measures" sponsored by city council or energy agencies as a precondition for citizens and stakeholders trust and acceptance on future measures and activities. The redaction of a communication plan including targeted public campaigns, seminars or public hearings showing the impact of climate change in the daily life and the benefits citizens encounter when reducing GHG emissions in terms of security, health, traffic and pollution reduction.
- X. A pro-active and balanced involvement of local actors in the voluntary agreement promoted by local public authorities, with a focal point on improving citizen's quality of life. The involvement of policy makers, planners, energy agencies, universities, developers and industry actors are strongly recommended during this stage.

In the **planning** phase the CONCERTO initiative recommends:

 Adapting local planning instruments to energy targets and objectives previously defined in the commitment phase as a precondition for achieving goals. In CONCER-TO, local authorities having defined a comprehensive city strategic plan in advance taking into account mobility, buildings, waste and water management have been facilitated in the planning and implementation phase.

- For local authorities, the inclusion of housing, environmental, energy and urban regeneration municipal departments in the planning process.
- III. The establishment of a biannual or quarterly operational planning instruments such as a "Sustainable Action plan" enabling the introduction of ambitious energy criteria in the city master plan guidelines through ex post amendments. This process guarantees a direct participation of stakeholders.
- The use of simulation models that evaluate energy needs in a district on the basis of statistical analysis or real energy data if available.
- v. The preparation of a survey or a risk assessment analysis in this stage. It can support the definition of specific measures and provide higher priority projects with a time frame for development and realisation.
- VI. The integration of energy criteria into local planning instruments such as urban energy master plans and detailed district or neighbourhood master plans for all typologies of urban development operations.
- VII. A "smart" combination of national/regional/local planning instruments and funding schemes when available.
- VIII. In projects with a strong focus on social housing, considering the possibility to activate dedicated local incentives coherent with local sustainable strategies on innovative energy performance solutions in social existing and newly created buildings. Reducing tenants' energy expenses as a support measures against energy poverty is an asset.

When **designing** a project, the CONCERTO initiative recommends:

- I. That the governance the process be undertaken by public authorities, as they offer the best means of combating general public interest requirements and energy improvements at city scale.
- II. The involvement of energy experts in the urban planners' team.
- III. The preparation of a pre-feasibility study – with a selection of relevant renewable energy and energy efficiency technologies for the project which take into account administrative, social and economic potential barriers and possible solutions in advance.
- IV. The performance of a life-cycle cost analysis during the planning phase of the project

including  $CO_2$  costs and showing  $CO_2$  external costs saved through the energy optimization of the building project.

- v. The identification from the outset of legal and administrative paths and time necessary for accomplishing all these tasks in the project (the number of legal permits and authorities involved, all steps necessary for grid connection, etc).
- **VI.** A clear and early definition of the management process needed for project implementation.
- VII. For public procurement procedures (tendering, concession, development briefs), always including energy criteria in the specifications and in the contractual documents. For projects in new urban neighbourhood areas, successful CONCERTO cities have used contract negotiations as a means of leverage. In these cases the opportunity to sell public land to building developers has been used to negotiate ambitious energy performance targets. The energy performance requirements were specified in the contractual document related to the real estate sales and included in the general requirement specifications formulated in the so called development brief. The success of the programme was dependant on the availability finding developers willing to adhere these requirements.
- VIII. The set up of a consortium agreement in order to define stakeholders' role from the project's start date.

When **implementing** a project, CONCERTO initiative recommends:

- Choosing the most appropriate administrative operational body, taking into account the project typology and the legal context of a given country (utility/investment/procurement/ESCO are the most common used in CONCERTO).
- Using quality control mechanisms including coordination of contractors, strong project management and testing before implementing on a larger scale.
- III. Facilitating regular local committee group meetings coordinated by the local public authority ensure that everyone is updated on current events in the project.
- IV. To take into account the divergences from the original planning and which are the best corrective actions to be undertaken.
- V. To decide in advance the most appropriate stakeholders within the project for taking care of energy performance monitoring and how it should be done.

- **vi.** Establishing a continuous dialogue with residents, providing information to end-users.
- VII. Setting up a local or regional ordinance regulating contracts model in social housing managed by municipal or regional companies including mechanisms that reduce costs for tenants.
- VIII. In regeneration projects, the possibility of setting up a temporary organisation that groups and empowers social housing associations and introducing requirements for energy performance of buildings. This structure can also facilitate access of tenants to temporary dwellings during construction works.

At the end of the project, for **dissemination** and **replication** of results CONCERTO initiative recommends:

- Establishing clear definitions during the planning phase of projects to bind results with the creation of a new standard variable at the city or regional level including energy requirements. If the project demonstration was more concerned with the creation of new social/contractual or financial models, the local municipality can translate it in an ordinance for city borders.
- II. Implementing soft measures such as conferences, press releases, demo site visits devoted to policy makers, professionals and students. These are considered crucial activities for spreading results in this phase.
- **III.** Bringing projects results to the attention of national and regional authorities.

In case of lack of communication between architects and engineers, the CONCERTO initiative recommends:

 Establishing new standard procedures in local public authorities obliging developers to provide an energy concept before receiving a building permit. This standard launched in a CONCERTO community<sup>2</sup> forced architects and engineers to work together from the beginning.

When there is a lack of skilled civil servants in energy fields within public administrations, the CONCERTO initiative recommends:

I. Supporting the presence of an "Energy Manager"<sup>3</sup> directly employed by municipalities. In CONCERTO projects the "Energy Manager" has demonstrated an ability to play an effective problem-solving role in day by day municipality activities and in managing pro-active relationships with local stakeholders. The possibility of having a small budget available every year varying according to energy saving targets achievements, has guaranteed personal motivation on improving energy saving and provide fast intervention in case of problems.

In cases where it is difficult to reconcile preservation and environmental imperatives in historical buildings CONCERTO initiative recommends:

- Establishing an effective dialogue with senior architects responsible for overseeing construction work in heritage areas.
- II. Asking for authorisation for solar panels installation on roofs, when they are clearly concealed.

When small rural area villages are interested in developing common activities in transport, waste management and energy, CONCERTO initiative recommends:

 Launching a regional energy association on a voluntary basis. It could provide support to municipalities for energy planning at regional scale and for financial engineering.

#### Recommendations for regional authorities engaged in achieving ambitious sustainable targets

In countries where the degree of decentralisation is high (i.e. Austria, Germany, Italy, Spain, Switzerland and UK) regional authorities play a fundamental role in the decision-making process. They have the power to set up ordinances, operational plans and financial (in some cases also fiscal) instruments. Regions are in charge of the structural funds management.

In the coming years, more stringent policies set at the European level reaching 3X20strategy goals will reinforce the role of regions and their partnerships with national authorities. They will be crucial in supporting national authorities through "co-sharing partnership" agreements which guarantee  $CO_{2^{\prime}}$  RES and EE targets achievements at local level.

In CONCERTO projects, the direct involvement at the regional level in the consortium has positively contributed to:

- II. Planning activities in a more strategic way;
- III. Providing policy coherence from the outset, ensuring better use of natural resources and better energy infrastructure planning as it facilitates relationships between the city and its surroundings;
- IV. Developing coherent policies with the territory thanks to

a constant dialogue with municipalities and private stakeholders and organising regular meetings;

v. Attracting new private investors by guar-

anteeing incentives and interesting land use packages;

- VI. Speeding up the process to include energy criteria in the regional planning and identifying devoted funding schemes;
- VII. **Replicating** interesting and successful results through new regional ordinances.

CONCERTO initiative recommends:

- VIII. In the commitment phase, establishing, during the commitment phase a "multi-governance table" inviting municipalities and intermediate levels (provinces, agglomeration, and departments) to regular meetings in order to discuss how to adapt regional policies to support initiatives and actions set by municipalities aiming to reach set  $CO_2$  and energy targets. (In the Covenant of Mayors Initiative, regions act as "Supporting structures" for cities).
- IX. Promoting participation in European initiatives "Covenant of Mayors" as a "support structure". This has proven to be a valuable means of coordinating municipalities with their regional authorities in order to establish coherent methodologies towards political commitment and targets.
- X. Upsetting a CO<sub>2</sub> inventory and establishing a unique baseline for the CO<sub>2</sub> calculations in agreement with municipalities in order to have comparable data for future initiatives (renewable energy action plans and Energy Efficiency Action Plans).
- XI. Preparing an analysis including state of the art of main infrastructures, energy requirements in buildings and renewable resources available at regional and local levels, coupled with a diagnosis of  $CO_2$  consumption. This has proven to be a key preliminary activity in order to set realistic and achievable  $CO_2$ , EE and RES targets at the local level. This analysis in CONCERTO projects has been carried out by technical partners such as universities, energy agencies or local research centres.
- XII. Taking into consideration the fact that European Regions managing a strategic plan within Structural funds programme can modify it, accordingly to regulation (EC) No. 397/2009 amending Regulation (EC) No. 1080/2006 on the European Regional Development Fund as regards to the eligibility of energy efficiency and renewable energy investments in housing<sup>4</sup>. This new regulation introduces the concept that in each Member State, expenditure on energy efficiency improvements and on the use of renewable energy in existing housing shall be eligible up to an amount of 4 % of the

total ERDF allocation.

- XIII. Considering the mid-term review of Structural funds' Regional Operational Plans foreseen in 2010-2011 as a good occasion to revise budgets allocated into thematic axis and shift more resources in "Energy" Axe for public and private refurbishment activity including energy saving and the use of RES technologies. This is a unique opportunity to go further CONCERTO initiative and replicate the experience in other municipalities eligible according to structural fund rules.
- XIV.Setting up a regional ordinance including energy criteria in the public procurement procedures (tendering, concession, development briefs).
- XV. In the final phase of a project, synthesising the most important lessons learnt in order to revise regional ordinances accordingly<sup>5</sup>.

**1** For instance, France, Sweden and UK governments set clear commitments and targets for 2050 with co-responsibly sharing for local authorities. Danish government imposed by law the reduction of an Agenda 21 programme to local authorities. German government elaborated an effective mechanism within "EnEv" ordinance on energy efficiency requirements, etc.

**2** A new standard called "minergie" have been launched in Geneva Canton. For additional information visit the website: http://etat.geneve.ch/dt/energie/minergie-239-1430-2723.html

**3** In Germany these professionals, are usually responsible for energy efficiency in municipal buildings.

**4** REGULATION (EC) No 397/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 6 May 2009 amending Regulation (EC) No 1080/2006 on the European Regional Development Fund as regards the eligibility of energy efficiency and renewable energy investments in housing: http://eur-lex.europa.eu/LexUriServ/LexUriServ. do?uri=OJ:L:2009:126:0003:0004:EN:PDF

**5** In Geneva after the experience of CONCERTO, the Canton has adopted a new energy law published last June 2010 with a new definition of territorial energy concept. The law has introduced several elements from CONCERTO experience such as to lower energy needs by introducing higher performance criteria in buildings and the growing use of technologies; to make mandatory the energy audit before renovation activity and solar thermal technologies during roofs major works renovations.

# NOTES

