O O O O O O PONER Low Carbon Economies



The POWER Programme is co-financed by the European Regional Development Fund (ERDF) through the INTERREG IVC Programme. Neither the Managing Authority nor SEEDA are liable for any information published in this brochure which presents the aims of the sub projects and the view of the Environment Agency.



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Context











POWER was formed to help regions deliver 'low carbon economies' and contribute towards meeting the EU energy targets. It is a 5.8 million Euros programme part funded by the ERDF, through INTERREG IVC. The partnership is led by the South East England Development Agency (SEEDA), representing South East England and working jointly with:

- Andalusian Energy Agency, Regional Ministry of Economy, Innovation and Science, Andalusian Government, Spain
- ARPA, Emilia Romagna, Italy
- Marshal's Office, Malopolska, Poland
- Province of Noord Brabant, Netherlands
- Stockholm Region, Sweden, and
- Tallinn City Government, Estonia

Policy Experts from across the regions drew up specifications which are closely aligned with the INTERREG IVC aims and objectives. The specifications focus on delivering low carbon economies, allowing the regions to present what they do best and also learn from other regions where they have gaps in their local expertise. After running two open calls, POWER funded nine sub projects delivering projects on the five POWER themes:

- Energy Efficiency
- Renewable Energy
- Eco Innovation and Environmental Technologies
- Sustainable Transport
- Behaviour Change

Whilst the projects themselves respond to certain current needs within the regions they operate, with some immediate benefits, the end results of their activities will be fed back through a group of policy experts from across all seven regions. The experts will analyse the outcomes to ensure that good practices are captured and policy recommendations are fed back into the national and regional strategies.

Project participants will be able to interact with the Regional Policy Experts throughout the delivery of their projects via an on line Policy Forum accessible via the POWER website, as well as at interregional events. POWER results will be disseminated at the end of the programme through a series of conferences and workshops in Brussels, through targeted electronic mail-outs and via the POWER website: http://www.powerprogramme.eu/

Many businesses are calling for even higher carbon emission targets in order to place Europe as a leader in the global market place for cleaner technologies, create more jobs and stimulate economic recovery. However, this view is not shared unanimously. Some manufacturing companies and the steel industry strongly contest raising the 20-20-20 targets set out in the EU Climate and Energy Package. The partnership will debate the question, whether Europe should be setting even more challenging targets for the reduction of carbon emissions through the Policy Forum as the partnership experiments with new media. Join our Policy Forum Network http://powerprogramme.ning.com/

The POWER Partnership is grateful to the team at the Joint Technical Secretariat (JTS), Lille for the support provided throughout the delivery of the programme.

Janet Borgers Lead European Programme Manager















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Niepolomice Municipality Maciej Maderak Tel +48 12 28 12 448 maciej.maderak@niepolomice. com www.niepolomice.eu Responded to Specification Energy Efficiency, Theme 1.1

Theme: Exploring ways of reducing the overall energy consumption of the partner regions through policy, regulation, promotion and incentives.

Sub-theme: Development and Delivery of Public Sector Energy Efficiency Strategies and Action Plans to support low carbon economies.

Total budget (co-financing + ERDF): 301,331 €

The overall aim of the SEECA project is to build a sustainable, regional framework based on regional climate and energy strategies and implemented by climate agreements between the public sector and key stakeholders in the private and non-governmental (NGO) sectors. The SEECA project will provide clear manuals and guidelines for public authorities, businesses and NGO's when formulating objectives, control tools and assignments for the implementation of future climate and energy work.





The idea behind the SEECA project can easily be transferred to other regions in Europe since it does not require a certain governance structure, technological know-how or economical means.

The SEECA project will address 3 specific areas: Identification and development of existing Climate and Energy strategies,



Design and development of Climate Agreements and Eco-driving and good planning when using heavy machines.











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Theme: Exploring ways of reducing the overall energy consumption of the partner regions through policy, regulation, promotion and incentives.

Sub-theme: Public Sector Strategies, Programmes and Initiatives to improve the energy efficiency and reduce the carbon footprint of existing buildings, particularly the public housing stock.

Total budget (co-financing + ERDF): 370,000 €

The GENERATION project, 'Green ENERgy AudiTIng for a LOw CarboN Economy' is a 24-month project whose main goal is the improvement and enhancement of energy audits in buildings, in Andalusia in Spain, South East England in the United Kingdom, Emilia-Romagna in Italy and Malopolska in Poland. Together with an Advisory Board set up with experts from the four participating regions, project partners will bring together local and regional experience to deliver an innovative methodology ("Simplified Energy Audit") that will facilitate the assessment of the energy performance of buildings.

The project aims to contribute to the EC Climate and Energy package, which contains targets of 20-20-20% reduction of energy consumption and greenhouse gas emissions, and increased share of renewables by 2020. The building sector, responsible for about 40% of the EU's



total final energy consumption and CO₂ emissions, provides many cost-efficient opportunities for action, while contributing at the same time to the welfare of EU citizens. The sector has significant untapped potential for cost-effective energy savings which, if realised, would mean that in 2020 the EU will consume 11% less final energy.

GENERATION will focus on existing public buildings, in order to analyse the most important barriers to a rational use of energy and to provide local and regional bodies with recommendations for the improvement of audit programmes and policies. Participants will exchange best practice and knowledge in the field of energy audits, in order to create an innovative methodology for conducting a Simplified Energy Audit (SEA). The SEA tool will be a more cost-effective method of assessing the performance of a building, leaving comprehensive audits only for those cases where they are truly necessary. The completed tool will be tested by conducting at least 40 audits of public buildings, and a set of recommendations for the improvement of audit policies will be provided to local and regional bodies. Partners will conduct regional workshops, national & international conferences and capacity building seminars to enable interested parties to give input and benefit from the project results.











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Marine South East Ltd Simon Powell Tel +44 23 80 111 592 simon@marinesoutheast.co.uk www.marinesoutheast.co.uk click on current projects -WICO Responded to the specification Renewable Energy, Theme 2.1

Theme: Exploring ways of increasing the share of energy generated by renewables, including solar thermal; solar photovoltaic energy; high temperature thermal systems; wind energy; hydropower; biomass production for electricity, heating and cooling; sustainable biofuels; district heating and Combined Heat and Power (CHP) schemes.

Sub-theme: Large-scale deployment of renewable energy schemes: identifying and developing transferable best practice in the public sector to promote successful delivery and to maximise benefit to the regional economy and environment and society.

Total budget (co-financing + ERDF): 224,200 €

The WICO project partners will exchange and benchmark their experiences and knowledge in order to produce guidelines for the installation of small wind systems along coastlines which will provide key information and solutions to a number of issues:

- Information on how to influence and modify local planning rules to simplify the procedures for the installation of small wind systems
- Information on how to overcome the barriers to installation
- Technical information
- Information on the economic viability of small wind systems and financial incentive systems

The WICO partners will also be identifying and developing best practice in the public sector to promote successful largescale deployment of renewable energy



schemes in order to maximize benefit to the regional economy, environment and society.



The project also aims to develop a transferable tool to allow both the sharing of technical information on new generation systems and the knowledge required to overcome barriers for the wider use of this technology including policies, economic viability, financial incentives and awareness.





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Theme: Exploring ways of increasing the share of energy generated by renewables, including solar thermal energy, solar photovoltaic energy, high temperature thermal systems, wind energy, hydro, biomass production for electricity and heating and cooling, sustainable biofuels, district heating and Combined Heat and Power (CHP) plants.

Sub-theme: Biomass Energy and Sustainable Resource Management: Identifying and sharing best practice.

Total budget (co-financing + ERDF): 506,546 €

The Timber project aims to design a standard model for the regional development of sustainable and renewable energy based on biomass resources. Each partner carries out several studies (such as regional sustainable analyses in biomass production, feasibility studies on several kinds of biomass, location studies, logistics studies) on which the standard regional model will be based. This model will be transferable to other regions across Europe.

The input from this model will be integrated into ready-to-implement Biomass Energy Plans (BMEPs) for each participating region.



The BMEPs will consist of the output from the studies. Special attention will be paid to the actual implementation, the project legacy on the regional and national level and the continuous involvement of stakeholders.











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Theme: Promoting innovative low-carbon technologies, comparative intelligence on strategies for take-up and low-carbon development design strategies.

Sub theme: Living environment: Develop and deliver 'place-based' initiatives and programmes in the field of sustainable construction, including indoor climate and sustainable neighbourhoods.

Total budget (co-financing + ERDF): 302,752 €

SILCS incorporates four low carbon innovative building experiments as vehicles for pulling together different persons, professions, skills and specialist knowledge with the purpose of evaluating and generating multi-level low carbon innovative strategies and solutions. These will be directly transferable as best practice to existing and new sustainable community proposals.

These projects are not just innovative construction solutions, but illustrate the potential for social cohesion integrated with innovative low carbon technologies, which can become best practice examples for future settlements. The intention is to draw together economists, architects, planners, city officials, residents and other constituents of civic society, to harness their skills and enthusiasm over a longer time-period. SILCS aims to prove and illustrate the effectiveness of low carbon building initiatives within the framework of sustainable development. The project will address the following four questions:

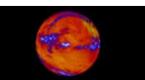
1.Participation: how are stakeholders to be involved within experiments and what types of community participation activities are possible and viable depending upon the low carbon solution and design outcome required?

2.Financing: what kind of approaches can successfully enable change and have maximum impact on the way financial analyses are made and decisions taken, resulting in decisions not based on initial investments but on total life-cycle costs? 3.Organisation: how can the building process (planning, designing etc) deliver sustainable results?

4. Technologies: which (systems) technologies are most effective and successfully achieve innovative low carbon solutions.













E-Mob - E-Mobility accelerator

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Theme: Removing the link between Gross Value Added (GVA) growth and car use in the partner regions by improving the provision of sustainable modes of transport and access to it and at the same time increasing smart ways of moving around supported by ICT.

Subtheme: Achieving Sustainable low-carbon Transport in Urban Areas.

Total budget (co-financing + ERDF): 462,384 €

The overall aim of the E-mobility project is to define a common strategy and policy recommendations to accelerate successful market implementation of electric vehicles in the participating regions. To achieve this goal, the project has four sub-goals:

1.Identification of common key success factors to move beyond pilot projects towards market implementation.

2.Shared development of sustainable regional business cases for market implementation, based on these factors.

3.Regional and international policy and strategy recommendations based on these business cases.

4.Dissemination of these recommendations to policy makers and to actors from the automotive industry.



The project will follow an 'hour glass' structure - shared, local, shared. The partners start with sharing the status quo of their region, followed by jointly building new knowledge and expertise through field trips and a study to fill common knowledge gaps. The partners will then work on business cases. The project partnership has opted for a regional approach for the development of the business cases. The regions will make use of the knowledge transferred and gained within the project and will use this knowledge to build business cases fitting the regional circumstances. The regional business cases will be used as input for the development of regional and European policy recommendations.















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Theme: Removing the link between Gross Value Added (GVA) growth and car use in the partner regions by improving the provision of sustainable modes of transport and access to it and at the same time increasing smart ways of moving around supported by ICT.

Subtheme: Achieving Sustainable low-carbon Transport in Urban Areas.

Total budget (co-financing + ERDF): 407,000 €

ITACA aims to reduce carbon emissions in metropolitan areas through the identification, assessment and exchange of innovative technologies and management plans for public and private transport. This entails the development of public sector strategies for optimising the design and delivery of sustainable transport solutions, comprising several approaches.

In this framework, the main objective of the ITACA project is the identification of best practices and approaches to achieve an integrated urban renewal and local mobility management process, helping to meet sustainable mobility targets using a combination of traditional tools and innovative means like the application of new technologies and the existing partner's know-how. Every implemented action will be related to both transport supply and demand management. The activities will be based on a strategy aimed to create a new mobility culture, taking into account the whole urban system and the interaction of the subjects involved in this complex matter.





With Emilia Romagna's expertise in regional transport strategies and INTA's research of State of the Art technologies this should result in an excellent transfer of good practices to the participants whose transport and mobility plans are less advanced. Stichting Brabantse Milieufederatie have the overall responsibility for the communication plan to ensure the results are shared as widely as possible.







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Theme: Removing the link between Gross Value Added (GVA) growth and car use in the partner regions by improving the provision of sustainable modes of transport and access to it and at the same time increasing smart ways of moving around supported by ICT.

Sub-theme: Improved Co-ordination of Integrated Transport Systems, and their development and operations, to achieve resource efficiency and CO₂ reduction.

Total budget (co-financing + ERDF): 322,100 €

The overall aim of TraCit is to identify and share knowledge and best practice between partner regions on schemes and policies with the potential to reduce carbon intensive travel while at the same time supporting the development. economic growth and sustainability of new and existing urban environments. A common approach to measuring travel intensity and carbon audits with respect to CO₂ emissions will be developed at regional level down to specific business and individual level in order to determine base lines, trends and to assess the impact of schemes and policies as and when they are introduced. This will enable regions to meet strategic aims related to each of these associated problems. This project takes an integrated approach to mobility and urban & regional development; the reciprocity between regional and local sustainable mobility and

regional sustainable development is explored in order to determine improved implementation of Low Carbon Transport strategies to the benefit of both. Project partners will function as observers and evaluators in each other's projects, providing a strategic continuity, mutually reinforcing one another, combining knowledge transfer activities through joint studies determining best practice benchmark exemplars for future low carbon transport initiatives.





The mix of academic, industrial and municipal partners will bring together experts, decision makers and practitioners in order that policy recommendations can be made that are evidenced by research and are implementable across the partner regions and other regions across Europe.











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Municipality of Gotland Helena Andersson Tel +46 498 26 82 12 / +46 70 447 67 72 helena.andersson@gotland.se www.gotland.se/eco Responded to Specification Behaviour Change, Theme 5.1

Theme: Promote behavioural change to underpin efforts to improve energy efficiency and the use of sustainable transport.

Sub-theme: Tools for achieving behaviour change to deliver a sustainable low carbon future.

Total budget (co-financing + ERDF): 349,275 €

The TrIsCo partnership brings together a broad spectrum of organisations from across Europe. Together they will exchange knowledge and expertise to:

 Enable different 'islands' of communities (households, businesses and public bodies) to reduce their Carbon Dioxide (CO₂) emissions by changing their behaviour towards their use of resources;
 Embed sustainability (social, economic and environmental) into behaviour change drivers; and



3. Overcome barriers to implementing low carbon communities.

The key outcome is to create bespoke 'Empowering CO₂ Reduction' catalogues of instruments, initiatives or local authority action plans with quantifiable measurement tools for public bodies, commerce and the public to take action themselves and be able to assess their own success. These catalogues can then be applied across Europe to achieve sustainable carbon reduction through behaviour change. The project will evaluate and advertise the CO₂ savings of the communities, and the consequences of these savings, so they can see that they are making a real difference, thus encouraging further behaviour change. Communities in the regions will be engaged through a series of road shows, climate change street parties and solar energy seminars. Communities will be offered carbon footprint assessments.











The Environment Agency's duty in England and Wales is to protect and improve the environment, and to promote sustainable development, both now and for future generations. Everyone should have a high quality local environment - places that communities can be proud of.

All parts of our society face challenges, from climate change to building a sustainable economy. We work together with local communities and partners to find solutions or help them adapt, and empower them to take their own action wherever possible.

We are committed to helping the region make the most of the opportunities presented by our changing climate, such as growth in green and renewable technologies. We want to see the South East benefit from a thriving low carbon economy. The environment can benefit from a strong economy, and similarly, environmentally friendly practices can support economic growth.

The schemes and projects within the POWER Programme represent not only new ideas for sustainable living, but a blueprint for how communities could live in the future. These schemes benefit both people and the environment.

The Environment Agency is proud to be a part of the POWER Programme and to support its projects both in the UK and across Europe.





Staff of the Environment Agency at work











Regional Authority Contact Page

Working for England's World Class Region

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