



ENNEREG Regions paving the way for a sustainable Europe



Publishable Report June 2013

www.regions202020.eu







ENNEREG - Regions paving the way for a Sustainable Energy Europe is a European Project supported by the Intelligent Energy - Europe programme. The project started on 1 May 2010 and ran until 30 April 2013.

The aim of the **ENNEREG project** has been to establish and inspire EU Regions to take up the challenges of fulfilling the EU 20-20-20 climate and energy targets of at least 20% reduction in greenhouse gas emissions, 20% increase in energy efficiency and 20% of energy from renewables by 2020 (ec.europa.eu/climateaction/).

As part of the project **12 Pioneer ENNEREG Regions** have been producing regional **Sustainable Energy Action Plans (SEAPs)** and initiating **Sustainable Energy Projects (SEPs)**. The ENNEREG Pioneer Regions have been sharing their experience directly with 14 ENNEREG Twin Regions and ENNEREG has also been actively promoting replication in Sustainable Regions throughout Europe.

To promote and support these activities, the ENNEREG **Regions 202020** website (<u>www.regions202020.eu</u>) acts as a platform to encourage networking and replication by enabling regions and their local communities to exchange experiences and be inspired on their journey to develop and implement SEAPs and SEPs.

Publication Date: 1st July, 2013 Issue: 1 Prepared by: EC network



ENNEREG - Regions paving the way for a Sustainable Energy Europe is supported by the Intelligent Energy - Europe (IEE) programme under Contract No: IEE/09/250.661/S12.558228. The sole responsibility for the content of this publication lies with the authors. It does not necessarily reflect the opinion of the European Union or members of the ENNEREG Project Consortium. Neither the European Commission, nor the ENNEREG Project Consortium Members nor the authors are responsible for any use that may be made of the information contained herein.



Contents

| Project Data | | |
|---|--|--|
| About the ENNEREG Project – Executive Summary 5 | | |
| The European Perspective | | |
| The Regional SEAP Process9 | | |
| Developing a Regional SEAP | | |
| The SEAP Process | | |
| Phase 1 Initiation | | |
| Phase 2: Planning | | |
| Phase 3: Implementation | | |
| Phase 4: Monitoring | | |
| Experience from the ENNEREG Region 18 | | |
| Development of Regional SEAPs | | |
| Supporting Sustainable Energy Projects | | |
| Silistra Region, Bulgaria | | |
| Upper Palatinate, Germany | | |
| The Triangle Region, Denmark | | |
| Basque Country, Spain | | |
| Rhône-Alpes, France | | |
| The Cyclades Islands, Greece | | |
| Kaunas County, Lithuania | | |
| Pomerania, Poland | | |
| Wielkopolska, Poland | | |
| Madeira, Portugal | | |
| Blekinge, Sweden | | |
| Cymru - Wales, UK | | |
| Twinning and Replication | | |
| Twinning Activities | | |
| Replication Activities | | |



| ENNEREG Dissemination | 61 |
|---|----|
| Regions 202020 Platform (and website) | 61 |
| Dissemination in the Partner and Twin Regions | 63 |
| ENNEREG Good Practice Case Studies | 64 |
| Annex 1: ENNEREG Partners Contact | 65 |
| Partner Organisations | 65 |
| Associated networks | 70 |



Project Data

| Project | ENNEREG |
|-------------------------|--|
| Title | ENNEREG - Regions paving the way for a Sustainable Energy Europe |
| Coordinator | Energy Consulting Network A/S (EC Network) |
| Partners | 01 Energy Consulting Network A/S (EC Network), Denmark 02 Centre for Renewable Energy Sources (CRES), Greece 03 Centre for rational use of Energy and Environment (ZREU), Germany 04 South Denmark European Office (SDEO), Denmark 05 Baltic Energy Conservation Agency (BAPE), Poland 06 Basque Energy Agency (EVE), Spain 07 Institute of Mechanical Engineering (IDMEC), Portugal 08 Sofia Energy Centre (SEC), Bulgaria 09 Lithuanian Energy Institute (LEI), Lithuania 10 Energy Agency for Southeast Sweden (ESS), Sweden 11 Rhonalpénergie-Environnement (RAEE), France 12 Severn Wye Energy Agency Limited (SWEA), United Kingdom 13 Regional Agency for Energy and Environment of the Autonomous Region of Madeira (AREAM), Portugal 14 Triangle Region (Triangle Region), Denmark 15 Silistra Municipality (Silistra), Bulgaria 16 Marshal Office of Wielkopolska Region (UMWW), Poland 17 CPL Scientific Publishing Services Ltd trading as CPL Press (CPL), UK |
| Website | http://www.regions202020.eu |
| Objective | Boosting regions' role in fulfilling sustainable energy policy goals, planning and implementation of Sustainable Energy actions |
| Results and Benefits | Sustainable Energy Actions the ENNEREG Regions The partner regions have developed regional Sustainable Energy Action Plans (SEAPs) to steer the creation of sustainable energy regions in conjunction with undertaking specific sustainable energy projects (SEP) <u>http://regions202020.eu/cms/inspiration/inspiration-guide/ennereg- experiences</u> Twinning and replication ENNEREG fulfilled a successful twinning and replication programme, where a core activity has been twinning with regions outside the consortium for interaction on SEAP development and SEP initiation <u>http://regions202020.eu/cms/inspiration/inspiration-guide/replication Http://regions202020.eu/cms/inspiration/inspiration-guide/replication </u> Inspiration Guide The Regions 202020 Inspiration Guide, enriched with experiences from the ENNEREG Pioneer Sustainable Energy Regions, aims to help regions getting on track to become Sustainable Energy Regions <u>http://regions202020.eu/cms/inspiration</u> |



| Duration | 05/2010 – 04/2013 |
|------------------|---|
| Budget | EUR 1,960,472 (EU contribution: 75%) |
| Key stakeholders | Communities and related stakeholders involved in sustainable energy practice in communities, with focus on the regional level |

Further information

Further information about ENNEREG activities, including the region's Sustainable Energy Action Plan and Good Practice Case Studies, can be found on the Regions 202020 website at: <u>www.regions202020.eu</u>

Contacts for further information:

ENNEREG Regions202020 Project Activities:

Nils Daugaard, EC Network, info@regions2020202.eu

Replication Activities:

Thomas Jensen, SDEO, replication@regions202020.eu

Regions202020 website:

Katy Hall, CPL, web@regions202020.eu



About the ENNEREG Project – Executive Summary

ENNEREG - Regions paving the way for a Sustainable Energy Europe is a European Project supported by the Intelligent Energy - Europe programme. The project started on 1st May 2010 and ran until 30th April 2013.

ENNEREG aimed to establish and inspire EU Regions to take up the challenge of fulfilling the EU20-20-20 climate and energy targets of at least 20% reduction in greenhouse gas emissions, 20% increase in energy efficiency and 20% of energy from renewables by 2020.

ENNEREG developed and implemented regional Sustainable Energy Action Plans (SEAPs) to steer the sustainable energy process in 12 Pioneer ENNEREG regions: Upper Palatinate, Germany; Cyclades, Greece; Triangle, Denmark; Basque, Spain; Madeira, Portugal; Silistra, Bulgaria; Kaunas, Lithuania; Blekinge, Sweden; Rhône Alpes, France; Wales, UK; Pomerania and Wielkopolska, Poland.



A key element in this has been a network oriented approach for engaging the regions' key stakeholders; the process only succeeds and creates momentum for long term impact if a broad range of stakeholders from both the public and private sector become engaged. While some of the partner regions had a more mature starting point and were able to progress further in the process, all regions took essential steps in becoming a sustainable energy region. The successes, strengths and weaknesses of the development and implementation of the SEAPs have been evaluated for the benefit of other regions so that they can also make a start in progressing along the path towards becoming sustainable energy regions.

The work on regional SEAPs has been accompanied by the promotion of specific sustainable energy actions. The project team succeeded in triggering almost 300 Sustainable Energy Projects (SEPs) – which is double the original target. The evaluation shows that these SEPs correspond to cumulated investments of around 250,000 MEUR within the project period and are estimated to reach nearly a billion Euro by 2020. The total energy savings are estimated to be around 200,000 toe, renewable energy production 1.6 million toe and reductions of CO_2 emissions more than 2 million toe by 2020.

An interesting aspect of the project has been how the regional partners have supported the SEPs in their regions in order to reach these achievements, e.g. through capacity building, awareness raising, direct support such as assistance with feasibility studies or other types of intervention that have helped the SEPs to develop.

In addition ENNEREG has fulfilled a successful twinning and replication programme. A core activity has been twinning with regions outside the consortium for direct interaction on SEAP development and initiation of SEPs in the twin regions. On both sides, ENNEREG regions and their twins evaluated



the twinning experience as useful and 2/3 of the partnerships are expected to continue cooperation after the ENNEREG project has ended.

The Regions 202020 platform has been put in place as a facilitator for interaction between European regions and communities on SEAP actions. The website contains useful information from both ENNEREG and parallel projects and attracted great interest with more than 327 thousand visits to the website during the project period; in addition almost 700 regional and local stakeholders have joined the Regions 202020 Network: <u>http://regions202020.eu</u>.

Due to the wide variation in regional characteristics there is no uniform approach on how to design a SEAP and SEP implementation process. Regions that are starting such a process must find a path suited to the regions' specific circumstances. ENNEREG's Inspiration Guide, building on the examples and learning of the partner regions, helps regions identify how they can take appropriate steps in order to elaborate and implement SEAPs. The Inspiration Guide is enriched with extensive good practice examples and implementation stories from the achievements in the ENNEREG regions: http://regions202020.eu/cms/inspiration.

In this Publishable Report and the project website you can read much more about the ENNEREG achievements and perspectives. The project team hopes that the guidance and examples of sustainable energy practice can be enriching for regions at broad European scale.



The European Perspective

Regions are key factors in ensuring the fulfilment of Europe's sustainable energy policies. They serve as the link between the EU and national level on one side and the local level, including local authorities, on the other side. As such a key factor they can help to steer the development, where elaborating a regional Sustainable Energy Action Plan - as demonstrated in 12 regions under the ENNEREG – is the ultimate way of ensuring this.



Regions are by no means a uniformed factor and their point of departure and motivation in terms of sustainable energy practice are driven by a diversity of factors. Variances in the geographical characteristics, culture, resources and the structure of economy may often have a decisive impact on how energy is produced and consumed at a local level as well as the opportunities for introducing renewable energy sources.

By making use of local resources, communities at the regional and local level do not only improve their energy self-reliance, but also rapidly spur green growth and innovation all over Europe. The use of renewable energy sources constantly increases and for some regions it already makes up a significant share of their overall energy production.

A key policy driver at the European level concerns the climate and energy package, known as the "20-20" target. It is a set of binding legislation which aims to ensure the European Union meets its ambitious climate and energy goals for 2020, due to the following key objectives:

- A 20% reduction in EU greenhouse gas emissions from 1990 levels;
- Raising the share of EU energy consumption produced from renewable resources to 20%;
- A 20% improvement in the EU's energy efficiency.

Since its adoption in 2007 Europe has moved forward on realising the above objectives. However, in the area of energy efficiency a gap has emerged in terms of fulfilling the objective until 2020.

In response, on 25th October 2012, the EU adopted the Directive 2012/27/EU on energy efficiency (EED). The EED establishes a common framework of measures for the promotion of energy efficiency in order to ensure the achievement of energy efficiency part of the Union's 202020 % target. It lays down rules designed to remove barriers in the energy market and overcome market failures that impede efficiency in the supply and use of energy, and provides for the establishment of indicative national energy efficiency targets for 2020.

One important element in the EED is to promote the use of Energy Performance Contracting as a way to boost the uptake of energy efficiency measures. The concept entails a guarantee of the energy savings to be gained of a given project that can raise the confidence of the involved stakeholders.







On 27th March 2013, the European Commission adopted a Green Paper on "A 2030 framework for climate and energy policies". The aim of this publication is to provide a stable framework for investors and to mobilise the funding needed, to support progress towards a competitive economy and a secure energy system as well as to establish the EU's 2030 ambition level for GHG reductions.

The further process, including a public consultation process, will determine the more exact ambitions and related measures. No doubt that the regions in Europe, including all the stakeholders they represent, are to play a major role in the period up to 2020 and beyond.



The Regional SEAP Process

This Section describes the process of developing a regional sustainable energy action plan as practised by the ENNEREG project. A more comprehensive online version is available at the online inspiration guide:

http://www.regions202020.eu/cms/inspiration/inspiration-guide

Developing a Regional SEAP

The **Sustainable Energy Action Plan (SEAP)** is the underlying management tool outlining the processes required to implement the policies and actions to establish a **Sustainable Energy Region**. It should outline the essential steps required to fulfil the region's objectives by 2020.

The SEAP identifies and presents the best areas for activities and the actions required in order to reach the objectives, these objectives can include economic, social, environmental, etc. aspects to name a few. For each topic, an associated set of **concrete measures** is required. These measures should take into account activities in both **public and private sectors**, along with a **time schedule** covering both **short term** and **long term** actions.

Why to Develop a Regional Sustainable Energy Action Plan (SEAP)?





The SEAP Process

The Figure below gives an overview of the regional SEAP process, including the associated working steps:



Phase 1 Initiation

The three main steps in the **Initiation Phase** of the process to become a **Sustainable Energy Region**, includes:

• **Commitment:** In order to become a Sustainable Energy Region, the regional officers and stakeholders who will help plan, develop and implement the actions need to be committed



to the process. Identifying these stakeholders efficiently and early in the process can be the key to success.

- Vision: To start the process of becoming a Sustainable Energy Region, a Vision must be developed at the very beginning which defines, in broad terms, which direction to go. The vision and goals will determine those Sustainable Energy Actions that will ultimately be chosen. Some time needs to be taken at the outset to consider the motivation, dreams and desired future that a Region aspires to.
- **Build Support:** The Vision will justify the decisions to be made during the process and the paths decided on during the planning and implementation stages. This will, in turn, help to obtain the commitment and support needed from the regional stakeholders. Hence communicating the progress throughout the **Initiation** and later phases is essential. As well as getting support from local communities, an important aspect of the regional SEAP is how it should interact with activities already taking place or planned for the municipalities, cities and communities of the region, including when these cities or municipalities are active on local SEAPs and/or have committed to the **Covenant of Mayors**.

Communicating with the Stakeholders

Developing and implementing a regional SEAP is a collaborative process:



ENNEREG Guideline for promotional activities at regional level

This document, developed as a guide for promotional activities in the ENNEREG Region aims to help the successful implementation of Sustainable Energy Actions by communicating effectively with regional stakeholders

Further information »



Developing a Regional Vision

The EU 20-20-20 targets and the respective national objectives should be a reference for the regional vision and goals. However, objectives need to be specific for the region, based on the characteristics of the region (geographic, social, economic, etc), the potential for renewable energy production, the regulatory framework and the availability of energy infrastructures.

The vision and goals will determine those **Sustainable Energy Actions** that will ultimately be chosen. At the outset some time needs to be taken to consider the motivation, dreams and desired future that a Region aspires to.



For example, you might ask:

- Why do you want to change your region into a Sustainable Energy Region?
- How do you imagine your region will look in 20 or maybe 40 years?
- What makes your region special?

To develop an effective vision it is useful to follow the **SMART** acronym, ensuring that the region's objectives are:

- **S**pecific
- Measurable
- Attainable
- Realistic
- **T**ime-sensitive

and that Key performance Indicators (KPIs) are evaluated and re-evaluated.

Each region will establish its own KPIs that will serve to measure the advances made towards sustainable energy. However, these aims can be summarised in some basic indicators which can be used for benchmarking among regions:

- CO₂ emissions (percentage increase on baseline year)
- Percentage of final consumption obtained from renewable energy
- Percentage of electricity consumption from renewable electricity production
- Percentage of energy self-sufficiency

In addition, qualitative objectives should be set by the regions indicating their motivation and their vision of a desired sustainable energy community.

Work on this vision requires that the participants and stakeholders are convinced that the objectives are obtainable and they have a clear awareness of what they must do to achieve or help achieve these objectives. In strategic terms the vision expresses the long-term, measurable and realistic targets and hence requires a specified deadline for each milestone.



Supporting cities and communities within the region

The degree of sustainability of a regional SEAP depends on the extent to which all the affected stakeholders are involved in the "green energy" process. This requires raising awareness and promotion of green energy, regular consultation, communication and interaction as described in Phase 2: Planning.

During the initiation stage of the regional SEAP it is particularly important to consider the interaction between the region and its cities and local communities. It is vital to ensure a good understanding of the current situation in the cities and communities, taking into consideration details of local SEAPs and/or whether they are signatories of the Covenant of Mayors.

For example the regional SEAP could aim to provide the following type of support:

- To help the region's cities and communities to assess their sustainable energy potentials and the feasibility and logistics of **Sustainable Energy Project (SEP)** investments. Ideally, there should be good agreement between the visions and specific actions set out in the regional SEAP and those at the city/community level.
- Help in assessing potential for interaction across city borders and how to exploit such combined activities. For example, this could include plans for an efficient regional transport network or to take advantage of a waste-to-energy system covering collection from several cities.
- Help in obtaining financing for the SEP investments of the city SEAPs by providing guidance on how to get access to national/regional support programmes or pooling investments, which is often a precondition in terms of qualifying for the ELENA financing instrument.



How to develop a Sustainable Energy Action Plan (SEAP) Covenant of Mayors Guidebook

The guide book on developing a SEAP at the municipal level, published by the Covenant of Mayors, provides a detailed overview of the possibilities and the changes than can occur in a region. The current guidebook provides detailed step-by-steep recommendations for the entire process of elaborating a local energy and climate strategy, form initial commitment to implementation.



Phase 2: Planning

Step 1: Current Framework (Potential)

The decision-making process involved in **Developing a Sustainable Region** requires knowledge of the current situation regarding energy supply, transformation and consumption as well as the market potential, including barriers and possibilities, for developing RES. An Energy System Analysis associated with a Renewable Energy Resource Assessment provides a good start for assessing the potential areas of activity.

Step 2: Planning

When assessing the potential, it is necessary to have a realistic vision about the region's green development. This vision can become realised through many different routes andwhen choosing the best direction for the region one must deal with uncertainty by **analysing different scenarios** in accordance with predictions.

Step 3: Instruments

The decision taken in the planning stage to implement the most feasible development option necessitates a political and supportive framework to succeed. Under this framework, various stakeholders, that could play a major role in the region's future energy goals, could be attracted by using the instruments that are in the region's possession.

Step 4: Interaction

The degree of sustainability of a regional energy project highly depends on how all the affected stakeholders are involved in the "green energy" process. Raising awareness and promoting green energy are not the only way to address stakeholders. Regular consultation and effective participation has proven to be very efficient in defining common interests and setting common targets or action plans. Thus, communication through interaction should be part of the communication strategy.



Phase 3: Implementation

A key object of the ENNEREG project has been to share the experience of the 12 Pioneer ENNEREG Regions in developing and implementing their regional Sustainable Energy Action Plans (SEAPs) in order to inspire other regions throughout Europe to become Sustainable Energy regions and develop their own SEAPs.

With this in mind, the **Implementation** section of the Inspiration Guide summarises the experience from the 12 ENNEREG Pioneer Regions in developing and implementing their **Sustainable Energy Action Plans (SEAPs)**.

In this regard a number of reports and publications have been produced during the ENNEREG project which may assist other regions in implementing their SEAP, covering:

- $\sqrt{}$ Development of ENNEREG Regional Sustainable Energy Action Plans
- √ Implementation of ENNEREG Regional Sustainable Energy Action Plans
- $\sqrt{}$ ENNEREG Good Practice Case Studies
- $\sqrt{}$ Other Resources on the Regions 202020 website

For Good Practice Case Studies please refer to the below Section on ENNEREG Dissemination.





Development of ENNEREG Regional Sustainable Energy Action Plans

The publication **Development of ENNEREG Regional Sustainable Energy Action Plans** describes the added value of the ENNEREG project in the 12 participating regions, which not only have very different characteristics with respect to their size and their social features and the use of energy, but they also have had different starting points for this process.

Further information »



ENNEREG Sustainable Energy Action Plan Implementation Report

[EN] The purpose of this document is to describe how ENNEREG regional partners worked towards the successful implementation of promotional activities regarding the Sustainable Energy Action Plans, the Sustainable Energy Projects and the Covenant of Mayors Initiative in their region and in other regions for replication.

Further information »



Phase 4: Monitoring

Within the ENNEREG Project, consideration of monitoring is not just limited to the Key Performance Indicators related to Sustainable Energy Project measures, but more generally applied to the indicators which can be used for the definition of SEAPs. Hence ENNEREG considers not only the methodologies but also the tools or organizations dedicated to monitoring issues in the regions.

Several ENNEREG regions have already implemented such approaches. Some regions, such as the Basque Country, elaborate energy balances on a regular basis (see appendix). Some other regions are tracking the RES installations, such as Rhone-Alpes and Upper Palatinate, in order to assess the part of renewable energy sources in the energy production mix.

Pioneer regions in Europe should compare their energy situation with energy situations of other regions or countries. They should therefore use a standard format for energy balances. Due to the size of regional statutory corporations, the calculation of energy balances at the regional level is a challenging task. EUROSTAT, which is the official statistical office of the European Union, has developed a coherence and harmonized system of energy statistics, based on data provided by the Member States.



During the ENNEREG Project, the Basque Country (2.7 mio. inhabitants) and the Region of Rhône-Alpes (6.2 mio. inhabitants) have exchanged their experience on the way how to elaborate Regional Energy Balance in EUROSTAT format.

Download the Publication [EN - English]



Experience from the ENNEREG Region

Development of Regional SEAPs

During the project, the ENNEREG partners have worked on the development of sustainable energy action plans (SEAP) in their represented regions and on the promotion of sustainable energy projects (SEP).

Some of the SEAPs defined with the support of the project have been approved by the respective administrations and others still need to be matured to be accepted at the regional level and to be implemented.

Thus, the situation is not the same in every region, and the approach to work in sustainable energy is not the same either. Nevertheless in all cases ENNEREG has supported efficiently either by supporting already ongoing processes or introducing regional energy planning in cooperation with regional stakeholders.

In all regions, regional energy surveys were made on the essential aspects surrounding the energy and climate situation in the regions. Based on this all regions, except Madeira, have established regional SEAPs in conjunction with operating a network involving all relevant stakeholders.

At the end of the ENNEREG project, the status of the SEAP development in the 12 regions was as follows:

- ✓ Basque Country: The Basque Energy Strategy was developed in collaboration with the ENNEREG project and was approved by the regional Government in December 2011.
- ✓ Blekinge: The regional SEAP process is in full progress and the document is under preparation by the regional authority although not yet approved.
- Cyclades: CRES is cooperating with the Network of Sustainable Aegean Islands (DAFNI) in the development of the SEAP for the region of Cyclades that was presented to the Regional Authority in January 2013. The plan is now under consultation.
- Kaunas: A non-official SEAP was elaborated by Lithuanian Energy Institute under ENNEREG project in October 2011 as a basis for municipal SEAPs, and is under discussion with the regional authorities.
- Madeira: Madeira has developed two Sustainable Energy Action plans in the scope of the Pact of Islands for the Madeira Island and the Porto Santo Island. ENNEREG has helped to implement these SEAPs.
- Pomerania: BAPE has developed SEAP (both excel and word version) and has involved the regional authorities in this process although there is no regional responsibility for energy planning. The document printed in 200 copies was handed over in April 2013 to the regional authority for further dissemination/inspiration in muncipalities in Pomerania.
- ✓ Rhône-Alpes: The Regional Plan Climate Air Energy (SRCAE) has been enhanced by RAEE in the framework of the ENNEREG project. A draft has been prepared, approval is expected in 2013.



- ✓ Silistra: A SEAP produced in the framework of the ENNEREG project has been adopted by the regional authority and was approved in March 2013.
- ✓ Triangle Region: Triangle Region initiated its SEAP as a member of the Covenant of Mayors. During the SEAP process the Triangle Region had to resign as CoM member as it did not fulfil the legal requirement as an authority. The process of developing a SEAP was thus redefined. In January 2013 a first phase of SEAP, including baseline and identification of potential interventions, was completed. Future activities regarding a full SEAP, including specification of interventions, will be anchored in the joint municipal spatial plan to be completed and politically approved before the end of 2013.
- Upper Palatinate: Although there is no regional authority responsible for energy planning, ZREU has produced a draft energy vision and action plan and a draft SEAP to promote the involvement of the District Government in sustainable energy.
- ✓ Wales: The Welsh Government has approved the Energy Policy Statement. In addition, in March 2012 it published the document "Energy Wales: a low carbon transition". The ENNEREG project added value to the Welsh Government's document by identifying and highlighting key policy and statutory background to the summary aspirations set out in the Energy Policy Statement."
- ✓ Wielkopolska: "Wielkopolska Regional Sustainable Energy Action Plan for renewable sources and energy efficiency" has been elaborated in parallel with the regional energy strategy and approved by the Board of the Wielkopolska region in December 2012.

Those regions that have an officially approved SEAP now have the challenge of developing the actions defined towards a more sustainable energy future. The regional partners in the ENNEREG project have in this case a roadmap to follow, each one according to its own organization's objectives or mission. In some of the partner regions, the action plan has been outlined by the project partners but for different reasons its completion has not yet been assumed by the regional authority; in this case a roadmap has been drafted and the objective should be to improve the regional involvement in sustainable energy and get a SEAP approved.

Supporting Sustainable Energy Projects

During the project period, ENNEREG supported a total of 292 sustainable energy projects (SEPs) in the 12 partner regions.

These projects are divided into the 8 project topics as indicated in the figure below:





Distribution of SEPs between different topics - Source: ZREU 2013

The largest share of supported SEPs is related to the topic 'energy efficient buildings' (nearly 57 % of all supported SEPs). Another significant topic is 'renewable energy' (25 %). The corresponding performance indicators are illustrated by the figure below.



Source: ZREU 2013



For each performance indicator the quantitative accumulated result with respect to 2020 is expected to look as follows:

- ✓ Cumulative investment triggered (in k€): 960.281,
- ✓ Total energy savings until 2020 (in toe): 204.460, the average annual energy saving triggered by ENNEREG project by 2020 is 18.812 toe/a,
- Renewable energy production triggered until 2020 (in toe/a): 1.645.241 toe, in annual figures this will result in 141.525 toe/a by 2020,
- \checkmark Total reductions of CO₂ emissions (in toe): 2.073.105, the average annual CO₂ emission reduction achieved by ENNEREG SEPs by 2020 is estimated with 191.778 toe/a).



Final result of ENNEREG in terms of ENNEREG's performance indicators (related to 2020)

Source: ZREU 2013

69 projects out of the 292 projects supported by the ENNEREG project have been identified and initiated directly as a result of the project, whilst the remaining supported projects were already under development.

The support from ENNEREG significantly contributed to strengthen development, documentation and implementing of existing as well as new identified projects. Further the support contributed to establish efficient regional cooperation frameworks supporting SEP development in general.

The figure below categorizes the various types of support that were provided by the ENNEREG project. This is based on individual input from each project.





Source: EC Network 2013.

As can be seen the major type of support was related to **raising awareness**. About half of the projects were supported through such activities, which mainly included workshops, exchange of know-how, dissemination of best practice examples as well as various direct consultations/bilateral meetings with key stakeholders. Information provided focused on best available technologies, project results from good/best practice projects, financing schemes and other supportive means.

Capacity building activities (done within 27% of all projects) through workshops and direct consultations focused on advising stakeholders on how to develop and implement SEPs in practice taking particular local conditions and circumstances into account. In 8% of the projects, stakeholders were supported by project **feasibility analysis**, assessing technical and economic aspects of various development options.

Various kinds of support were mobilized through efficient **networking** taking point of departure in the ENNEREG Steering committees in each region. This contributed to support important subjects such as data collection/validation, identification of financing options, matchmaking between key stakeholders etc. The networking combined with support through capacity building, feasibility analysis etc. increased the numbers and the quality of SEPS under various financing schemes, in for example Pomerania, Wielkopolska and Kaunas mostly in relation to structural funds.

In many cases, in about one tenth of all projects, the networking was taken a step further by **establishing strategic alliances** for further SEP development. One example is a cooperative business model organized to exploit the local wind energy potentials in a rural District in Upper Palatinate. Another example is the establishment of a network of window carpenters and manufacturers in the Basque Region to support implementation of energy efficiency measures in residential buildings.



As to issues on **increasing transparency**, this was for example a scope of intervention in Rhone Alpés in relation to get access on data on energy consumption and GHG emissions. Data suppliers needed to be convinced of the relevancy and importance of data needed for municipal baseline emissions.

Further, the exchange of know-how and experience between the 12 ENNEREG regions efficiently contributed to raise awareness of key stakeholders, enhance ongoing SEPs as well as identifying new SEPs. For example the Triangle region in Denmark initiated a project on mobility management inspired by a similar project in the Blekinge Region.

In addition to direct exchanges between regions, the Regions 202020 platform was an important tool in this context, not least the presentation of good practice examples from the various regions.

The website was also a focal point for dissemination at the regional level, and was often used as a reference for the replication of SEPs from one municipality to the other.

Summing up the general added value of the ENNEREG action in relation to trigger and support SEPs in the ENNEREG regions was:

- ENNEREG efficiently managed to mobilize and organize regional and local stakeholders resulting in coordinated and continued efforts towards identifying and supporting SEPs.
- ENNEREG efficiently facilitated cross country exchange of know-how and experience on SEP development and implementation through partner and twinning cooperation structures. Workshops in relation to the project meetings and events served key forums for such exchange.
- Through various support measures ENNEREG contributed towards diminishing various barriers for project development and implementation in the regions. The major effort was done in relation to increasing awareness of good practice and best available technologies as well as various financing options. Further, in relation to increasing capacity of local and regional stakeholders in relation to project development, documentation and implementation.
- In all regions the ENNEREG action contributed to efficient matchmaking between the various stakeholders, i.e. leading to an increased number and improved quality of applications to available financing schemes.

The overall lessons learned are:

- Mobilisation and networking have by the ENNEREG action proved to be important drivers for SEP development and implementation.
- Regional/multi governance structures, governing as well as coordination structures are important elements for facilitating SEP development. This e.g. provides a good framework for coordinating SEPs of cross municipal interests (for example in relation to financial sources or RES potentials), and not least provide a good framework for exchanging of good and best practice.
- The SEPs of cross municipal interest as well as regional strategic issues are best coordinated through development of a regional SEAP process that determines binding agreements of items of regional interest, thereby establishing a regional framework for municipal SEPs.

In the subsequent sections, highlights from the various regions are presented.





Silistra Region, Bulgaria

Silistra Province, Bulgaria, is named after its main city – Silistra, and is located in the North-East Region of Bulgaria, along the Danube, at the Romanian border. It is divided into seven municipalities - Silistra, Alfatar, Dulovo, Glavinitsa, Kaynardzha, Sitovo, and Tutrakan - with a total population, as of December 2009, of 127,659. It is a traditionally agricultural province.

SEAP STATUS AND DEVELOPMENT

ENNEREG Activities in Silistra have concentrated on developing a local SEAP for the Municipality of Silistra (60,000 inhabitants). ENNEREG has produced a first draft, which has been adopted by the regional authority for further processing.

The draft was then developed in relation to the networking activities within ENNEREG which has enabled them to include relevant input and contributions from various local stakeholders on local priorities, goals and the means/actions necessary to



achieve them. The networking contributed to achieving a common view on targets and measures.

The draft SEAP has a main emphasis on energy efficiency in buildings.

In addition to the network cooperation with stakeholders, the key to success has been high commitment by the municipal energy manager and his team of experts with the assistance of Sofia Energy Centre. ENNEREG contributed to the development process by introducing a systematic holistic approach to solve local sustainability problems.

ENNEREG further contributed with knowledge about emission reduction calculations and their importance within the overall sustainable development concept at local level, and with knowledge about the financial aid to local authorities provided through ELENA facility. The local administration plans to address ELENA for financing technical and economic feasibility studies and business plans of the initiated projects.



SEP DEVELOPMENT

The SEP activities in the region of Silistra focused on three topics; "energy efficient buildings", "renewable energies" and "energy services and financing". In total, ENNEREG supported the development and implementation of ten SEPs, all of them related to the priorities around which the Regional SEAP has been elaborated.

Four of these projects were implemented under the topic "energy efficient buildings". The most effective project referred to refurbishment of educational buildings (kindergartens and schools) in the Municipality of Silistra by different efficiency measures and the installation of solar thermal and PV technology. This particular SEP aimed at achieving a 20 % reduction of heating and electricity costs by implementation of an ESCO approach.



Energy renovation of school buildings in Silistra

Four SEPs were supported under the topic "renewable energies". This included installation of a solar thermal system (63 m² solar thermal collectors) in the elderly people's home in Ajdemir Village (Silistra Municipality). Another example is a project for construction of an energy complex for CHP on biomass. The main aim of the project is to produce heat and electricity at 85% efficiency, while at the same time making use of available wood and agricultural waste potential in the region.

Finally, two projects were implemented in the topic "energy services and financing". One of them is the construction of a gas distribution system in the municipality of Silistra and the adjacent villages of Ajdemir and Kalipetrovo to substitute electricity and coal for heating purposes in industries and households, thus contributing significantly to the reduction of CO_2 emissions.

The key success factors for SEP promotion was the ENNEREG action combined with the significant potential for energy efficiency in buildings and RES exploitation, as well as a clear priority of the Silistra Municipality to work in a sustainable direction.

Most prevailing barriers are related to financing and lack of resources to development technical and economic assessments and business plans for the identified SEPs .

One main lesson learnt is that the political support and direct involvement of local authorities in the ENNEREG project activities is a critical factor for successful SEP initiation and promotion. During the ENNEREG action all related activities were put on hold, due to elections and change of administration, until a new administration took over.





Upper Palatinate, Germany

The Upper Palatinate (German: Oberpfalz) is one of the seven administrative regions of Bavaria, Germany. It has a total size of 9.691 km². The region is located in the east of the Free State of Bavaria. In the east, Upper Palatinate is bordering to the Czech Republic. 80 percent of the 1,081,417 inhabitants are living in rural areas. The major city is Regensburg.

SEAP STATUS AND DEVELOPMENT

One of the major efforts of ENNEREG was to strengthen the regional energy planning process in the Upper Palatinate Region. Previously there was no regional SEAP existing, but at the end of ENNEREG a draft was prepared at discussion level.

Major efforts were done in relation to sensitize stakeholders on the relevance and need for a regional approach to coordinate sustainable energy investments. Whereas many energy concepts and sustainable energy plans have been developed in recent years by local authorities, a more coherent regional approach, balancing the existing potentials between local authorities and integrating potential synergies between them at a regional level are still missing.



The development of the Regional Framework Plan for Energy within ENNEREG contributed significantly to realize a more integrative perspective. Due to the rather weak regional governance structure of sustainable energy issues in Upper Palatinate, the finalization of the Plan illustrated the benefits of sustainable energy planning at this level to a wider public. To some degree, the plan is able to serve as a role model in Bavaria.

The main results of this plan are:

- Information and overview on the energy infrastructure in the Region of Upper Palatinate
- Regional analysis of final energy consumption in the building sector, including an assessment of energy saving potentials
- Assessment of final energy consumption in the commerce, trade and industry sector
- Regional analysis on the current use of the renewable energy sources, more detailed analysis of expansion potentials in specific technologies (e.g. wind and solar energy)

The ENNEREG contributed to the development of the Regional Framework Plan for Energy specifically through:



- Establishment of a constructive working atmosphere between essential public and private organizations working in the energy sector
- Provision of trust through regular meetings especially of the ENNEREG Steering Committee, helping to elaborate a draft for regional objectives and a long-term development vision

The major driver for developing a regional SEAP of the Upper Palatinate was basically the renewable energy industry. A major barrier for developing a complete and substantial regional SEAP is the lack of a regional authority / organization taking over responsibility for the development of a full SEAP, including the establishment of a regional energy data basis and continuous data management.

SEP DEVELOPMENT

In the region of Upper Palatinate, a total of ten SEP projects was initiated and supported in the context of ENNEREG. One third of the projects were carried out under the renewable energy topic (six projects). Four of these projects were related to the development of wind farms in the northern area of the Upper Palatinate Region. Another RES project was to support the installation of a CHP unit based on biomass (biomass installation and district heating in Mitterteich), and a final one the construction of a PV installation on a large commercial building.

ENNEREG has significantly supported the development of SEPs in the renewable energy topic by offering regional expert workshops on the current regulatory and planning framework for installing PV and wind power installation. Particular focus was also was also directed towards establishing a financing model for energy cooperatives, mainly developed and organized by local administrations. Another important element was to strengthen the networking between existing regional energy cooperatives by offering regional platforms for knowhow transfer.

As a result of the workshop and seminar activities, several local authorities in the Upper Palatinate and in neighbouring regions decided to invest in developing a SEAP, based on the funding schemes offered at the Bavarian and the federal level.

Another ENNEREG activity was to support the cooperation of nine municipalities in the Northern Upper Palatinate Region, rural district of Tirschenreuth, in developing a joint wind power development plan.



Windpower Installation Brenntenberg, 3.2 MW

Additionally, ENNEREG also supported the dissemination of innovative building technologies. One example of this is the planning and construction of an energy-efficient and nearly carbon-neutral secondary school in Lappersdorf, which is located in the District of Regensburg. This project combines the integration of an innovative heating and cooling system (using geothermal energy and heat pumps) in combination with modern architecture for buildings planned to achieve carbon neutrality.





The Triangle Region, Denmark

The Triangle Region is organized as an association of six municipalities: Billund, Fredericia, Kolding, Middelfart, Vejen and Vejle.

The Triangle Region has initiated an overall coordination of relevant climate initiatives in the municipalities to reduce energy consumption and environmental impacts in the Triangle Region.

SEAP STATUS AND DEVELOPMENT

During the ENNEREG project, the region completed a draft basis for a SEAP. This includes a thorough review of the energy sector in the Triangle Region, including production, consumption and potential resources. For each energy sector, a number of possible interventions were identified, described and analysed, however, the SEAP draft did not set specific goals regarding energy consumption and/or CO2 emissions for each sector or for each intervention.

The SEAP process in Triangle Region Denmark was stopped and reconsidered completely upon termination of Triangle Regions membership of Covenant of Mayors. In September 2009 Triangle Region Denmark joined the Covenant of Mayors as a single member on behalf of the 6 municipalities in the region. At that time this membership approach was accepted by the Covenant of Mayors office. However at a later stage the common membership of the six municipalities was not accepted as a valid legal status within the CoM.

In this light, the future steps are not fully determined. However, future activities regarding finalizing the SEAP, is expected to be anchored in the implementation of the joint municipal spatial plan for the Triangle Region. The process for a new Joint municipal spatial plan for the Triangle Region was launched in 2012, and is expected to be completed in late 2013.

The ENNEREG project has contributed to establish a better overview of the energy flow in the region and how it is produced. This has provided possibility to focus on areas where it is possible to make an impact on how to change the way energy is produced and consumed.

The ENNEREG actions have also contributed to develop a process for the municipalities by giving the possibilities and resources to spur an already existing ambition to create a platform for cooperation on climate issues. Throughout the project continuing meetings were held with the municipalities, at which various initiatives and projects regarding climate and energy were discussed.



SEP DEVELOPMENT

In the Triangle Region, in total eight SEPs were supported by the ENNEREG action. Four of the projects are categorised under the "sustainable transport" topic, two of them under the "renewable energy" topic, one under the "energy services and financing" topic and finally one under the "IE Education" topic.

The sustainable transport projects mostly focused on e-mobility, including establishing an infrastructure for electric cars (e.g. charging stations). A charging stand was developed through the project. Another SEP focused on the development of a planning instrument to be used in spatial planning for the traffic infrastructure. In a third SEP private households are offered to try an electric car for a period of 3 months for free. The project runs for 2 years and involves 300 electric cars.

Under the "renewable energy topic", biogas was in focus including the development of a business plan for biogas from liquid biomass. During the coming years up to five large-scale biogas plants are expected to be commissioned.

In addition to direct support to projects through workshops and bilateral meetings with stakeholders, the ENNEREG action efficiently contributed through the exchange of know-how and experience with other ENNEREG regions. For example the project on c-mobility management (including car pooling) was initiated through exchange of information with the Blekinge Region regarding a similar project in Sweden. Moreover much information was collected among several ENNEREG partners and regions to enhance the development of the SEPS in the Triangle Regions. This was for example done in relation to designing electric charging stands.

During the ENNEREG project the Triangle Region Denmark continued the networking between all the six municipalities mainly focusing on knowledge sharing in relation to sustainable energy action plans and developing new projects (SEPs), e.g. in relation to Infrastructure for electric cars, energy refurbishment of sports, biogas etc..



Electric car and charging stand in Electric car and charging stand in the Triangle Region

In relation to meeting the Governmental strategy of 100% RES in

2050, Danish municipalities are expected to play a major role in implementing the needed measures. There is a big tradition for local heat planning and a good data basis, but many municipalities are facing many challenges in relation to the needed holistic planning approach. This also includes financing issues. Despite relatively good financing possibilities, there is a need to mobilise more capital through public private partnerships.

The major lessons learned from the ENNEREG activities in the Triangle Region are:

- Knowledge sharing as practiced within the ENNEREG project is important and most often leads to new ideas and inspiration.
- Efficient networking leads to local initiatives, which lead to better projects and which are much easier to implement.
- Good practice in one municipality leads to projects in other municipalities.



Basque Country, Spain



The Autonomous Community of the Basque Country is an area of 7,240 km², inhabited by a population of 2.1 million people. It consists of three provinces, Gipuzkoa, Araba and Bizkaia, and its capital is Vitoria-Gasteiz.

The Basque Country enjoys a high level of autonomy in matters like health, education, security, housing and taxation. This has led to the establishment of its own energy policies since the early 1980s.

SEAP STATUS AND DEVELOPMENT

Networking activities for the development of the energy action plan (Basque Energy Strategy - BES2020) were carried out in cooperation with the regional government as the main stakeholder. A document showing the outline of the action plan has been prepared, presented and discussed with the stakeholders, which have the opportunity to provide their comments in an early phase of the preparation of the plan.

The Energy strategy for the Basque Country 2020 (BES2020) consists of a series of actions within three major areas: energy consuming sectors, energy markets and supply and industrial

technological development. These actions seek to advance along the road towards greater energy efficiency and supply security taken by the Basque Country since it first developed its own energy policy.

The ENNEREG project has contributed actively to the SEAP development process by:



- Providing valuable inputs from the regions and partners participating in the project. This has included innovative ideas and examples of good practices about the tasks that they are working on.
- The participation of stakeholders. The methodology for participation of stakeholders in energy policies that was set up for the SEAP development process was inspired by the work in the project.

The rising price of energy, the consciousness about climate change and even about a lack of fossil fuels in the future are the main drivers for an increasing awareness in the region about the need to carry out actions in the field of sustainable energy. This makes it easier to involve stakeholders in the SEAP preparation and to promote actions in energy efficiency and renewable energy.



SEP DEVELOPMENT

Twelve SEPs were implemented through the ENNEREG's support, four of them under the "renewable energy" topic. The renewable energy projects comprise solar energy plants for public buildings (two projects), geothermal energy and biomass for district heating.

Two SEPs implemented in relation to "energyefficient products" are related to two public support programmes, one aimed at supporting replacement of old inefficient appliances by A and A+ category appliances through economic incentives. Another one is supporting window replacement in the residential sector. Within the



District Heating with biomass in Orozko, Spain

first programme around 30,000 old appliances are replaced every year.

Two projects were also implemented in relation to sustainable transport, including operation of a new fleet of electric vehicles in the Cruces Hospital in Barakaldo. Additionally ENNEREG supported one SEP in each of the topics "energy-efficient buildings", "energy efficient industry", "energy services and financing" and "IE education".

In connection with the ENNEREG project a new specific team of 3 people has been set up for the promotion of SEPs at the municipal level. In addition to ENNEREG this team will be responsible for other activities related to collaboration with municipalities, including activities related to EVE's role as Covenant Coordinator.

The organization of workshops has proven to be the most effective tool in the Basque region for raising awareness among stakeholders about existing possibilities for developing SEPs in various areas.

The ENNEREG project has encourage the organisation of seminars on energy efficient public lighting, biomass in the household sector as well as energy service contracts at municipal level. Furthermore specific workshops were held with municipalities on the elaboration of SEAPs. Generally the workshops have inspired participants with ideas (raising awareness), which they have often started developing afterwards.

Some of the SEP activities in the Basques regions have led to building of strategic alliances (in total in 6 SEPS), for example, a network of window carpenters and manufacturers was created to support the above-mentioned window replacement programme.

One of the main lessons learnt from the SEP process in the Basque region is that many projects need financial support from the national and regional administrations to help them to be carried out. The financial crisis is hitting hard in Spain and many support programmes set by the national and regional administrations are being delayed, or even withdrawn. This slows down the development of sustainable energy projects. Some municipalities have defined their SEAP in the framework of the CoM but faces lack of resources to implement the plan.



Rhône-Alpes, France



The Rhône-Alpes region (6.2 million inhabitants) lies at the natural crossroads of major national and European axes of communication. This situation makes it a region where diversity is the key-word. This geographic, climatic, sociological and cultural puzzle could be a handicap. Rhône-Alpes has made this its great strength. Considered as a symbol of dynamism in the heart of the European Union, the Rhône-Alpes Region is co-founder of the "Four Motors for Europe" which, with Catalonia, Lombardy and Baden-Wurttemberg, works in the university, scientific, economic, sport and cultural fields.

SEAP STATUS AND DEVELOPMENT

The **Regional Plan Climate Air Energy (SRCAE)** of the region Rhône-Alpes was officially launched on December 6th 2010 by the Prefect and the President of Region.

The European commitments of France in 3 x 2" must be defined at regional level. Every region of France has to define its contribution to the national objectives according to its own specificities, by elaborating a Regional Plan Climate Air Energy (SRCAE). The objective of this plan is to define the orientations and the regional objectives on horizons 2020 and 2050 in reduction of greenhouse gas emissions, control of the energy demand, development of renewable energies, fight against atmospheric pollution and adaptation to climate changes.

The plan is based on:

- A diagnosis on the questions of air quality, renewable energies, greenhouse gas emissions, energy consumption and the vulnerability of the territory in climate changes
- An exercise of prospective on horizons 2020 and 2050 on these various elements to determine the possible future of the region
- The definition of objectives and orientations ensuing from the previous exercises

These orientations will serve as strategic frame for local authorities and will have to facilitate and strengthen the regional coherence of the actions engaged by these local authorities.

The elaboration of the project of SRCAE began in 2011 and with the ENNEREG project partner, **Rhonalpénergie-Environnement** involved in developing and testing the regional scenarios. Most specifically this has ensured precise calculation of CHGs.

Moreover, ENNEREG contributed to bringing several stakeholders from many fields together in order to discuss and establish the desired scenario in the best way.

SEP DEVELOPMENT

The ENNEREG activities were mainly related to supporting three major projects that were all identified as a result of ENNEREG (covering the three topics: "energy efficient buildings", "renewable



energy" and "monitoring"). The projects are related to general needs within the region and thus serve as good examples for further replication.

The projects were supported and supplemented by awareness and training activities, e.g. in relation to public procurement rules for energy efficiency projects in buildings.

The RES project (hydropower) was supported by detailed feasibility analysis, including identification of site.

As to the project on monitoring, the objective of the relevant SEP was to establish a regional method



ensuring an effective approach for calculating the SEAP baseline for local authorities in the context of the CoM initiative. This will be done automatically by using the database of the regional GHG and energy observatory.

This SEP also contributed to increasing transparency around the data needs. Initially certain stakeholders refused to provide data for municipalities, due to fears on privacy/confidentiality issues as well as doubts on relevancy, but were convinced through the

ENNEREG action that the data requested is very important to help covenant signatories to elaborate Baseline Emission Inventories.

Thus, the ENNEREG action ensured that the data needed was provided to the municipalities. This was further supported by various trainings on tools to handle the data.

There was also some general focus on financing issues as to what kind of mechanisms and financing is available at local, national and European level. Currently access to financing is one of the major problems in the region.





The Cyclades Islands, Greece

The region comprises of a group of approximately 220 islands. 24 of the 220 islands are inhabited. The region consists of 19 municipalities.

During the last forty years the Cyclades have become one of the most famous tourist destinations in Greece. Apart from tourism, Cyclades economic activities include traditional agriculture and fishery, mining and ship construction.

One of the major characteristics of the region is the geographical isolation and also the land split which causes

severe communication and access obstacles.

The region still lacks specific technical infrastructure (marine installations, water supply, soil process installations, etc). One of the most important problems is the water shortage that the islands are facing, not only because of climate change but also due to non-rational use of the water resources.

SEAP STATUS AND DEVELOPMENT

The Sustainable Energy Action Plan (SEAP) for the Cyclades Islands has primarily been developed as part of the ENNEREG project. Initially ENNEREG supported in developing a Baseline Emission Inventory on which basis a draft Action Plan was developed in cooperation with the Steering Committee.

The measures proposed in the sustainable energy action plan for Cyclades include interventions for tertiary and residential buildings such as changes in behaviour, retrofitting of buildings, replacement of old appliances and use of solar thermal for hot water production. Such measures are contained in the individual SEAPs of the municipalities of the region already submitted for the Pact of Islands.

Other measures include PV systems, public lighting-reduction of about 10% by energy saving measures in local authorities and various measures for the public and private transport sector such as promotion of public transport, eco-driving and use of electric-hybrid vehicles.

ENNEREG has established close cooperation with the Regional government of South Aegean right from the beginning of the project. Moreover the regional ENNEREG partner established close cooperation with the Network of Sustainable Aegean Islands (DAFNI) in the development of the SEAP. A draft SEAP was presented to the Regional Authority in January 2013 and is now under further processing including consultation with stakeholders.




SEP DEVELOPMENT

The total 13 SEPs were supported by ENNEREG in the Cyclades Region. SEP activities in Cyclades focused on the ENNEREG topics "energy-efficient products", "energy-efficient buildings", "renewable energy", "IE education" and "sustainable transport". The most SEPs were supported in the topic "energy efficient products" (5 SEPs), followed by the building topic (3 SEPs) and the "renewable energy" and "IE Education topic" (2 SEPs in each). One additional SEP was supported in the topic "sustainable energy".

The most successful SEP in terms of contributing to the achievement of performance indicators was the implementation of a renewable energy project, which led to theimplementation of a smart grid infrastructure on the three autonomous islands Kythnos, Milos, Santorini in the Aegean Sea. Other very effective SEPs were conducted in the category of energy efficient buildings, such as implementation of energy efficiency measures and renewable energy technologies in ten preliminary and secondary school buildings in the islands of Andros, Kea, Naxos and Sifnos.

As to IE education projects, these comprised an education program for local authorities and a project titled "Climate Caravan" directed towards pupils and students to develop and spread awareness on energy efficiency issues.

A major driver for the SEP development in the Cyclades Region was the establishment of the ENNEREG Steering Committee involving the Ministry of Environment, Energy and Climate Change; the Region of South Agean; municipalities; the regional Covenant supporter as well as the regional university.

In particular, the ENNEREG Steering Committee supported the Region in developing proposals for available Funding programs. This also included getting access to all required information and data, including energy consumption data for the overall region and the various municipalities.

Further, the ENNEREG Committee played a supportive role in establishing meetings among regional and national contacts for



PV in public lighting, Cyclades, Greece

setting the priorities and better identifying new projects. In addition, it acted as an intermediate between the regional and municipal authorities and the central government (i.e. ministries etc).

The most notable learning from the SEP process in the Cyclades region is that access to funding is the most important mechanism for the initiation of new projects. Another important factor is the education of the stakeholders and the awareness campaigns. The ENNEREG workshops revealed that many stakeholders need support to develop SEAPs and SEPs in relation to their potential as well as support towards the implementation of these through funding opportunities and other supportive measures. The ENNEREG project successfully contributed to cover all of these items.





Kaunas County, Lithuania

Kaunas Region is located in the central part of Lithuania. It is formed by 6 municipalities and has a population of 666,319 inhabitants corresponding to approximately 20% of the total population in Lithuania.

There are 2 city and 6 regional municipalities in the Region. The main authority is Kaunas Region Development Council, which have adopted the Kaunas Region development plan until 2020. Municipalities are governed by Municipal Councils, which assign the Mayor and the Administration.

Kaunas Region is also one of main cultural centers. Cultural heritage includes a big number of architectural-historic buildings.

SEAP STATUS AND DEVELOPMENT

At the end of the project the Regional SEAP produced by the ENNEREG action was at discussion level by regional authorities and is considered as an important basis for the further regional energy planning process. Further the SEAP is to be used as the background for planning needs of the 8 municipalities in the region. Thus, the plan was elaborated to support municipalities in defining municipal targets in RES development, improvement of energy efficiency and reduction of GHG emissions.

The main added value from the ENNEREG support is assessing potentials and defining municipal targets in relation to mandatory municipal renewable action plans, as well as in relation to energy efficiency. This was done through modeling.

Such tasks are the most difficult for municipal authorities to carry out by themselves, due to lack of proper tools and skills. Good practice and experiences from other ENNEREG regions was also useful.

The major barrier towards development of a regional SEAP is considered to be lack of motivation. Actions are only taken according to mandatory requirements such as the above-mentioned mandatory renewable energy actions plans. Other barriers include political interference, lack of financial support (apart from EU Structural Funds), increased heat tariffs as well as lack of proper regional and municipal energy data.

On the other hand activities related to energy efficiency, transport and reduction of CO₂ emissions are being planned and implemented under national programs and strategies.



SEP DEVELOPMENT

The Kaunas region promoted 30 SEPs, covering five topics, mostly within the renewable energy and energy efficiency in buildings. In total 10 RES projects were supported mainly bio energy and biomass projects.

Eleven SEPs were supported in relation to energy efficiency in buildings. These projects mainly dealt with the retrofitting of public buildings (e.g. kindergartens, primary schools, museums, health care centres).

ENNEREG also supported the initiation and implementation of three SEPs in the topic "Sustainable Transport". One important project included modernization measures of the public transport system, like the introduction of a web-based electronic ticket service and the electrical devices at bus stations to inform about time-schedules, delays, routes, etc.

The major support from ENNEREG to development of SEPs in the region was related to establishment and maintenance of network operation – e.g. providing some information on good practice in other proactive regions as well as providing some explanations for policy-makers on problems and opportunities for SEAP and SEP development.



Public Transport, Kaunas

Other support was related to awareness raising for various stakeholders as well as bringing transparency on certain issues within the energy sector.

Several SEPs were implemented in the region during the ENNEREG project period (years 2010-2012), many of them related to funding possibilities through structural funds, and supported through the above-mentioned network cooperation.

The most notable learning from the ENNEREG intervention in the Kaunas Region is that municipalities and regional authorities in general still lack a full understanding of the needs associated with regional and local sustainable energy planning, not least when it comes to small municipalities. One particular problem is the missing involvement of all relevant stakeholders. Typically only stakeholders related to municipal infrastructure is involved in the planning process.



Pomerania, Poland



The Pomeranian Province (Pomorskie Voivodeship) is situated in the North of Poland, on the southern coast of the Baltic Sea. The Region borders on the East with the Russian Federation.

The capital of the Province is Gdańsk – a city with a history spanning more than 1000 years. But now the role of metropolis is played by the Tri-City agglomeration created from the three cities located in the Bay of Gdańsk: Gdańsk, Gdynia and Sopot. Their combined population of nearly 750,000 inhabitants amounts to one-third of the population of the province.

SEAP STATUS AND DEVELOPMENT

There is no obligation to develop SEAPs at any governance level in Poland and at such no Regional SEAP existed before the ENNEREG Project.

However, the idea of developing Regional SEAP was very much appreciated by the regional authority of Pomerania as a supplementary document to the regional strategy. However, the realization of SEAP turned out to be much more difficult than expected due to lack of reliable statistical data on energy consumption in various economy sectors.

The major elements in the developed plan are: Increased energy system efficiency, change of fuel structure from coal to gas and RES, wind energy, biomass in CHP, biogas, and energy efficiency investments in the public sector.

The developed regional SEAP is not a mandatory document; however it is important to the region as it points the way forward for municipalities on how to achieve the 3 x 20 goals. Moreover, municipalities may use the regional SEAP as an inspiration for their own actions. One of the most important activities leading to the development of the SEAP was bilateral meetings, especially with representatives of the regional self-government. Good contacts with suppliers of gas and electricity, as well as people involved in the development and implementation of regional transport strategies were very important as well.

In addition to a rather progressive strategy on nuclear power in the region a major obstacles were related to the availability and quality of data and information. As to the possible implementation of the plan the lack of access to financial resources is considered a major obstacle.

The most notable learning from the SEAP process was:

- Raising awareness is crucial for motivation of authorities at all levels of governance
- Appointing energy manager at local level is vital for energy planning and its implementation
- Data collection is challenging due to lack of reliable information
- SEP implementation depends quite strongly on the priorities for the next budgetary period 2014-2020



SEP DEVELOPMENT

In total twelve SEPs in the Pomerania Region were submitted by the ENNEREG Project. Most of the projects are related to the "energy efficient buildings" topic (seven SEPs). Five projects were initiated under the topic "renewable energy".

The energy efficiency projects in buildings mainly concentrate on retrofitting of school buildings, including retrofitting of buildings at Gdańsk University, including installation of solar collectors. The four renewable energy projects in Pomerania mainly aimed to increase the use of biomass and solar collectors for renewable heating systems in public buildings.

A major driver for SEP development in the Pomerania region was the Structural Funds and other sources of funding such as the 'Green Investment Scheme' (implemented by the National Fund for Environmental Protection). Therefore, SEP activities focused mainly on eligible projects related to these funds: energy efficiency in buildings and utilisation of renewable energy.

ENNEREG project promoting activities concerning SEP development were mostly done during seminars and trainings organized at the beginning of the project. Assistance was also provided to assess and prove financial and technical feasibility of SEPs, particularly in relation to the building projects.

In general the promotion of SEPs helped to increase public acceptance in terms of improving energy efficiency and utilising renewable energy sources, not just among employees of public offices, but also among the general local community. The modernization of public buildings serves an exemplary role and may increase the interest in such investments.

The most notable learning of the SEP and SEAP process is that the regional energy policy relies on National energy policy – which is still heavily depending on coal and plans about new nuclear power plants. In this light it is difficult to get support for implementation of sustainable energy policy oriented on RES.



Five municipalities from the Pomeranian Region, signed the Covenant of Mayors during the Pomeranina Energy Days in April 2011

On the other hand municipalities have to focus on energy efficiency and RES, but faces problems in relation to lack of historical and present statistical data on building state, energy sources and transportation. In this context it is worth noting that Pomerania is considered a Polish pioneer region for showing a sustainable alternative to the conventional policy. The region has developed more municipal energy plans and concrete RES/EE projects than any other region in Poland. The ENNEREG action has strengthened the region in pursuing this pioneer role.



Wielkopolska, Poland



Wielkopolska is one of the 16 administrative regions in Poland with 3.4 million inhabitants.

Wielkopolska, in comparison with other regions, can boast of very well-developed infrastructure. The region is especially well provided with power, a developed railway network and perfectly organised air transport. Also, a model of electric energy, natural gas and oil supply is crucial.

Wielkopolska is mostly an industrial and agricultural area with areas of some good prospering farms. Almost 58% of region populations live in cities and towns. The major city is Poznan.

SEAP STATUS AND DEVELOPMENT

A Regional Sustainable Energy Action Plan for renewable sources and energy efficiency was elaborated within the ENNEREG project in parallel with the regional energy strategy and was approved by the Board of the Wielkopolska region in December, 2012.

The plan has high focus on the creation of an infrastructure for use of energy generated by RES such as wind, hydro, solar and geothermal energy. Moreover, it is assumed to use energy from bio fuels, biogas, and biomass for electricity and heat production.

The ENNEREG project is the first action in the region that has addressed all the regional stakeholders with the special emphasis on the self-government.



Thanks to organized conferences and distributed bulletins most of the Mayors in the region had good possibility to be introduced to the Covenant of Mayors initiative, including the purpose and the required content of a sustainable energy action plan.

The SEAP development in the Wielkopolska Region was done from scratch since there is no mandatory obligation to develop a regional SEAP. The same situation applies to the local authorities.



The development of the SEAP encountered some obstacles like: lack of regional statistical data e.g. on energy production from RES, dissipation of data on RES investments and lack of statistical data on heat production and consumption per sector.

SEP DEVELOPMENT

56% of all SEPs supported by the ENNEREG project are related to the Wielkopolska Region. This can be explained by the fact that the local ENNEREG partner is the public authority of the region, representing more than 3.4 million inhabitants. Within the ENNEREG consortium it is the only regional public authority, disposing over large administrative resources for implementing and coordinating respective programs. Further, the public authority of the Wielkopolska Region is also responsible for planning and administrating the allocation of European Structural Funds, e.g. regarding the relevant environmental and energy programs.

Against this background, more than 130 SEPs were filed for the topic "energy efficient buildings", four SEPs in the topic "sustainable transport" and 28 SEPs in the topic "renewable energy".

A large share of energy efficiency projects in building was targeted to improve energy efficiency of public buildings. A majority of these projects was financed by European Structural Funds.

As already indicated, the ENNEREG action has primarily supported the Wielkopolska region in fulfilling its role as regional authority, and mainly in relation to supporting projects in getting financing from structural funds.



Energy crops in the Wielkopolska Region

A network was in place at the start of the ENNEREG action, and was further strengthened through the project. The network involves municipalities (226 communes and 31 poviats), regional RES and EE market stakeholders (including energy producers), the regional energy agency WAZE Ltd. and scientists from high schools and institutes located mainly in Wielkopolska.

A major learning from the ENNEREG intervention is how a Regional Authority can plan a significant role in promoting sustainable energy projects. The challenge for the region is now to build on the success including strengthening the link with municipalities and increase the momentum going forward.



Madeira, Portugal



The archipelago of Madeira is made up of two inhabited islands (Madeira Island and Porto Santo Island) and two groups of uninhabited islands (*Desertas* and *Selvagens*). It is situated in the Atlantic Ocean about 1,000 km from Lisbon, the capital of Portugal.

Since 1976, Madeira has been an autonomous region with a regional government. It has 11 municipalities, 10 of which are in Madeira Island (Calheta, Câmara de Lobos, Funchal, Machico, Ponta do Sol, Porto Moniz, Ribeira Brava, Santa Cruz, Santana e

São Vicente) and a municipality in Porto Santo Island. The Autonomous Region of Madeira has 267,785 inhabitants, with a concentration of 45% of inhabitants in the city of Funchal, the capital of the Region.

SEAP STATUS AND DEVELOPMENT

The Vice-Presidency of the Regional Government of Madeira is the governmental body with relevant expertise in the energy field. It has the power to define and implement the necessary actions to be complied with the regional policy in the energy sector. In addition to these powers, it is the responsibility of the Vice-Presidency to oversee some public and government subsidized companies operating in the energy sector.



During the development period of ENNEREG project, Madeira has approved three important political instruments in energy domain at regional and local level:

- The **Sustainable Energy Action Plan for Madeira Island**, approved in March 2012 Isle-Pact Initiative.
- The Sustainable Energy Action Plan for Porto Santo Island, approved in March 2012 Isle-Pact Initiative.
- The Sustainable Energy Action Plan for Funchal Municipality approved in April 2012 Covenant of Mayors Initiative.

In this context, the main contribution from ENNEREG in the Madeira Region has been:

- Promotion of Sustainable Energy Projects (SEP) to key stakeholders at regional and local level, within the scope of these three political instruments
- Promotion of the Covenant of Mayors in Madeira Region
- Exchange of experiences and good practices between different European regions' participants
- Support to the development of the Sustainable Energy Action Plan under Islepact

The elaboration of the two above-mentioned plans involved an important group of regional and local stakeholders (public and private) and citizens, which constitutes an Advisory Committee, and who will have a major role in the plans' implementation and monitoring process.



SEP DEVELOPMENT

Nine projects were supported by ENNEREG in the region of Madeira. The majority of SEPs are renewable energy projects (six projects). Additionally, there are two projects in "energy efficient buildings" and one project in "sustainable transport".

Four of the renewable energy projects were focused on implementation of solar collectors for heating of buildings (basically for public buildings and swimming facilities). Additionally two projects were conducted to install PV panels for sustainable electricity generation.

In the energy efficient buildings topic, ENNEREG supported regional activities by offering a platform to organize bilateral meetings with key actors which play an important role on public buildings management, such us facilities, services, schools, sport infrastructures, social residential sector, etc.

In sustainable transport, the SEP activities of the region focused on the promotion of electrical mobility. The use of electrical vehicles was promoted with the organization of an information campaign about electrical mobility and with an eco-driving campaign for driving schools.

The main activities that led to the identification of projects and their implementation were bilateral contacts with public and private actors aimed at disseminating information on best practices and best available technologies. Further in this context to identify needs that could lead to identification, development and implementation of SEPs.



Awareness raising workshop

A similar strategy was chosen to promote the Covenant of Mayors. All municipalities of the Autonomous Region of Madeira were requested to attend a meeting where importance was given for Municipalities to join the Covenant of Mayors and develop its own Sustainable Energy Action Plan. The covenant signatory Municipality of Funchal, was invited as a mentor municipality.

The major learning from the Madeira Region is that the action of the ENNEREG project contributed to an efficient dialogue with stakeholders and increased their commitment in pursuit of Madeira's and Porto Santo's regional action plans.





Blekinge, Sweden

Blekinge with 153,000 inhabitants is one of the traditional provinces of Sweden. It is situated in the south east of the country and it is the country's second-smallest province by area.

The historical provinces of Sweden serve no administrative function. Blekinge is, however, the only province, besides Gotland, which covers exactly the same area as the administrative county, which is Blekinge County.

The total number of municipalities in Blekinge is five and all of them are actively involved in Climate cooperation network. Each municipality has their own SEAP and the goal is that the

local SEAPs will have a natural connection to the regional SEAP.

SEAP STATUS AND DEVELOPMENT

The provincial government has good competence in sustainable energy planning and has the main responsibility for developing the regional SEAP. This task has been distributed by the Swedish national Government to the counties in Sweden. In practice, the development of the regional SEAP is being done within the network "Climate Cooperation Blekinge", in which ENNEREG has had a big impact by supporting the provincial government in the process.



The regional SEAP process is in full progress, and the document is under preparation by the regional authority although not yet approved

The regional vision and goals have been redesigned during 2012 and now have the ambition to reach even further than EU's 202020-goals as well as the Swedish national goals.

Thus, Blekinge is leading the way forward and is doing so by actively engaging stakeholders and citizens in the process.

The ENNEREG actions have contributed to the development process by giving the possibilities and resources to initiate an already existing ambition to create a platform for cooperation, consensus and collaboration regarding energy and climate issues. Once the platform was established the need for a better and more anchored SEAP was obvious. Thus, ENNEREG contributed with great inspiration.



Another main driver for the SEAP development is for example the support for working strategically with energy efficiency that all municipalities in Sweden get from the Government, for example through funds for energy and climate advisors in every municipality. Possible problems ahead may be related to funding of SEPs.

SEP DEVELOPMENT

SEP activities in the region of Blekinge focused on six topics; "energy efficient buildings", "energy-efficient industry", "sustainable transport", "renewable energy" and "energy services and financing".

In total, twelve SEPs were supported in the Blekinge region. Most SEPs were implemented in the "renewable energy" and the "sustainable transport" topics, three and four projects respectively.

The focus of the SEP in the topic "energy buildings" was the construction of an energy-efficient building with energy consumption 50% lower than the existing building code. The excellent energy



Passive house in Blekinge

performance of the building is achieved with passive house technology.

In the "sustainable transport" topic, the three SEPs focused on improving mobility management, for example by increasing the bicycle modal share of commuting trips.

The renewable energy projects of Blekinge focused on wind power and small-scale buildingintegrated PV installations, including the small wind farm Säby (four wind turbines with a total installed capacity of 3.2 MW).

A notable SEP in the topic "energy services and financing" included the construction of a new smallscale district heating system, financed and operated by a community-based energy association.

The promotion of SEPs, including prioritisation of the focus areas, are done in parallel with the regional SEAP process, and as an integrated part of the activities within the regional network for "Climate Interaction Blekinge".

The prioritization of main topics for SEPs was handled both in the Civil Servant group and in the Steering group. The most important activity for SEP development proved to be dialogue meetings to develop further possible actions within different sectors, e.g. industry, households, farmers etc.

There were no projects directly initiated by ENNEREG action, but the projects were heavily supported by raising awareness and capacity building activities, including exchange of know-how in the established ENNEREG network nationwide as well at European level.



Cymru - Wales, UK



Wales is part of Great Britain and the United Kingdom. It is situated to the West of England and is inhabited by 2,999,319 inhabitants (2009).

Cardiff, Wales' capital is situated in the south of the country with a population of 321,000.

The National Assembly for Wales, which opened in 1999 is the political body made up of 60 elected Assembly Members. The Welsh Assembly Government is responsible for policy and budget priorities and is scrutinized by the legislature, the National Assembly for Wales.

In Wales 40 members are elected to the UK Parliament where responsibility for some non devolved policy areas for Wales resides.

SEAP STATUS AND DEVELOPMENT

Whilst the document has never been referred to as a Sustainable Energy Action Plan (SEAP) the Welsh Government's Energy Policy Statement – A Low Carbon Revolution, has been used, within the ENNEREG project, as the core of such a plan. It is considered that the policy statement, along with the documents that lie behind it, is the equivalent of a SEAP.

Wales. The Welsh Government has approved the Energy Policy Statement. In addition, in March 2012 it published the document "Energy Wales: a low carbon transition". The ENNEREG project added

value to the Welsh Government's document by identifying and highlighting key policy and statutory background to the summary aspirations set out in the Energy Policy Statement.

The ENNEREG project has concentrated its efforts on bringing communities and citizens into the vision of the plan and seeking to ensure that the message is not one simply for big businesses. It is widely recognised that individuals and communities in general have to see that they have a real stake in the energy agenda if they are



to accept some of the changes that are necessary for a low carbon economy. The ENNEREG project, being delivered by an energy agency that is not part of government, has a reasonable opportunity to engage with such stakeholders.

The ENNEREG project has engaged with farmers, landowners, community groups and householders in order to directly deliver sustainable energy actions and to get over the message that action needs



to be taken and is usually a very cost-effective option. These activities are related to the sustainable energy projects described below.

SEP DEVELOPMENT

In ENNEREG, the region of Wales region promoted 10 SEPs covering three topics. Three SEPs were supported in the topic "energy efficient buildings", one SEP in the topic "renewable energy" and six SEPs in topic "IE Education".

In the buildings topic, SEPs were mainly targeted at improving energy efficiency in public buildings. Including installation of PV's to generate electricity. RES projects e.g.. includes a biomass heating system using broadleaf woodland and the Llangattock Green Valleys Project, which making the village Llangattock carbon neutral via hydro, micro wind, PV, AD and airsource installations.



Intelligent energy education in Wales

Among the SEP six IE Education projects can be mentioned the Supply Chain Development Programme initiated by the Energy Saving Trust, which is aimed to develop the micro generation supply chain so that it can meet its market potential.

For this general objective it supports installers to reach industry standards in micro generation (Micro generation Certification Scheme).

The networking carried under the ENNEREG project has contributed significantly to the development of the above SEPs, including reaching important grass roots organisations, community groups and individuals. Thus, there is considerable level of interest amongst community groups in taking forward community owned renewable energy generation schemes. Workshops, exhibitions and events supported by ENNEREG has demonstrated a growing interest in energy efficiency and renewable energy.

With regard to the learning from the process, the primary focus in Wales for ENNEREG has been to seek to persuade individuals, communities and smaller businesses (particularly farmers) to take action to reduce their energy use and generate renewable energy. It is also an important message that changes are necessary in the way that energy is generated at a larger scale too and that some impacts upon local landscapes are necessary in order for this to occur.



Twinning and Replication

The overall scope of the ENNEREG twinning and replication programme has been to interact with regions beyond the direct partner regions, including transferring successfully demonstrated achievements of the ENNEREG regions. This chapter reviews how this part of the project turned out.

Twinning Activities

The ENNEREG sustainable energy twinning programme, being the most prominent feature of the project's replication efforts, was launched in order for each ENNEREG region to enter into a dedicated dialogue on replicating project achievements with one twin region outside the ENNEREG consortium.

The twinning has taken place in three main steps:

- Identification of twin partner by the ENNEREG region, agreement on twinning and joint drafting of twinning work programme
- Initiation of activities, including at least one ENNEREG region mission to its twin partner
- Evaluation of twinning process, activities and outcome by the ENNEREG region

8 of 12 ENNEREG regions identified their twin partner through previous collaboration or own networks. The remaining 4 found their twin through contacts provided by other ENNEREG partners and via European networks. The most common criteria for the choice of twin were "potential for improvements in twinning region" as well as "potential for future cooperation".

The twinning partnerships are shown on the map below:





□ ENNEREG partner Energy Agency of the Basque Country (EVE) and the neighbouring region Castilla y León (EREN) in Spain



Key scope, results and lessons learned of the twinning:

- The Basque Country's SEAP developed under ENNEREG will be used as a reference documents in the development of a regional SEAP in Castilla y León.
- EREN's telematic administrative procedure for the management of grants is likely to be replicated in the Basque Country.
- EVE provided support on the Covenant of Mayors, i.e. on new ways to finance municipal SEAPs, and on how to encourage municipalities to develop and implement SEAPs.
- Strengthened cooperation between the two regions' Brussels offices for coordination on EU sustainable energy projects.
- Energy agencies should take advantage of opportunities for exchanging experiences, and not only within the context of a European project like ENNEREG. National platforms of energy agencies such as EnerAgen in Spain can be a useful instrument to facilitate interregional cooperation.

EVE Contact

Álvaro Pérez de Laborda Email: <u>alaborda@eve.es</u> Phone no: +34 944035663 Website: <u>www.eve.es</u> EREN Contact Cruz Martín-Granizo Email: <u>marlopcr@jcyl.es</u> Phone no: +34 987 849393 Website: <u>http://www.eren.jcyl.es/</u>



□ ENNEREG partner Energy Agency for Southeast Sweden ESS (Sweden) and Tartu Regional Energy Agency TREA (Estonia)



Key scope, results and lessons learned of the twinning:

- The core part of the interaction has concerned experience on the SEAP development process SEAP step-by-step.
- Specifically it addressed experience on energy baseline analysis which data are required to develop a proper SEAP and how to organise data collection and processing.
- Organisation of a study visit to Växjö for a Tartu delegation to get a firsthand experience on sustainable energy planning and initiation of SEPs.
- Due to the effective twinning experience cooperation on a regular basis has been established between the two regions and sharing of information and experiences will continue.

ESS Contact

Lisa Wälitalo, Energikontor Sydost Framtidsvägen 10 A, 351 96 Växjö Email: <u>lisa.walitalo@energikontorsydost.se</u> Phone no: +46 73 415 4542 Website: <u>www.energikontorsydost.se</u>

TREA Contact

Marek Muiste, Tartu Regional Energy Agency Riia 181A, Tartu Email: <u>marek@teaduspark.ee</u> Phone no.: +37 27 635 374 Website: <u>www.trea.ee</u>



□ ENNEREG partner Centre for Renewable Energy Sources CRES (EL) and Region of Dodecanisa (EL)



Key scope, results and lessons learned of the twinning:

- The two regions made exchange on SEAP development within the Pact of Islands and 5 island authorities from the Dodecanese region joined the Covenant
- Dodecanisa stated that one of the main outcomes of the twinning has been "Recommendations on how to develop a SEAP".
- Two SEP's from the Cyclades region were replicated in Dodecanisa: Portable water and Energy Efficiency In Schools
- The two regions expect further exchange of experience and information and to collaborate on future common projects. Possibly CRES will continue to support Dodecanisa in initiating a SEP on getting power supply to a small island in Dodecanisa from a PV-station.

CRES Contact

Elena Taxeri, Center for Renewable Energy Sources and Saving E-mail: <u>elena@cres.gr</u> Phone no.: +30 210 6603332 Website: www.cres.gr Dodecanisa Contact Manos Telonis, Region of Dodecanisa Email: <u>manos.syros@gmail.com</u> Phone no.: +3022810.98802 Website: www.nad.gr



ENNEREG partner Lithuanian Energy Institute LEI and Šilutė Municipality in Lithuania



Key scope, results and lessons learned of the twinning:

- LEI helped Šilutė Municipality in revising a SEAP produced in 2010 that needed to be renewed due to the lack of experience and data about the local energy sector
- The twinning turned successful, resulting in an energy inventory and SEAP was produced, there was organised training of municipal staff and organisation of a Sustainable Energy Day in Šilutė.
- The activity that proved the most complicated was how to manage closer collaboration with the relevant stakeholders
- Strong contacts between the LEI and Šilutė Municipality have now been established, enabling Šilutė to seek further consultations on SEAP implementation.

Kaunas Contact

Valerijus Makūnas Kaunas Region Development Council Email: <u>v.makunas@krs.lt</u> Phone no: +370 37 305 571 Website: <u>www.vrm.lt</u>

Šilutė Contact

Remigijus Budrikas, Šilutė municipality Dariaus ir Girėno g. 1, LT 99133, Šilutė Email: <u>br@pamarys.lt</u> Phone no.: +370 44 179 280 Website: <u>http://silute.kryptis.lt/main.php</u>



ENNEREG partners Institute of Mechanical Engineering IDMEC/Regional Agency for Energy and Environment of Autonomous Region of Madeira AREAM twinning with the regional energy agency Oeste Sustentável in the West Region in Portugal



Key scope, results and lessons learned of the twinning:

- The West Region is ambitious and very committed to the development of measures that reduce energy consumption, enhance the use of renewable energy and reduce CO2 emissions. The twinning helped to support these objectives based on the ENNEREG experience.
- The main results were exchange of experiences and expertise, engagement of stakeholders through workshops and replication of SEP. The latter comprising the itinerant hydrogen promotion exhibition, which is an educational SEP developed in the scope of the SEPs implemented within ENNEREG activity in Madeira.
- A main lesson learned is that municipalities within a region are likely to share many of the same characteristics and face similar energy problems and will gain from combining their engagement and efforts.
- The two regions plan to continue their cooperation. More SEPs are in the pipeline and when the West Region find the financial and human resources needed, further replication from Madeira is just around the corner.

Madeira Contact

Sandrina Pereira, Institute of Mechanical Engineering Av. Rovisco Pais 1, 1049-001 Lisboa E-mail: <u>sandrinapereira@ist.utl.pt</u> Phone no.: +35 12 18 419 406 Website: <u>www.rgesd.ist.utl.pt</u>

West Region Contact

Rogério Ivan, Oeste Sustentável Avenida General Pedro Cardoso 9, Apartado 811, 2500-922 Caldas da Rainha Email: <u>oestesustentavel@oestedigital.pt</u> Phone no.: +370 44 179 280 Website: <u>www.oestesustentavel.pt</u>



□ ENNEREG partner Baltic Energy Agency BAPE in the region of Pomerania (PL), the neighbour region Warmia-Mazuria Regional Energy Agency WMAE in Poland



Key scope, results and lessons learned of the twinning:

- The wish of the newly established energy agency in Warmia-Mazuria was mainly to learn from Pomerania's experiences in energy planning.
- BAPE visited Warmia-Mazuria twice in the twinning partnership as well as representatives of Warmia-Mazuria participated in a workshop in Gdánsk, arranged by BAPE within the framework of ManagEnergy.
- These exchange visits were accompanied by many effective discussions on good practises, on SEAPs, the CoM and specific SEP development.
- Several potential subjects of future cooperation were identified such as bilateral participation in regional events dealing with energy planning, support by Pomerania to SEAP development in Warmia-Mazuria and sharing experience on the organisation of regional Energy Days.

BAPE Contact

Katarzyna Grecka, Baltic Energy Conservation Agency (BAPE) ul. Budowlanych 31, 80-298 Gdańsk Phone no: +48 58 347 55 35 E-mail: bape@bape.com.pl www.bape.com.pl

Warmia-Mazuria Contact

Adam Koniecko, Warmia-Mazuria Regional Energy Agency Mikołaja Kopernika 46 11-041 Olsztyn, Poland E-mail: <u>Secretariat@wmae.pl</u> Phone no.: +48 89 521 59 70



 ENNEREG partner Rhônalpénergie Environnement, RAEE (France) and Alba County (Romania)



Key scope, results and lessons learned of the twinning:

- The main scope of the twinning was to start up the implementation of a master energy plan in conjunction with setting up a monitoring and evaluation system of this implementation in Alba County.
- The experience from the ENNEREG project, and in particular the Inspiration Guide and the collection of good/best practices, proved to be very useful material for ALEA and Alba County as sources of inspiration for the implementation of the Regional Energy Master Plan.
- As a key result RAEE provided ALEA with detailed guidelines on the first steps to set up a regional energy and GHG observatory, based on the vast experience in the Rhonalp Region
- The twinning partners have signed a "Memorandum of understanding" as the basis for continuing cooperation on these issues.

Rhône-Alpes Contact

Yalamas Pierrick, Rhônalpénergie Environnement Rue des Archers 10, 69002 Lyon, France Email: <u>pierrick.yalamas@raee.org</u> Phone no: +33 4 72 56 33 58

Alba County Contact

Florin Andronescu, Alba Local Energy Agency Str. Trandafirilor 9, Alba Iulia, Romania Email: <u>contact@alea.ro</u> Phone no.: +40 02 58 813 405 Website: <u>www.alea.ro</u>



D ENNEREG partner Silistra Municipality (Bulgaria) and Medgidia Municipality (Romania)



Key scope, results and lessons learned of the twinning:

- The overall ambition of the twinning was to agree on a common legal structure for cross-border cooperation regarding energy and environmental issues and inspire Medgidia Municipality to develop a strategy for energy independence based on Silistra's experience
- In November 2012 the mayors of the two municipalities signed a mutually binding agreement to collaborate on energy and environmental issues. Common projects were outlined, for instance cooperation on combined heat and power from municipal waste.
- This agreement will steer the future cooperation between the municipalities, including joint search for financing options for cross-border projects.
- Silistra found that the twinning success was due to three factors: High level political involvement, efficient cooperation between experts from both municipalities and mutual trust and previous good collaboration.

Silistra Contact

Valeri Georgiev Silistra Municipality Simeon Veliki Str. 33, 7500 Silistra Email: <u>enef@silistra.bg</u> Phone no: +359 86 816 333 Website: <u>www.silistra.bg</u>

Medgidia Contact

Sorin Tutuianu, Deputy Mayor Medgidia Municipality Str. Decebal 35, 905600 Medgidia Email: <u>sorin.tutuianu@yahoo.com</u> Phone no.: +40 241 820800 Website: <u>http://www.emedgidia.ro</u>



□ ENNEREG partner Triangle Region Denmark (Denmark) and Regional Energy Agency North/REAN (Croatia)



Key scope, results and lessons learned of the twinning:

- As basis for the twinning REAN was looking for inspiration on new SEPs financing models. This turned to be a good match with the experience on partnership model gained in the Triangle Region for enabling energy-renovation of municipal buildings at no extra cost to the municipality
- As a cornerstone in the twinning representatives of the Triangle Region went on a mission to Koprivnica, which proved very effective. This included a 1) Face to face session between i.e. the mayor of Koprinica and the chairman for energy from the Danish municipality of Middelfart, 2) A conference targeting the private sector and a number of municipalities and regions in Croatia, and 3) Site-visits, which gave good impressions of the efforts related to energy savings currently being done in Koprivnica.
- The twinning cooperation has provided a base for a long ESCO process in Koprivnica. The cultural and legislative differences do not allow for a direct transfer of the experiences, but if adopted in an appropriate manner the sharing of information can be a very successful experience.

Triangle Contact

Jakob Knud Bro Lorenzen, Triangle Region Denmark Kolding Åpark 1, 2 tv, 6000 Kolding E-mail: jl@trekantomraadet.dk Phone no.: +45 7979 7011

Koprivnica Contact Boris Kuharić, Regionalna Energetska Egencija Sjever Miroslava Krleže 81, 48000 Koprivnica E-mail: <u>boris.kuharic@rea-sjever.hr</u> Phone no.: +38 5 48 289 245



 ENNEREG partner Zentrum für Rationelle Energieanwendung und Umwelt ZREU/Upper Palatinate and Eza! Energie- & Umweltzentrum Allgäu Gemeinnützige GmbH/Allgäu Region in Germany



Key scope, results and lessons learned of the twinning:

- The twinning addressed a common need of ZREU and Eza! to improve the framework conditions for implementing RES with a special concern for wind power installations (e.g. planning procedures, social and local acceptance for wind power projects)
- With this background in mind, the objectives of the twinning were exchange of information and experience on 1) Quality management schemes for energy efficiency and climate protection at a local level, specifically in smaller municipalities and 2) approaches and strategies for Improving public acceptance of wind power generation & development of regulatory and policy recommendations for effective wind energy planning.
- The twinning has served springboard for initiation of cooperation on regional energy planning activities of Allgäu and the Upper Palatinate Region for mutual benefits.

Upper Palitinate Contact

Dr. André Suck, ZREU Blumenstraße 24, 93055 Regensburg E-mail: a.suck@zreu.de Phone no.: +49 941 46419-15 Website: www.zreu.de

Allgäu Contact

Dipl-Arch. Carmen Cremer, Eza! Burgstraße 26, 87435 Kempten E-mail: cremer@eza-allgaeu.de Phone no.: +49 831 960286-83 Website: www.eza.eu



□ ENNEREG partner Severn Wye Energy Agency in Wales (UK) and Mid-West Regional Authority in Ireland



Key scope, results and lessons learned of the twinning:

- The primary objective of the twinning was to see the Mid-West Region start the processes that would lead to the development of a SEAP. Further objectives were to develop specific areas of cooperation, such as: Land-use planning policy for new buildings, land-use planning policy for renewable energy, training of building inspectors and wood fuel supply chain development.
- As a result, in Jun 2012, the Mid-West Regional Authorities signed off on the proposal to develop a SEAP. During the following process, other relevant strategies were updated and combined with the new SEAP.
- The twinning relationship between the two regions has grown strong and will continue. The parties have exchanged valuable experience on how to manage a regional SEAP process as well as within the specific areas of common interest.

Ireland Contact

Deirdre Byrne, Mid-West Regional Authority Friar Court, Abbey Street, Nenagh, County Tipperary, Ireland E-mail: dbyrne@mwra.ie Phone no.: +353 6737351 Website: www.mwra.ie

Wales Contact

Andy Bull, Severn Wye Energy Agency Entrance A, Royal Welsh Showground, Builth Wells, Wales, UK LD2 3NJ E-mail: Andy@swea.co.uk Phone no.: +44 1982 551006 Website: www.swea.co.uk



Replication Activities

As supplement to the direct twinning ENNEREG performed studies of how to transfer and replicate sustainable energy practice among European regions.

The main focus was "replication potential studies" of regions in Hungary, Poland and Romania aiming at determining where and which of the ENNEREG achievements could add value to the regions examined.

These studies helped to qualify the twinning efforts in these countries as well as giving an overall picture on how best to manage the promotion of sustainable energy practice in a regional perspective onwards.

The final part of the report recommends some general replication themes that could be highlighted in future (European) projects concerned with sustainable energy capacity building and planning at regional and local level.

Further details on both the project twinning and replication can be found via this link:

http://www.regions202020.eu/cms/home/replication



ENNEREG Dissemination

The dissemination activities under ENNEREG have aimed at both informing and engaging the stakeholders in the partner regions as well as spreading the project results and inspiring regions at broad European level to take up sustainable energy practice.

The latter has been done within the framework of 'Regions 202020' put in place as a platform for interaction among regions and communities in the field of sustainable energy actions.

Regions 202020 Platform (and website)

ENNEREG has operated the Regions 202020 platform to inspire replication throughout Europe and enable effective dialogue and interaction between stakeholders on regional and local in view of EUs 202020 goals.

It has reached out to the project's target groups, including:

- □ Local/regional authorities in Europe
- □ Agencies and other organisations active in the field of EE and RES at regional/local levels throughout Europe
- European institutions and decision makers
- Other networks and stakeholders active at the European level

The key means of dissemination have been the website and database at www.regions202020.eu

This has included extracting, collating and publishing Good Practice and Experiences from the ENNEREG Pioneer and Twin Regions, as well as other aspects of the ENNEREG actions that could enrich other regions to become active in the field of energy and climate.

Key achievements of the Regions 202020 platform comprise:

- Almost 700 regional and local stakeholders have joined the Regions 202020 Network and more than 200 Sustainable Energy regions and local communities have been added to the website. A full list of these is available on http://www.regions202020.eu/cms/home/findregions-communities where it is possible to search for regions and communities by name, country and region/community category.
- The platform has interacted with related IEE projects, especially the 4 other SEC projects: Come2CoM, Energy for Mayors, ENESCOM and City_SEC by providing resources for the website such as presentations during the various SEC project events, articles for the SEC News, SEAPs, Good Practice examples and/or via Twinning activities. Another key activity has been to prepare four online ENNEREG e-Bulletins dated December 2011, September 2012, March/April 2013 and May 2013, as well as ENNEREG articles for four issues of Sustainable Energy Communities NEWS published in Autumn 2010 (#1), Summer 2011 (#2), Winter 2011/Spring 2012 (#3) and Autumn 2012 (#4). All the newsletters can be accessed from the news page of the website: <u>http://www.regions202020.eu/cms/news</u>
- Throughout the project, ENNEREG has assisted the other 4 SEC projects in promoting the
 activities of their regions and communities, as well as those of other pioneer regions and
 their communities throughout Europe. This work was expanded during the second half of



the project, with an emphasis on ENNEREG Twin Regions and Replication Regions and the local communities within those regions.

- Further to promoting the 5 Sustainable Energy Communities projects, the Regions 202020 website has promoted other EU Actions and Initiatives as sources of assistance and reference materials for Sustainable Energy Regions and their local communities, including:
 - IEE Programme and projects (BEn, BioEnerGIS, MAKE-IT-BE)
 - Covenant of Mayors
 - ManagEnergy
 - ISLE-PACT
 - RegioNetwork 2020
 - INTERREG IVC and projects (ClimactRegions, MORE4NRGm RENREN)
 - INTERREG IVB and projects (North Sea SEP)
 - EUCO2 80/50
- The type of information viewed on the website has been regularly analysed. As indicated in the graph below, there was a consistent growth for all sections of the site:



- The following statistics were recorded by the end of the project:
 - The **website home page** received more than **5,000 page views** each month
 - More than **17,000** pages in the **Sustainable Energy Communities section**, which was particularly popular, were being viewed each month.
 - The four issues of Sustainable Energy Communities NEWS continued to grow in popularity, receiving 4-6,000 page views per issue per month totalling almost 20,000 page views per month for the News section overall.
 - More than **12,000 Inspiration Guide and Resource pages** were viewed each month.



- Almost **10,000 PDF publications** were downloaded each month.
- More than **2,000 pages** describing the **Pioneer regions** and almost **5,000 pages** describing the **Replication regions and communities** were viewed each month.

Dissemination in the Partner and Twin Regions

Each of the ENNEREG regional partners has undertaken a range of dissemination activities to engage the local stakeholders in sustainable energy actions. The natural anchor point for this has been the regional SEAP and related SEP activities in the regions. As described in the chapter on experience from the ENNEREG regions a network approach has been applied for ensuring the necessary momentum and the dissemination has helped to strengthen the stakeholder interaction.

Websites in local language, supplemented with news services, events and distribution of materials, have been the means to reach out to the local stakeholders.

Further to this, all ENNEREG regions have uploaded their profile and experiences on the Regions 202020 website (in UK language) as a way to ensure the European exchange of experiences. As illustration is below a snapshot of the Basque profile on the site, from where it is possible to learn about the regional SEAP and SEP measures in the region



Source: http://regions202020.eu/cms/home/pioneers/euskadi

Moreover the 12 ENNEREG Pioneer regions have added details about their Twin Regions to the website, see http://www.regions202020.eu/cms/home/replication/#theme62

Here it is possible to read about the twin regions' profiles and the scope of interaction between the ENNEREG and twin region.



ENNEREG Good Practice Case Studies

As mentioned above, a key objective of the ENNEREG project has been to share the experience of the 12 Pioneer ENNEREG Regions in developing and implementing their regional Sustainable Energy Action Plans (SEAPs) in order to inspire other regions throughout Europe to become Sustainable Energy regions and develop their own SEAPs. Based on this, the **Implementation** section of the above described Inspiration Guide summarises the experience from the 12 ENNEREG Pioneer Regions in developing and implementing their **Sustainable Energy Action Plans (SEAPs)**.

In this regard, a number of reports and publications have been produced during the ENNEREG project which may assist other regions in implementing their SEAP, amongst other reports on development of ENNEREG Regional SEAPs and ENNEREG Good Practise case studies.

The ENNEREG project published more than **125 Good Practice Case Studies** within eight key Sustainable Energy themes:

- Sustainable and energy efficient buildings
- Energy efficiency in industry
- Energy efficient products
- Sustainable transport
- Renewable energies
- Energy services
- Intelligent Energy Education
- Energy Monitoring

Each of the case studies includes the following sections:

- Summary
- Aims and Objectives of the Sustainable Energy Action
- Results and Impacts, including:
 - Start and End Date
 - Cumulative investment made by stakeholders in sustainable energy (kEuro)
 - Carbon dioxide emissions saved (t/period)
 - Energy saved (MWh)
 - Other relevant project outcomes / impacts
- Technical and Financial Implementation
- The Partners and Stakeholders
- Lessons Learnt
- How this Action could be Replicated
- ENNEREG Contact
- Sources of Further Information

Download case studies here:

http://regions202020.eu/cms/inspiration/inspiration-guide/phase-3-implementation/good-practice/





Annex 1: ENNEREG Partners Contact

Partner Organisations



EC Network

EC Network is specialised in European projects within sustainable energy and has served coordinator of the ENNEREG project.

Website: www.ecnetwork.dk

Contact person Nils Daugaard E-mail: <u>nda@ecnetwork.dk</u> Phone no.: +45 32508800



CRES - Centre for Renewable Energy Sources and Energy Saving

The Centre for Renewable Energy Sources (CRES) is the Greek national centre for Renewable Energy Sources (RES) and the Rational Use of Energy (RUE). Within the ENNEREG project, CRES was responsible for activities in the Cyclades in Greece.

Contact person Elena Taxeri E-mail: <u>elena@cres.gr</u> Phone no.: +30 210 6603332

Website: www.cres.gr



ZREU Zentrum für rationelle Energieanwendung und Umwelt GmbH ZREU

ZREU is a consultancy and engineering company devoted to provide custom-tailored services to a broad variety of clients. Within the ENNEREG project, ZREU was responsible for activities in the Upper Palatinate Region of Bavaria in Germany.

Website: www.zreu.de

Contact person Dr. André Suck, ZREU E-mail: <u>a.suck@zreu.de</u> Phone no.: +49 941 46419-15



South Denmark European Office

SDEO - South Denmark European Office

South Denmark European Office is the Brussels representation of Southern Denmark's local and regional public authorities. Within the ENNEREG project, SDEO was responsible for the twinning and replication activities.

Contact person Thomas Jensen E-mail: <u>thj@southdenmark.be</u> Phone no.: +32 22 34 68 52

Website: www.southdenmark.be



BAPE - Baltycka Agencja Poszanowania Energii SA (Baltic Energy Conservation Agency)

The mission of BAPE is to implement the principles of sustainable development, to promote renewable energy sources and to improve energy efficiency. Within the ENNEREG project, BAPE was responsible for activities in the Pomeranian Region of Poland.

Contact person Katarzyna Grecka E-mail: <u>kgrecka@bape.com.pl</u> Phone no: +48 58 347 55 35

Website: www.bape.com.pl



EVE - Ente Vasco de la Energía

Due to a mandate of the Basque Government EVE support steering the Basque Country towards a position of sustainable development. EVE has been a Covenant of Mayors Supporting Structure since the year 2009.

Contact person Álvaro Pérez de Laborda

Email: alaborda@eve.es Phone no: +34 944035663

Website: <u>www.eve.es</u>





IDMEC–IST - Instituto de Engenharia Mecânica, Pólo IST

IDMEC-IST is a research institution devoted to the development of tools and practices for energy management, RUE, RES technologies and its potential in remote areas. Within the ENNEREG project, IDMEC IST has supported regional SEAP activities in Madeira.

Website: www.rgesd.ist.utl.pt

Contact person Sandrina Pereira E-mail: <u>sandrinapereira@ist.utl.pt</u> Phone no.: +35 12 18 419 406



Sofia Energy Centre Ltd Енергиен център София

Sofia Energy Centre (SEC) is a consultancy company specialised in the execution and implementation of different European energy projects in Bulgaria. Within the ENNEREG project, SEC has supported regional SEAP activities in Silistra.

Contact person Ivanka Pandelieva E-mail: <u>ivankap@sec.bg</u> Phone no.: +359 2 962 8447

Website: www.sec.bg



LEI - Lithuanian Energy Institute

LEI is a national research institute in Lithuania covering energy sector issues broadly. Within the ENNEREG project, LEI was responsible for activities in the Kaunas Region.

Contact person Farida Dzenajaviciene Email: <u>farida@mail.lei.lt</u> Phone no: +370 37 401935

Website: www.lei.lt



Energikontor Sydost Energy Agency for Southeast Sweden

Energikontor Sydost AB Energy Agency for Southeast Sweden (ESS)

The Energy Agency for Southeast Sweden strives for increased energy efficiency and supply of renewable energy. Within the ENNEREG project, ESS has supported regional SEAP activities in the Blekinge Region.

Website: www.energikontorsydost.se

Contact person Lisa Wälitalo Email: <u>lisa.walitalo@energikontorsydost.se</u> Phone no: +46 73 415 4542



RAEE - Rhônalpénergie-Environnement 10 rue des Archers

Rhônalpénergie-Environnement (RAEE) is the regional energy and environment agency of the Rhône-Alpes region. RAEE give advice to local authorities and public companies on putting into practice a sustainable development

Contact person Yalamas Pierrick Email: <u>pierrick.yalamas@raee.org</u> Phone no: +33 4 72 56 33 58

Website: www.raee.org



SWEA - Severn Wye Energy Agency SWEA Cymru

Severn Wye Energy Agency Limited (SWEA) is a SAVE energy agency, working in Wales and South West England. SWEA promotes sustainable energy and affordable warmth through partnership, awarenessraising, innovation and strategic action, working across the community, business and public sectors.

Website: www.swea.co.uk

Contact person Andy Bull E-mail: Andy@swea.co.uk Phone no.: +44 1982 551006





AREAM - Agência Regional da Energia e Ambiente da Região Autónoma da Madeira Regional Agency for Energy and Environment of Autonomous Region of Madeira

AREAM is a private non-profit making association, recognised as a public interest body, having as the main purpose to promote the rational use of energy, the valorisation of renewable energy sources and the protection of the environment. Within the ENNEREG project, AREAM has supported regional SEAP activities in Madeira.

Contact person Claudia Henriques E-mail: <u>claudiahenriques@aream.pt</u> Phone no.: +351 291723300

Website: www.aream.pt



Trekantområdet Danmark (Triangle Region)

The Triangle Region is organized as an association of 6 municipalities (350.000 inhabitants) and support the municipalities with consultant assistance and is facilitating different kinds of networks between the public, companies and educational institutions

Website: www.trekantomraadet.dk

Contact person Jakob Knud Bro Lorenzen E-mail: <u>il@trekantomraadet.dk</u> Phone no.: +45 7979 7011



Municipality of Silistra Община Силистра

Silistra Municipality is situated in North-East of Bulgaria in Danube Valley, in an agricultural region. with developed cereal crops production. It is devoted to the implementation of sustainable energy measures and under ENNEREG strengthened these efforts.

Website: www.silistra.bg

Contact person Valeri Georgiev Email: <u>enef@silistra.bg</u> Phone no: +359 86 816 333





UMWW - Urząd Marszałkowski Województwa Wielkopolskiego Departament Rolnictwa i Rozwoju Wsi

MARSHAL OFFICE of the Wielkopolska Region in Poland supports the Board of the Region, secures substantial operation of the Board and cooperates with the Regional Parliament. The ENNEREG support has resulted in a regional SEAP and sustainable energy measures in the region.

Contact person Alicja Nowak Email: <u>alicja.nowak@umww.pl</u> Phone no: +48616266527

Contact person

Email: katy@cplpress.com

Phone no: +44 (0)1635 569787

Katy Hall

Website: www.umww.pl

cplpress

CPL Scientific Publishing Services Ltd CPL Press

CPL is responsible for the Communications and Dissemination activities of the ENNEREG project including producing and editing the Regions 202020 website and Sustainable Energy Communities NEWS.

Website: www.cplbookshop.com/sps

Associated networks



FEDARENE

FEDARENE is the premier European network of regional and local organisations which implement, coordinate and facilitate sustainable energy and environment policies.

Website: www.fedarene.org

Contact person Dominique Bourges Email: <u>fedarene@fedarene.org</u> Phone no: +32/2 646 82 10