











Concerto/act2 – Lessons learnt

Project Co-ordinator Meeting Brussels

Concerto is co-funded by

13 October 2008



Summing up act2





- 5 Cities with 14 Partners
 - Hannover, Nantes (Demonstration communities)
 - Koszalin, Newcastle, Malmö (Observer cities)
- Central Issues:
 - Retrofitting (Hannover)
 - Retrofitting and New Build (Nantes)
 - Integration of RES
 - Dissemination
 - Training
 - Energy efficiency and advice campaigns (EE)
 - Research on barriers and drivers





Demo Hannover - Overview





Demo	Number of	Number of	Final energy	Renewable	
objects	buildings	apartments	demand	energy	
Multi-occupancy- buildings	26 3 (Kronsbergstandard)	217 24	65 – 71 kWh/m² 62 kWh/m²	District heating of biomass	1.200 MWh/a
	8	72	63 – 73 kWh/m²	Wood pellet heating	164 kW
Detached and Semi-detached houses	4 1 (Kronsbergstandard)	7 1	72 kWh/m² 62 kWh/m²	Solar collectors	41 m²
Detached and Semi-detached houses	3	3	72 kWh/m²		
Multi-occupancy- buildings	4 (Kronsbergstandard)	34	62 kWh/m²		
Schools	2	Halving final energy demand	100–124 kWh/m²	PV	32 kW _p
Public buildings	3 1			Wood fuel heating Solar collectors	1.140 kW 1.800 m ²
Wood Energy Centre				PV	75 kW _p



Retrofitting















Wood Energy Centre

















Renewables - Lister Bad











Demo Nantes status







Résidence Les Forges



Siège de la Nantaise d'Hab et du CIL Atl.



Centrale PV Beaulieu



Habiter les Quais 2



Quais 2 Siège Nantaise d'Hab. et CIL Atlantique

> Résidence des Forges (FJT)

Services CG44 + Maison dép. des pers. handicapées



Centrale Photovoltaïque Beaulieu

Carte des opérations pilotes Concerto-act2 (c) Nantes Métropole, Atelier Île de Nantes



Tripode A



Terrain des Gendarmes



Services CG44

Demo Nantes - Status





2nd demonstration site delivered: headquarters of 2 housing companies - 4.248m²







Conventional <u>Primary</u> energy consumption (regulatory calculation) : **57 kWh/m².a**



(includes space heating, lighting, ventilation, zero cooling, auxiliaries, **not electric appliances**)

Research Methodology





- Description of processes
- Description of barriers
 - technical / economic
 - social / cultural
 - political / legal



- Development of instruments to overcome barriers
- Detailed barrier and instruments description sheet
- Recommendations



Research





- Processes which will be researched:
 - Energy efficient retrofitting of multi-occupancy houses (housing associations)
 - Energy Efficient retrofitting (individual house owners)
 - Energy Efficient New Built
 - District Heating System
 - Urban Regeneration
 - New Energy Standards
 - Working with the Tertiary Sector





Research



- Socio economic aspects:
 - Tenants survey
 - Energy advice campaign for low income households
 - Study on fuel poverty
 - Calculations of additional costs
 - Information tenants concerning heating bills after retrofitting in Hannover
 - Door to door campaigns
- Policy recommendations:
 - Political Steering Board
 - Climate Protection Programmes of every act2 City
 - Covenant of Mayors

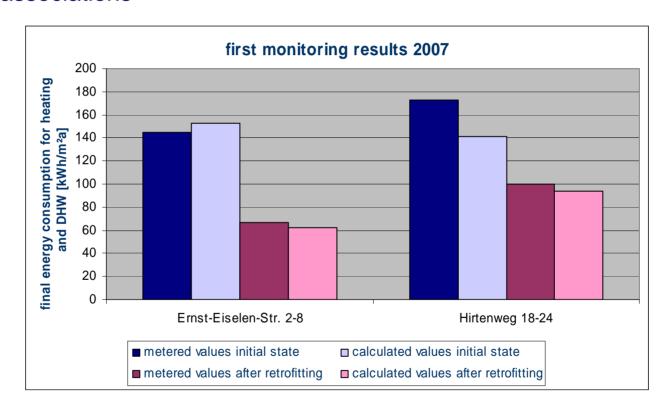


Monitoring





Hannover – Multi-occupancy houses retrofitted by housing associations





Dissemination





- Electronic newsletter twice a year
- Website <u>www.concerto-act2.eu</u>
- Flyer and posters
- Brochure with case study sheets
- Banner and roll ups
- Fortune wheel for kids
- Lectures during national and international conferences
- Review of brochure 'Best practise Concerto' examples from Hannover and Nantes in 2010
- Training brochure 'Quality Assurance Briefings'
- Local energy week







Results and lessons learned



Implementation needs:

- Stakeholder Involvement
- Political support
- Eco-guidelines Nantes and Hannover
- Information and technical support for house owners
- Quality assurance
- Local and national funding needed



Discussion points



- Prolongation of the project for one year
- Audit guidelines (special clause 41)