

Concerto/act2 in 2010

The Cancun climate summit produced respectable results. It announced a change in strategy after attempts to introduce a treaty were blocked in Copenhagen and do not look like being successful for years to come after the US interim elections. For the first time, the UN decided on the two-degree limit globally as a gauge of climate-protection activities. The voluntary pledges made in Copenhagen, which as minimum objectives need to be elaborated on in more detail and improved in terms of content, were acknowledged. But various steps are still required before a comprehensive and legally binding international treaty can be concluded. As a result, the European Union is well advised to step up its climate protection activities and, as a frontrunner, to encourage other states.

Climate protection in the European Union and cities

The European Commission is aware that its agreed climate protection goals can only be achieved with the help of European cities. The Covenant of Mayors is an ideal way of pooling and linking these endeavours and applying political pressure on the appropriate organisations to provide funding. In this regard, not just projects for implementing technical measures, but also tools for creating a change in awareness and lifestyle amongst the population should be provided. As members, the act2 cities of Hannover, Malmö, Nantes and Newcastle support the alliance's projects.

In some states, such as for example Germany and the UK, changes of government have caused a drop in support for climate protection measures, or climate protection goals being abandoned. Germany has seen a significant fall in funding for energy-efficient redevelopment programmes and support for renewable energy sources. Therefore, it is advisable that support from the EU is not just of a financial nature. In Germany the lifespan of atomic power stations has been extended, presenting an additional problem and sending out the wrong signal for future energy supply and climate protection. Both in Germany and other countries, a similarly knotty problem (not yet clarified by a long chalk) is what to do with atomic waste.

Successful: Concerto

Now that five years have elapsed, we can conclude that the Concerto project is a very successful programme that is close to reality. It has contributed much to issues like energy efficiency, education in sustainable development and increasing the share of renewable energies, and consequently to supporting the cities' climate protection activities in practical terms. Furthermore, it leads to professional exchanges of opinion between local people in positions of responsibility, whether at a political or working level, or between national and local experts from the most diverse of disciplines. This exchange of opinions produces positive results and helps in becoming familiar with very different approaches, ways of implementing climate protection activities and applying and transferring them to work locally.

Concerto enhances co-operation in situ. Cities work together closely with local players. As a result, interesting activities in creating and implementing climate protection programmes have emerged, with experience gained in Concerto included and applied to the climate protection programmes in Nantes and Hannover too. However, the programme is only aimed at selected parts of the city, but not the whole urban area.

Programmes like this are a good idea and should be pursued in future too, or offered in a modified form throughout the city.

The next step - CO₂ neutral cities and the Smart Cities programme

The next challenge the cities will have to face is the question: how do we want our city to be in tomorrow's world? How do we want to organise the traffic and energy supply? How should we plan our city today so that it is sustainable and worth living in tomorrow? What lifestyle suits the city of the future?

Many communities are already looking at these issues. Numerous local and national studies have been drawn up on these subjects and handed to politicians as a guide upon which to act. The European Union must face this issue and should accompany and support the cities in the by-far-from-easy task of dealing with it.

Therefore, Concerto/act2 welcomes the Commission's planned new project called Smart Cities which looks at the city as a whole and places its focuses on energy supply and traffic. We believe that supporting educational activities and including the urban population in planning and implementation activities is vital. In this case, prudent and imaginative communications processes and effective communications strategies are required. It will be impossible to change our society towards embracing more sustainability, if people are not included in major decision-making processes.

Hannover

Various projects were completed in Hannover in 2010. After act2's project partner Gundlach GmbH & Co. KG finished further energy efficiency projects in multi-dwelling houses in Ahlem, redevelopment work was completed in the two Brüder-Grimm and Alice-Salomon schools (now Kulturzentrum Hainholz). An additional housing corporation also applied for Concerto funding, completing energy efficiency measures on a small scale, as well as converting its heating supply to biomass district heating. A wood pellet system was set up in the Schools' Biology Centre (Schulbiologiezentrum). In 2011, as part of Concerto/act2, the last two projects were completed. They entailed improving efficiency at Lutherschule by adding a photovoltaic system and integrating a wood pellet system in the winter nursery in Herrenhausen.

Consumption figures on the demo projects completed since 2006 are available and confirm that average heating energy savings of **58%** for the new build standard and **69%** for the Kronsberg standard have been achieved thanks to the efficiency programmes. Due to the conversion to using biomass district heating, average CO₂ savings of **81%** (23 kg/m²) have been achieved for heating energy. In comparison to the heating energy savings forecasted, the actual savings differ by 6.8% to 10%. Furthermore, the photovoltaic systems produce more electricity and the solar-thermal systems more heat than planned.

Worth special mention is also the fact that a detailed website for tenants and landlords has also been created. In the "Climate-friendly living" area, Concerto/act2 partner *target* has provided in-depth information on heating costs, saving electricity, insulation, technology and facts, as well as on the German energy certificate. This website was developed and co-ordinated with the real estate business network, in co-operation with the tenant and home-owner representative bodies. The platform is also part of the Hannover 2020 Climate Alliance website.

		
<p>Eulerstraße © Christian Wyrwa</p>	<p>Alice-Salomon-Cultural Centre © Aussieker Fotografie</p>	<p>School Biology School © Landeshauptstadt Hannover</p>

Nantes

After Stockholm and Hamburg, Nantes has also been awarded the “Green Capital 2013” title by the European Commission. The city and region have invested a lot of work in sustainable urban planning, energy aspects of construction planning, agricultural and traffic planning, as well as in an extensive climate protection programme. Nantes has more than deserved the award and demonstrates its significant endeavours towards changing the city in social, ecological and sustainability terms. Concerto/act2 also helped it win the title.

Over the last few years, investors have been found for the construction project subsidised by Concerto on the 350 hectare Ile de Nantes. However, some of the projects will not be finished until 2012, making a one-year extension of the whole project until 2012 necessary.

The following projects were completed in 2010 to BBC Standard (Bâtiment Basse Consommation – Low energy consumption building), in other words better than the Concerto standard agreed:

- Living the Quays (5,730 m² apartments), heating using a 45 m² solar-thermal system
- Ile Rouge (3,069 m² services building), heating using an efficient heat pump
- Terrain des Gendarmes Plot B (3,123 m² apartments) connected to district heating from refuse

Various projects to BBC standard will still be ongoing until 2012:

- Terrain des Gendarmes Plot A, C and E2 with 13,270 m² living space connected to district heating from refuse 77 m² of solar-thermal systems were also installed
- Tripode (21,000 m² of business + 12,200 m² apartments) connected to district heating from refuse
- Prairie au Duc school (approx. 4,200 m²) new build
- Ecotech-Wood Centre (approx. 1,560 m² business buildings) with wood pellet system
- DT6-Noon (approx. 6,300 m² apartments and approx. 850 m² space for businesses) with a solar-thermal system
- DT6-Noon (subsidised housing with 2,800 m² of living space) with a solar-thermal system
- Expansion of district heating (from wood pellets and refuse)

		
Terrain de Gendarmes Plot B © JD Billaud-Nautilus	Ile Rouge © JD Billaud-Nautilus	Living the Quays © JD Billaud-Nautilus

PR

Since 2009, the results of the project have been published in in-depth fact sheets on the act2 website and in the Concerto Plus newsletter. The fact sheets are constantly added to and printed, both in Hannover and Nantes, on all demo projects. act2 was presented to the wider public at major events, such as the car-free Sunday in May in Hannover and the Energy Week in Nantes in November. Various articles have been published and presentations at conferences or events held.

Observer Cities

All the experience and results of the two demo cities Hannover and Nantes are exchanged regularly with the observer cities of Malmö, Koszalin and Newcastle. Newcastle and Malmö in particular work in urban areas in need of redevelopment while embracing sustainability aspects and adopting well thought-out energy concepts. Low energy houses were connected to district heating in Malmö-Hyllie which is operated using biogas and heat from refuse. Compost from that area of the city is used for biogas production. Newcastle's urban planners are in the process of redeveloping areas based on sustainability criteria, such as Scotswood, Byker and Walker, which have been hard hit by the recession. Top energy standards and sustainable energy concepts are applied. The results on low-energy house redevelopments in Newcastle are particularly interesting. In June 2010, a workshop by project partner proKlima was offered in Hannover. To boost its impact, training programmes for urban planners and architects in city administration are offered. In Koszalin, a study on enhancing district heating in the city was carried out to optimise expansion.

Impressions from the Observer Cities

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