





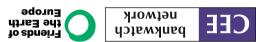


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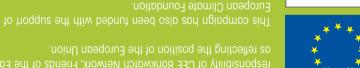
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European Climate Foundation



strong oversight of these projects at all stages so that guidelines are strictly followed. This would include introducing 5. Sustainable development has to become central to the entire scope of the EU's Cohesion Policy. We also need a 4. Strong partnerships between relevant stakeholders to be an integral feature of the Cohesion Policy at all stages.

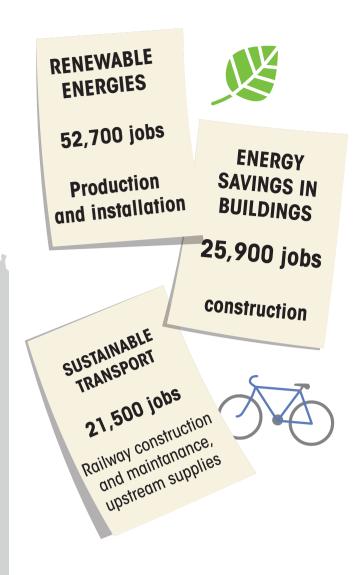
CEE Bankwatch Network, Friends of the Earth Europe and WWF are calling for:

sustainably and letting local people benefit from them clearly creates a real sense of ownership over Cohesion Best practice means achieving positive environmental impacts and real economic benefits, from substantial energy Best practice in project selection and development

recently. While they vary in purpose, all have been tailored towards social and environmental ends in order to ensure This map displays some of the best practice Cohesion Policy investments in infrastructure projects to be realised Mapping environmentally friendly Cohesion Policy investments

get it right. For the 2014-2020 period a budget of over a trillion euros is under negotiation, a third of which should regional development across the 27 Member States. While the EU is misguided in many of the projects it supports, The case for cohesion funding – getting it right for the environment and people

JOB POTENTIAL PER €1 BILLION **INVESTMENT FROM** THE EU BUDGET



AGUEDA, PORTUGAL ELECTRIC BIKES TACKLE CO2 EMISSIONS

- 13,000 km travelled by electric bike after six months In the pilot phase of the project, more than two tonnes of
- CO2 emissions avoided The city of Agueda (50,000 inhabitants) in north west Portugal, has pledged to reduce its CO2 emissions by one third by 2020. One strand of its transport policy is the creation of a new

public electric bicycle scheme, named operation "Center", that

allows citizens to reduce their carbon footprint and access new parts of the city. The scheme's overall aim was to encourage more citizens to see cycling in general - and not just the new bikes - as a viable transport alternative. This builds into the overall emissions

reduction plan of Agueda that seeks to support a shift of

mentality in how citizens view the environment and energy.

Between July 2010 and February 2011, a pilot project introduced ten electric bikes, each of which had a WiMAX tracking system that allows the scheme's administrator to track their use. After the first six months of trial 13,000 km were covered by the bicycles, saving the equivalent of two tonnes of carbon emissions. There has also been a reduction in

car use and noise pollution, as well as cleaner air. Following

the success of the pilot phase, it was decided to expand the

project throughout 2012 and increase the number of bicycles

THE BALTIC TACKLING EUTROPHICATION TOGETHER

100 pilot farms incorporate best practices

available.

- On-going study trips aid in information exchange
- Member States work together to address environmental concerns

The Baltic Deal is a project that brings farmers and advisory groups from across the region together to fight eutrophication. This process results from nutrients escaping soils into the sea and stimulates algae growth. As a result marine fish and plant life suffocate as oxygen is removed from the water by the algae.

At present more than 377,000 square kilometres of the Baltic is regarded as a dead zone. About 80% of all artificial nutrients in the sea come from the land, including agricultural runoff, sewage, industrial and municipal waste. The Baltic Deal network has established best practice in fertilisation, management of manure, soil structure, plant cover and protection zones as well as precision farming.

New techniques have been applied in pilot areas to allow for growth in innovation and ecological practice. In addition, 100 pilot farms are maintained throughout the region, where the latest environmental and business techniques are showcased. On-going study trips help exchange best practice among national nodes. The programme demonstrates how Member States can work together and voluntarily address environmental problems.

BÉSOS, SPAIN ENERGY FROM BIOGAS

- 120 to 160 thousand tonnes of waste can be converted to biogas every year
- This gas can generate 22 GWh of power The plant design reduces water and energy impact
- The Besos Eco Park 3 waste treatment plant in Barcelona is a state of the art facility that enables the recycling of waste and energy creation from organic materials. Each year over 400,000 tonnes of waste pass through the centre, 30-40%

of which is organic and can be recovered for conversion into biogas. The gas is used to generate power (22 GWh per year): half of it goes to power the station itself and the other half is redirected into the city grid where it is used by residents for everyday use. The remaining waste goes through a triage system where paper, glass and plastic are all recovered and sent for recycling.

The treatment and waste processing facility is owned by the Barcelona metropolitan area authority and managed by a private consortium of two companies: one operating the section for energy utilisation, the other the recovery of organic

Between 2008-2009 the Tukums local authority joined the materials.

The plant has been designed to reduce environmental impact, strategy. namely in the areas of water and energy. With regard to its sensitive location next to the sea front, special care has been taken to minimise the visual impact of the facilities.

SLIVENEC, CZECH REPUBLIC **LOW-ENERGY RECONSTRUCTION** OF PRIMARY SCHOOL

- Energy consumption reduced 90%
- Energy costs savings €2,146 per year
- Healthier environment for the students and teachers thanks to a smart ventilation system

While difficult to achieve passive building standards in an existing building, this reconstruction of a primary school in Slivenec applied principles of passive design, and the results • Improved access to mobility show that using passive building principles makes sense. Original energy consumption decreased from 203 kWh/ m2/year to 21 kWh/m2/year, and the quality of the inner environment and conditions for learning have improved significantly.

"Experts point out that we often force school children to concentrate in a situation when vitiated air in the classroom resembles more the climate of a submarine in an emergency is thus absolutely clear that we are obliged to secure a solution Czech and Polish sides and the only rail connection between of the district council of Prague-Slivenec.

The district council of Prague-Slivenec was so satisfied with the results of the reconstruction that it decided to build its new kindergarten to full passive energy standards.

FELDHEIM, GERMANY SHOWCASE FOR ENERGY INDEPENDENCE

- Average household energy bill reduced by 10-20%
- Job creation significantly reduced local unemployment
- Wind park capacity produces 75 MW, solar park 2.45 MW and biogas 600 kW

Over the last five years, the hamlet of Feldheim in eastern its 145 inhabitants by combining wind, solar and biomass energy sources.

Despite its small scale, the project managed to reduce the average household energy bill by 10-20% and provide green jobs black spot region, where unemployment averaged 30%, a 0% unemployment rate in Feldheim.

Recent efficiencies mean that the wind park now has a MW and the biogas plant 600 kW. By pooling different types heat throughout the village, supplemented by a woodchip burner when needed.

At the grassroots level, the success of the project was brought about by the efficient cooperation of the local authority, the inhabitants of Feldheim and the local project developer.

MÓRAHALOM, HUNGARY GEOTHERMAL CASCADE SYSTEM

consumption

- · Provides energy for several public buildings (town hall, library, primary school, community centre, kindergarten) Reduces the costs of heating and hot water for the local
- authority (by around 80%) During the 25 years lifecycle of the project, annual CO2 emission reduction of 870 tonnes, while the natural gas saving is 482,000 m2, which equals 80% of total
- The 50 most disadvantaged settlements received funding to use its geothermal potential. Even though the geothermal water is not hot enough for electricity generation, it is still sufficient for heating systems and providing hot water. A cascade system was built to serve several public buildings and

a private hotel, saving around 80 % of the costs.

The success of the project encouraged the municipality to continue developing renewable energy sources and efficiency measures such as extended geothermal energy utilisation, LED technology in street lights, photovoltaic solar cells and replacement of doors and windows of public buildings.

the project manager.

TUKUMS, LATVIA **BIOMASS DISTRICT HEATING**

other substances

- Full switch to renewable sources of energy
- Additional savings of about 15-25% of energy production Prevention of further increase in heating costs for the
- inhabitants More than 90% decrease in particulate matter emissions; considerable decrease in emissions of sulphur, ash and

"Baltic Biomass Network" project and together with various stakeholders developed a regional bioenergy development

The municipally-owned heating company "Tukuma Siltums" has installed two new biomass boilers of 10 MW capacity to replace heavy, old fuel oil boilers. In addition, flue gas condensers were installed using technology developed by a local company. Each of the boilers provides additional efficiency in terms of heat energy production, substantially increasing the efficiency of heat energy production and replacing fossil fuels with renewables.

TANVALD REGION, CZECH REPUBLIC **IMPROVED PUBLIC TRANSPORT SERVICES**

- Re-established connection between the Polish and Czech
- sides of the Jizera and Giant mountains
- Increased appeal of the region for tourism
- Helps tackle frequent road transport congestion in the

The Tanvald microregion is located in a mountainous area that—routes are divided by man-made obstacles like highways, is a popular tourist destination on both the Czech and Polish sides of the border. It is used for seasonal sports, particularly cycling and cross-country skiing.

situation, making it extremely hard for children to concentrate. It The project re-established transport connections between the The Austrian Federal Ministry for Traffic Innovation and at the level of today's standards," said Jana Plamínková, head the Liberec-Jablonec urban area and the Jelenia Gora region. and after a period of research brought together stakeholders The railway line facilitates significantly improved access to the area for tourism, also thanks to the fact that trains provide enough space to carry bicycles and skis.

TROJANOVICE AND ZUBŘÍ, CZECH REPUBLIC **RESOURCE MANAGEMENT SOLUTIONS FOR MUNICIPALITIES**

- Increased waste separation, introduction of separate biodegradable waste collection
- Introduction of home composting and composting for
- Increased capacity for the treatment of biowaste by 130

addressing resource management solutions by implementing programs to increase the scale of separate waste collection as • 800,000 social housing units in 15 areas to be retrofitted. Currently, the oldest passenger trains being used date back well as introduce home composting. In the case of Trojanovice, by increasing the number of separation locations, launching biowaste separation, consolidating the containers system jobs during the construction and operation of the facility. In a and introducing an additional bag separation system, the municipality made waste separation easier for its people and the biogas plant and a local solar panel factory have ensured increased residents' motivations to separate waste through a new system of fees.

In the city of Zubří, the addition of 300 home composters for maximum capacity of 74 MW, the solar park can produce 2.45 local households enabled residents to separate biowaste and make use of the compost produced for their own benefits. of energy generation, reliability is secured. A network transmits The project improved waste management and increased the capacity of biowaste treatment by 130 tonnes annually. Even after a recent extension of the project by another 200 home composters, demand exceeds the availability.

TOP 10 COHESION FUNDING BENEFICIARIES

Poland - €67 billion Spain - €35 billion Italy - €28 billion Czech Republic - €26 billion Germany - €26 billion Hungary - €25 billion Portugal - €21 billion

Greece - €20 billion Romania - €19 billion France - €14 billion

"In my view the cascade system is a fantastic achievement for Morahalom because it takes us on the road of local resource use and emission reduction at the same time as achieving huge savings in the city budget!" says József Zoltán-Pásztor,

TARTU, ESTONIA BIOGAS BUSES IN PUBLIC TRANSPORT Increased energy independence – municipal waste

- treatment plant as a local source of biogas
- Biogas-run vehicles produce up to 25% less CO2 emissions than those running on petrol; 12% less than diesel while producing 10-15% less noise

A cornerstone of the EU Strategy for the Baltic Region is to make the region more environmentally sustainable. A first step to reduce environmental problems caused by the transport system is to convince more people to use public transport by making it more attractive and accessible.

Together with partners from Sweden, Norway, Finland, Latvia, Lithuania, Poland and Germany, Estonians are stimulating cities and regions around the Baltic Sea to use biogas powered buses. The Tartu local authority is planning to increase the number of compressed natural gas buses in the future. At present, the buses run on natural gas, not biogas, as the relevant technology in the nearest waste treatment plant is still in the development phase.

BURGENLAND, AUSTRIA AND THE BRATISLAVA REGION, SLOVAKIA BUILDING WILDLIFE CROSSINGS

- Reconstructing wildlife migration routes
- Partnering a wide variety of experts

The area separating the Austrian Alps and the Carpathian mountains is home to some of Europe's rarest species such as brown bear, wolf, lynx and red deer. Unfortunately the biodiversity in this region is threatened as traditional migratory urban conglomerations and agricultural areas. Without free passage these species have become restricted to certain small—was approved and the contract signed in 2009 between pockets and are likely to die crossing the barriers.

Technology became acutely aware of this problem in 2001 including spatial planners, environmentalists, farmers, hunters and civil engineers. They laid out a three-year plan to construct new routes that include "stepping stone habitats", made up of forested havens which would lead to safe crossing areas over motorway barriers. A series of bridges and underpasses where • Improving the attractiveness of rail transport wildlife could freely bypass manmade obstacles would enable • Increased safety and environmental benefits their migration from east to west.

essential as more of Europe's transport, environment and local energy-intensive Member States of the EU. But mobility authorities look to minimise the impacts grey infrastructure has patterns are still more diverse than the European average: on biodiversity.

15 LOCATIONS, FRANCE **ENERGY EFFICIENT SOCIAL HOUSING STOCK**

- Small investments in housing can result in big energy
- between 2009 and 2020
- To date, there has been a € 1,170 average energy saving per household per year
- Estimated that 15,000 jobs have been either created or maintained

In these times of economic downturn, investment in public housing is one of the first items to be affected despite increases in demand. Yet small investments in housing stock can mean big reductions in national energy consumption through conservation.

As part of the European Economic Recovery Plan, Member States were encouraged through the ERDF to improve energy • Share of bike traffic is expected to increase from 3% to efficiency in buildings and promote job creation.

The French government is meeting this challenge head-on and has plans to retrofit 800,000 social housing units in 15 areas between 2009 and 2020. To date, the results have been for a commuting bicycle road network in the southern part impressive. By the end of the first phase in March 2011, 63,000 of Veszprém, so as to make a bicycle connection between homes were retrofitted and of those, over a third will be of Class—the city centre and the Southern Institutional Centre. Within A energy efficiency rating. This totals energy savings equal to the framework of the project, 2362 m of bicycle paths and €1,170 per household.

One of the focus regions for this project is Brittany where 153,000 social housing units, managed by 38 operators, are works were implemented. awaiting conversion. In the first nine months of the project 2,103 households were brought up from the lowest D,E,F,G standard to the A and B efficiency levels.

In this same period it is estimated that 760 jobs were created locally in the construction and planning areas. These are real results in an area that needs support.

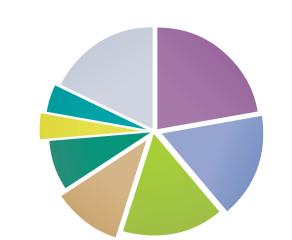
POĽANA REGION, SLOVAKIA BIOENERGY RECONSTRUCTION OF BOILER ROOMS

Successful community approach

*2007-2013

- Increased energy independence and energy safety of the
- Saving 67% of energy costs, energy price decrease by more than 25%, GHG emissions decrease by 2,643 tonnes/year and particle pollutions by 52 tonnes/year 21 new jobs created
- In 2005, several local authorities coordinated by Friends of the Earth-CEPA established an association of villages called "Bystricko Biomass". The leading idea behind the formation of

EU INVESTMENTS IN REGIONAL DEVELOPMENT



- 22% transport
- 19% research, development and inovation
- 14% environment 10% employment and social inclusion
- 8% human capital
- 5% social capital
- 5% energy 17% other

the association was to become self-sufficient in energy production by using local wood waste to heat municipal premises. Three years later, the association submitted an application for ERDF contribution in order to build four wood chip distribution warehouses and reconstruct 15 boiler rooms; of smart grids, allowing for regionally based regulation of heating 43 renovated buildings in eight villages. The project the association and the managing authority at the Ministry of Environment. The project has since delivered numerous benefits such as lower energy bills, less pollution and higher energy independence.

ESTONIA MODERNISING PASSENGER TRAIN ROLLING STOCK

This project has become an example for other ERDF projects

The Estonian economy is transport-intensive, and if current related to problems of overcoming man-made barriers. This is trends continue, Estonia will become one of the most transport public transport use in daily commuting is higher than the EU

around two-thirds of total trips).

to 1968. The Estonian Government has decided to change the rolling stock by the end of 2014 through the purchase of 18 electric trains and the capital lease of 20 diesel trains. The Part of the rejuvenation of wider Naples requires the electric and diesel trains will remain the property of the state owned Electric Railway Ltd. The first electric train will start its service at the end of 2012 and the first diesel train in the first guarter of 2013.

VESZPRÉM, HUNGARY FILLING GAPS IN THE CYCLING NETWORK

- Introduces a more environmentally friendly mode of
- transport 10% by 2013
- Successful pressure from civil society

The aim of the project is to create the necessary infrastructure related street-lighting, a closed bike storage in Erzsébet-liget, an open-air bike storage in the Theatre Garden, a bike ramp, and a safety barrier were constructed, and rainwater channelling

"The Veszprém-Szentkirályszabadja-Balatonalmádi bicycle path is a result of the active cooperation of both civil society organizations and the local authority," says Timea Szalay, chairperson of a local NGO - Csalán Association.

BLYTH, UNITED KINGDOM WIND TURBINE BLADES TESTING FACILITY

development

- Helping the UK further advance offshore renewable energy Providing an ideal environment to accelerate technology
- Securing Europe's leading position as an exporter of this technology

EU co-financing helped to bring together the engineering traditions of the north east England with the state-of-the-art offshore wind energy sector, creating the world's largest testing facility for turbine blades.

This specialised 5,700m2 construction was completed in August 2012 and is designed to test blades of up to 123

metres in length that are destined for the open seas, where the natural elements will push them to their limits. The new facility will provide an independent and confidential environment to accelerate the development of new blade designs before they are taken offshore.

The project was commissioned by the New and Renewable Energy Centre (NAREC) and is located in Northumberland. A total of 1,503 offshore turbines are now installed and gridconnected in European waters, bringing total installed capacity to 4,336 MW - spread across 56 wind farms in ten European countries. This new facility will ensure that Europe can continue being a leader in this sector and export its technology around

NORTHERN POLAND PIONEERING AGROENERGETIC COMPLEXES

- Offering the region technological advantages to develop local renewable energy sources
- Maintaining farm production and jobs
- Cutting the dependency on costly fossil energy

The Baltic Eco-Energy Cluster (BEEC) is a research and development initiative that brings together public universities, local governments and private enterprises looking to promote co-generation. The cluster operates in the traditionally agricultural areas of Northern Poland from Koszalin through the Pomorskie region to the eastern borders of the of Warmińsko-Mazurskie region.

Distributed co-generation is a developing technology of simultaneous small and medium scale production of thermal energy and electricity from biomass and other renewable sources. It is one of the key elements in the establishment renewable energy inputs and stabilising the grid. BEEC used this technology in rural areas characterised by sparse infrastructure, offering the region local renewable energy sources, maintaining farm production and jobs, while cutting its dependency on costly fossil energy.

Several agroenergetic complexes have been built using the cutting edge technologies of biogas and cogeneration facilities for heat and power, being one of the first of their kind in Poland. The installation in Kepice, for example, covers 75% of the towns needs for heat and hot water with 83% efficiency, saving annually 1,400 tonnes of coal. The cluster also works on the development of turbines for micro CHP modules and biogas systems in private houses, pioneering the smart grid experience in real life of families.

NAPLES, ITALY **UPGRADING THE CENTRAL ARTERY OF NAPLES' METRO**

(the share of walking and public transport in Estonian cities is • CO2 emissions cut by 250,000 tonnes per year across the

faster journey times.

network Reduced oil consumption of 110,000 tonnes per year

across the network Better and more frequent services and faster journey times

development of a localised metro system capable of transporting 2.9 million residents around the city. Within this remit, the upgrade of the metroline 1, the backbone of the system, was seen as essential for providing a fully sustainable service, especially for citizens living and working between the Garibaldi and Dante neighbourhoods of the city. This will allow citizens access to the main line and enable greater interconnections with the central railway station and the airport. 150,000 residents living and working in this suburb will directly benefit from better and more frequent services and

The line itself is managed by the Metronapolli S.P. of which the municipality of Naples is the largest shareholder. Between 2000 and 2012, the estimated overall benefits of the metro upgrade and extension make a significant difference to the carbon footprint of the city, with an annual reduction of CO2 emissions by 250,000 tonnes and a cut in oil consumption by

STRUCTURAL FUNDS AND NATIONAL CO-FINANCING AS % OF TOTAL PUBLIC INVESTMENTS (average 2009-2011)

