

# ANNEX 1

## Promotion / Dissemination Projects: SAVE, ALTENER, STEER and INTEGRATED INITIATIVES [CIP-IEE-PROMO-P]

<b>Full title of the proposed action:</b>	Regional Clusters for Energy Planning
<b>Action Acronym:</b>	RegCEP
<b>Co-ordinator (organisation, address)</b>	Brian Callanan Shannon Development Town Centre Shannon County Clare Ireland

**Table of contents:**

<b>1. Summary</b>	<b>3</b>
<b>2. Objectives-Results-Impacts of the Action</b>	<b>5</b>
<b>3. Target Groups and Key Actors</b>	<b>7</b>
<b>4. Work Programme</b>	
<b>4.1 Introduction to the work programme</b>	<b>12</b>
<b>4.2 Work packages</b>	<b>14</b>
<b>4.3 Overview of outputs and Deliverables</b>	<b>36</b>
<b>4.4 Schedule</b>	<b>38</b>
<b>5. Co-financing sources</b>	<b>40</b>

## 1. Summary and List of Participants

### (a) Abstract (2.000 characters):

RegCEP will focus on the use of regional clusters for energy planning, providing a territorial instrument for the development of intelligent energy by enterprises. RegCEP will help overcome the barrier of the poor use of intelligent energy by SMEs, by exploiting regional clusters as a tool for energy planning by SMEs. RegCEP will thus develop regional clusters as an instrument of integrating energy policy and regional policy.

The project will have three specific objectives: (i) produce intelligent energy plans with start-up of pilot projects for 8 regional clusters; (ii) 700 enterprises across Europe will be empowered to integrate intelligent energy into their business practices; (iii) a trans-national toolkit will be developed for regional clusters and energy planning, capable of transfer across Europe.

There will be eight work packages: (1) management; (2) renewable energy and regional clusters (key themes on promoting renewable energy to clusters of SMEs); (3) energy efficiency and regional clusters (key themes on promoting energy efficiency to clusters of SMEs); (4) cluster energy plans (including audit, analysis and strategy); (5) cluster pilot projects (specifications of pilot projects to implement key concerns of the strategy); (6) development of trans-national tool-kit arising from the partners' collective experience; (7) dissemination to the target groups; (8) common dissemination activities.

### (b) Major outputs and Results - including main result indicators (2.000 characters):

Specific Objectives	Result Indicators:	Quantification of success:
Energy plans for regional clusters to minimise external energy dependence and CO2 emissions	Production of regional cluster energy plans and specification of pilot projects	Specification of 8 energy plans with start-up of 8 pilot projects
SMEs	SMEs empowered to integrate intelligent energy into their businesses	700 SMEs benefiting from RegCEP project
Trans-national tool-kit	Production of recommendations for trans-national application of RegCEP approach	1 trans-national toolkit
Strategic Objectives	Impact Indicators:	Quantification of success:
Roadmap for each regional cluster	Implementation of pilot projects for the regional clusters	8 sets of pilot projects in implementation
Trans-national tool-kit	Dissemination of RegCEP trans-national toolkit	Toolkit presented to relevant audiences in EURADA, and in the 8 participant member states.

<b>Partic N°*</b>	<b>Participant name</b>	<b>Participant short name</b>	<b>Country code</b>	<b>Main Role in Consortium</b>
<b>1</b>	Shannon Development	Shannon	Ireland	Coordinator
<b>2</b>	Limerick/Clare Energy Agency	Limerick/Clare	Ireland	Partner
<b>3</b>	Lappeenranta University of Technology	Lappeenranta	Finland	Partner - "
<b>4</b>	Baltic Innovation Agency	BIA	Estonia	Partner
<b>5</b>	Celje regional development agency	Celje	Slovenia	Partner
<b>6</b>	Eastern Hungarian European Initiatives Foundation	Eastern Hungary	Hungary	Partner
<b>7</b>	European Association of Development Agencies	EURADA	EU	Partner
<b>8</b>	Ruse Business Business Support Centre for SMEs	Ruse BSC	Bulgaria	Partner
<b>9</b>	Asteria	Asteria	Italy	Partner
<b>10</b>	University of Coventry	Coventry	UK	Partner
<b>11</b>	AGENA Energy Agency	Agena	Italy	Partner
<b>12</b>	Kssena Energy Agency	Kssena	Slovenia	Partner
<b>13</b>	Ruse Regional Energy Agency	Ruse REA	Bulgaria	Partner

RegCEP will exploit the results of other IEE/SAVE projects. The lessons from previous projects will include issues such as exploiting energy savings, optimising thermal energy, energy management, delivery systems for energy efficiency in SMEs and other aspects. A structured approach will be followed to capitalise on the other work of IEE/SAVE. This will previous projects with RegCEP, and add value to RegCEP.

### **3. Objectives – Results – Impacts of the Action**

The project will have three specific objectives:

- (i) The action will produce intelligent energy plans for 8 regional clusters. The plans will identify priority energy measures for the group of firms in each cluster, particularly around renewable energies and energy efficiencies. The cluster energy plans will be informed by trans-national experience. The plans will lead to start-up of pilot projects in the 8 clusters. The pilot projects will arise from the logical process of energy planning, and will be based on rational analysis, trans-national lessons and public/private partnership.
- (ii) 700 enterprises across Europe will be empowered to integrate intelligent energy into their business practices.
- (iii) A trans-national toolkit will be developed for regional clusters and energy planning, capable of transfer across Europe.

The three specific objectives are mutually compatible and self-reinforcing.

**(a) Strategic objectives of the proposed action (max 2.000 characters):**

There will be two strategic objectives:

- In each of the regional clusters, a longer-term energy “road map” will be devised. Pilot projects will be conceptualised and specified. This will lead to longer run benefits as the regional clusters follow-on with a strategic direction for energy. A momentum will be established in each cluster to grasp the opportunities for intelligent energy.
- Most important will be the trans-national toolkit for regional clusters and energy planning. This will provide a long-term European impact. The steps in energy planning for regional clusters will be clearly defined. A set of useful techniques and processes will be developed for energy planning in regional clusters. Towards the end of the project, the toolkit will be disseminated to other European regions. The clearly defined trans-national lessons will give a long term impact for the whole of Europe. A new technique will be added to Europe’s energy policies: regional clusters for energy planning

**(b) Performance Indicators:**

<b>Specific Objectives</b>	<b>Result Indicators:</b>	<b>Quantification of success:</b>
Cluster energy plans to minimise external energy dependence and CO2 emissions	Production of regional cluster energy plans and specification of pilot projects	Specification of 8 energy plans and start-up of 8 pilot projects
SMEs	SMEs empowered to integrate intelligent energy into their businesses	700 SMEs benefiting from RegCEP project
Trans-national toolkit	Production of recommendations for trans-national application of RegCEP approach	1 trans-national toolkit
<b>Strategic Objectives</b>	<b>Impact Indicators:</b>	<b>Quantification of success:</b>
Roadmap for each regional cluster	Implementation of pilot projects for the regional clusters	8 sets of pilot projects in implementation
Trans-national tool-kit	Dissemination of RegCEP trans-national toolkit	Toolkit presented to relevant audiences from 8 member states.

#### **4. Target groups and key actors**

(a) **Target Group(s):**

Each partner has identified a significant regional cluster on which their project will be based.

<i>Area</i>	<i>Cluster</i>	<i>Enterprises</i>	<i>Employed</i>
Shannon (Ireland)	Shannon industrial estate	105	7,500
South Karelia (Finland)	Metal structures industry	100	1,000
Coventry (UK)	Bayton Road industrial estate	200	3,300
South Estonia (Estonia)	Forest and wood cluster	100	2,000
North Great Plains(Hungary)	Kabai industrial cluster	50	1,000
Ruse (Bulgaria)	Three clusters: textiles, agricultural engineering and furniture	70	6,400
Marche (Italy)	Mechanical engineering cluster	50	3,200
Celje (Slovenia)	Tool-making cluster	50	1,800
<b>Total</b>		<b>725</b>	<b>26,200</b>

In summary, three of the clusters are industrial districts prominent in their regions (Shannon, Coventry and Kabai) while five are regional sectors (metals in South Karelia, saw milling in Estonia, textiles/agricultural engineering/furniture in Bulgaria, mechanical engineering in Marche and tool making in Slovenia). All share the common characteristic of being clearly defined clusters, and will thus exemplify the use of regional clusters as tools for energy planning.

In Shannon, the industrial estate is the largest single concentration of industry on Ireland's western seaboard. It was established in the 1960s as an instrument for national regional policies. Industrial sectors are mixed: aerospace, internationally-trade services, engineering, electronics and information technology. Key policies have been to encourage the integration of the industrial estate with the adjacent international airport as a centre for aviation-related enterprise. Considerable efforts have also been made to secure industrial spin-off and linkage with the surrounding region. Energy consumption is primarily through electricity. Potential developments of intelligent energy have been identified in energy efficiency in industry, regeneration of buildings and use of renewable energy through potential wood chip facility

In South Karelia the metal industry is functionally integrated with the regional economy, with strong linkages to both the forestry industry and the construction industry. Increasing networking between firms is taking place, and the sector is the second largest in South Karelia after the pulp and paper industry. Significant collaborative programmes in research with the metal industry have been developed at the Lappeenranta University of Technology. In addition, high technology metal construction is a field of expertise in the Centre of Expertise in Southeast Finland. The metal using industry of South Karelia are significant users of electricity, although savings through energy efficiency and use of forest products for renewable energy are potential applications of intelligent energy.

In Coventry, the Bayton Road Industrial Estate, situated in Exhall, Bedworth in the Coventry and Nuneaton Regeneration Zone, is one of the largest industrial estates in the West Midlands. It comprises approximately 200 businesses, with a high proportion in engineering and manufacturing processes. Businesses range in size from international businesses engaged in the automotive supply chain, employing 650 people to small businesses employing 5 staff or less. Approximately three quarters of the businesses employ less than 20 people. The total labour force of some 3,300 staff is drawn mainly from the Coventry and Nuneaton area. Main energy use is through electricity, with space and process heating from gas. There are considerable potential savings from energy efficiency.

In South Estonia, the forest and wood cluster is one of the strongest and biggest industrial clusters today. This is directly related to the fact that up to 2/3 of Estonian territory is covered by wood. The wood is used both for saw material production and but also in energy sector as well as for log houses, veneer and plywood, chips and other wooden products. Local pulp industry is still in development using only a little part of pulpwood the cuttings produce. The pulpwood of spruce, pine, birch and aspen not used in Estonia is exported to the Scandinavian pulp and paper industries. The share of exports of wood industry in total turnover is 64%. Forest and wood industries stand to benefit from both energy efficiency and renewable energy from forest products.

In the Celje region of Slovenia companies in the tool making cluster are working in several industry fields: tools and services, automobile industry, airplane industry, computer industry, domestic appliances industry and other industries. Some of the companies in the cluster are already active in the field of energy efficiency and/or use of renewable energy. Key priorities for the cluster include horizontal and vertical integration of the companies and organizations involved into the tool-making business. Energy efficiency will be a critical issue for this cluster

In Kabai in North Great Plains (Hungary), the cluster has been developed around a former sugar industry company. The sugar factory had been closed, and investors shown up for the utilisation of the industrial area, that is suitable for agro-energetic projects. Several bio-energetic projects and initiations started in the region, and in its surroundings, but most of them face constraints such as lack of information, management and professional capacities. The local cluster initiation aims to integrate the project- and stake-holders together, and coordinate their activities. Potential use of biomass will be relevant for this cluster, as well as energy efficiency issues.

Ruse, Bulgaria, is a strategic inland port city on the Danube. Three clusters and industrial groupings have been selected. One is concerned with textiles, focused on clothing production. Ruse has a substantial tradition with production of apparel and an active business network has developed around skills and facilities for clothing. The second cluster focuses on agricultural equipment in the surrounding region. This is a rural area, and the agricultural equipment sector has important strategic implications. The third one is an industrial grouping dealing with the production of furniture. Ruse is one of the important Bulgarian regions in this sector with leading companies on the market, combined with educational structure and business support network. Moreover, the selected industrial clusters and groupings are developing intensively over the last 15 years. The three sectors of textiles, agricultural equipment and furniture are among the heaviest energy users in Bulgaria, and energy efficiency measures will make a substantial impact.

In the Marche Region of Italy, the Elmec network is an export consortium composed of small and medium factories dealing with mechanical electro-mechanical and electronics field. The companies cooperate to export technology, activities and products. Elmec staff operates side by side with the entrepreneur and works out market strategies. They start together business relations, organizes business trip and international trade fairs. Elmec Consortium coordinates the promotion activities of common interest and organizes collective participation to international explorative business trips and trade fairs. The electro-mechanical and electronics sectors have much to gain from enhanced energy efficiency.

In each of the target groups, the partners have already undertaken needs analysis, and have worked with companies in previous programmes. The partners have all a tradition of strong partnership with their local clusters. The local target groups will be actively engaged in the project. Key mechanisms to do this will include local steering groups and active consultation with SMEs

**(b) Key Actors:**

Key actors will include business representatives or key companies in the target groups.

Shannon Chamber of Commerce was formed in 1995 to represent the views and concerns of the commercial interests of the greater Shannon Area. The chamber now boasts a membership of over 200 individuals, representing individual members, SMEs and other enterprises.

EKTEK are the association of metal firms in South Karelia and they represent the interest of the firms, including the promotion of linkages and common interest.

Bayton Road enterprises in Coventry have an informal association of enterprises, that promotes their common interest and encourages collaboration between the companies on matters of shared concern.

Woodinfo, the Estonian wood cluster association, is financed by local wood processing enterprises and timber sellers, and has organised a number of common ventures, such as architectural competition of wood buildings.

The Kabai cluster association is a group of companies with common interests and has brought together several organisations with the SMEs, including research & development bodies, non-profit sector and the local Chamber of Commerce.

The Toolmakers Cluster of Slovenia is a representative body of tool-making companies concerned with increasing production volumes, competitiveness on the foreign markets, technology transfer between "company to company" and "R&D institute to company", and new technologies.

Ruse Business Association "Industrial Cluster Agricultural Engineering" is aiming at improving its members' competitiveness, one of its strategic objectives being development and promotion of energy efficiency investments thus improving environment protection. The business associations for the textile and furniture sectors encompass companies of different size and are responsible for sharing of information.

Business associations in Marche are represented by the Elmec consortium, a network of companies in the mechanical electro-mechanical and electronics field. The Elmec Consortium has active links with the Industrial Association of Ascoli Piceno, the Chamber of Commerce of Ascoli Piceno, and the Province of Ascoli Piceno

The key actors will have a very important role in promoting awareness and enthusiasm among the target groups, and will play a lead role in developing the project.

Letters of interest are included in the appendix. Representatives of these groups will be members of the local steering group.

Specific mechanisms for involving key actors will include the following.

- (i) In the preparatory phase, a selection of enterprises have already been contacted and their views gathered on key issues and approaches. These views have been used in formulating this proposal.
- (ii) A local steering group will be established in each cluster, comprising both enterprises and public organisations.
- (iii) Enterprises will be actively involved in the audit and benchmarking phase. This involvement will be through workshops, seminars, consultations and interviews.
- (iv) The analysis of strengths, weaknesses, opportunities and threats, and the subsequent strategy phase, will be developed in partnership with the private sector members on each steering group.
- (v) Definition of the energy plan for each cluster, including specification of the pilot projects, will also be in partnership with the private sector through the local steering group.

The overall composition of the consortium thus ensures a diverse partnership, with complementary and mutually-reinforcing members.

We envisage a “hierarchy” of involvement, reflecting the different levels of energy use and awareness in companies:

- All 700 companies will be made aware of the project through promotion and networking
- It is likely that 50% (350) will participate in workshops and seminars
- Probably about 25% (175) will actively adopt new measures as a result of the project

The key mechanism to avoid the top down approaches will be to involve closely, from the very start of the project, the main industry associations who have already committed to the project. Letters of interest have previously been submitted:

Shannon Chamber of Commerce (Ireland)

South Karelia Metal Industry (Finland)  
 Association of Forest Industries (Estonia)  
 Tool making cluster (Slovenia)  
 Kabai cluster (Hungary)  
 Ruse clusters: textiles, agricultural engineering and furniture (Bulgaria)  
 ELMEC Consortium (Italy)  
 Coventry company – UNIPART (UK)

**Overview Table:**

<b>(a) Target Group(s)</b>	<b>Proposed approach of involvement /engagement</b>	<b>Benefit to the target group</b>
Shannon industrial companies	Collaborative surveys, analysis, workshops, seminars	Awareness of the use of energy planning
South Karelia metal structures industry	Hands-on advice on energy, particularly in energy conservation agreements	Implications for energy
Bayton road industrial estate	Collective research on energy planning and savings for companies	Application of energy plans
South Estonia wood cluster	Map and develop technologies with companies, to use local renewable sources of energy	Use of energy technologies
Celje tool making cluster	Summit of the companies on energy efficiency and renewable energy; mobilise the use of these technologies	Collective approach to energy
Kabai cluster	Help companies develop common methodologies for energy efficiency and renewable energy	Use of shared techniques for energy
Ruse clusters and industrial groupings	Technical support to companies in bringing energy planning into their businesses	Enhanced knowledge about energy in the companies
Marche cluster	Collective approach by companies to resolve energy challenges	New use of energy initiatives
<b>(b) Key Actor(s)</b>	<b>Proposed approach of involvement / engagement</b>	<b>Benefit to the target group</b>
Shannon Chamber of Commerce	Forward planning of the RegCEP project in each locality; promotion and monitoring of the project	Integration of the RegCEP results into the ongoing work of the actors
EKTEK		
Bayton Road enterprises		
Woodinfo		
Kabai cluster		
Toolmakers Cluster of Slovenia		
Ruse Association of Companies		
Elmec Consortium		

#### 4. Work Programme

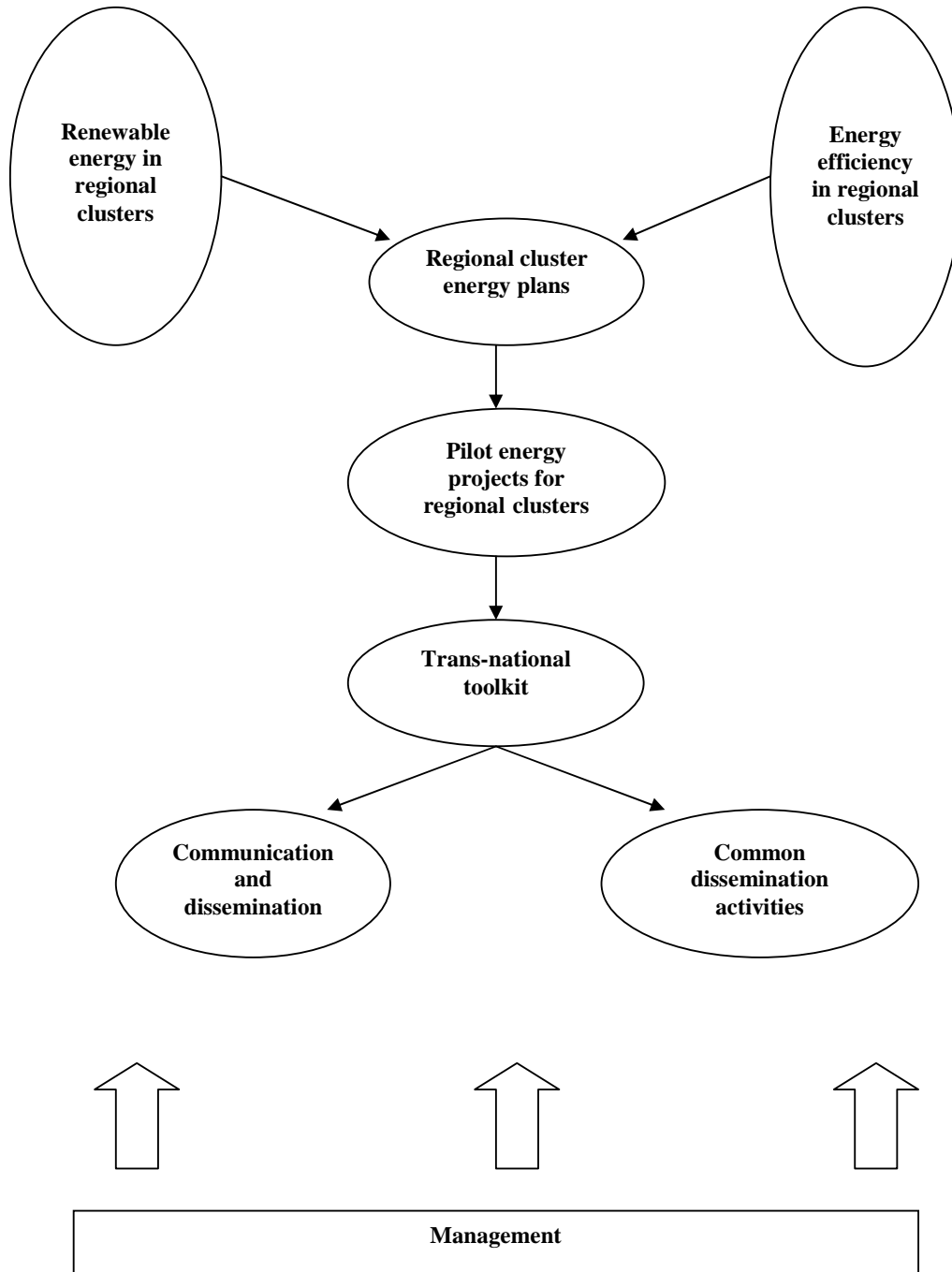
##### 4.1 Introduction to the Work Programme

(a) **Rationale and structure of your work programme:**

Eight work packages are proposed:

1. Management (how the partners will work together, both internally within the project consortium and externally with relevant target groups and key actors);
2. Renewable energy and regional clusters (the partners will collectively work on the key themes and challenges on promoting renewable energy to clusters of SMEs) ;
3. Energy efficiency and regional clusters (the partners will collectively work on the key themes and challenges on promoting energy efficiency to clusters of SMEs)
4. Cluster energy plans (each regional cluster will prepare an intelligent energy plan, following a shared process: audit, analysis and plan);
5. Cluster pilot projects (following completion of each plan, the partners will prepare specifications of pilot projects to implement key concerns of the plan, leading to start-up of the pilot projects);
6. Trans-national toolkit (documentation of the process of regional clusters in energy planning, in a way that can be applied to different regional and local situations across Europe).
7. Communication and dissemination to the target groups (with dissemination tailored to the specific needs of each target group);
8. Common dissemination activities (in this package, all IEE projects collaborate with IEE staff in a common dissemination activity).

(b) Flow chart of your work programme:



## 4.2 Work Packages

### Work Packages

N° of work package: <b>1</b>	<b>Management</b>
Duration in months: <b>30</b>	<b>Leader: Shannon</b>

#### **I. Description of the work:**

##### **a) Work package overview:**

The aim of the management work package will be to ensure that the group works together and that the quality of the work, with the outcomes, are assured. Trans-national co-operation and communications will be central to the management work-package.

##### **b) Tasks:**

*1.1 Management:* The Management Unit will be provided by Shannon, with officials from the organisation dedicated to providing the ongoing management of the project.

*1.2 Project steering:* The steering group will comprise representatives from each of the partner regions. The steering group will make all the key management, policy and programme decisions about the project, including the establishment of an effective monitoring and evaluation system. Decisions will be by consensus. Over 30 months, the project steering group will meet 5 times i.e. at six monthly intervals. The key function of the project steering group will be to monitor and review quality of work and key outcomes at the trans-national level. The project steering group will be the major mechanism for providing the basis for active trans-national cooperation.

*1.3 Local steering:* Each partner region will establish a local working group. These will comprise the official bodies responsible for implementation, including representatives of the private sector target groups. The active involvement of the firms will be essential to secure a strong public/private partnership. Over 30 months, each local working group will meet about 10 times i.e. at quarterly intervals. The key function of the local working groups will be to monitor and review quality of work and key outcomes at the local level.

*1.4 Communications* will be at several levels:

- Within the project steering group, face-to-face contact will be created, leading to active synergy between the partners;
- Between the project meetings, progress reports and other information will be exchanged by email;

- A project web-site will be created, giving access to progress reports and documentation.

### **IIa. Outputs of this work package:**

Delivery of each task successfully

### **IIb. Deliverable(s) of this work package:**

- D.1: Management reports
- D.2: 5 trans-national project meetings
- D.3: 80 local meetings (8 x 10)
- D.4: 1 web-site

### **III. Role and contribution (tasks) of each partner in this work package (Award criterion 5):**

<i>Partner</i>	<i>Task(s) of this partner organisation</i>	<i>Related to Task N°</i>
Shannon Development	Lead the overall management of the project and chair and facilitate the project steering group.	1.1, 1.2, 1.3, 1.4
Coventry University	Local management and participation in steering group	1.2, 1.3
Lappeenranta University	Local management and participation in steering group	1.2, 1.3
Baltic Innovation Agency	Local management and participation in steering group	1.2, 1.3
Celje regional development agency	Local management and participation in steering group	1.2, 1.3
Eastern Hungarian European Initiatives Foundation	Local management and participation in steering group	1.2, 1.3
Ruse Business Support Centre for SMEs	Local management and participation in steering group	1.2, 1.3
ASTERIA	Local management and participation in steering group	1.2, 1.3
EURADA	Advice with dissemination	1.2, 1.3
Limerick/Clare Energy Agency	Technical support	1.2, 1.3
Ruse Energy Agency	Technical support	1.2, 1.3
Agena Energy Agency	Technical support	1.2, 1.3
Kssena Energy Agency	Technical support	1.2, 1.3

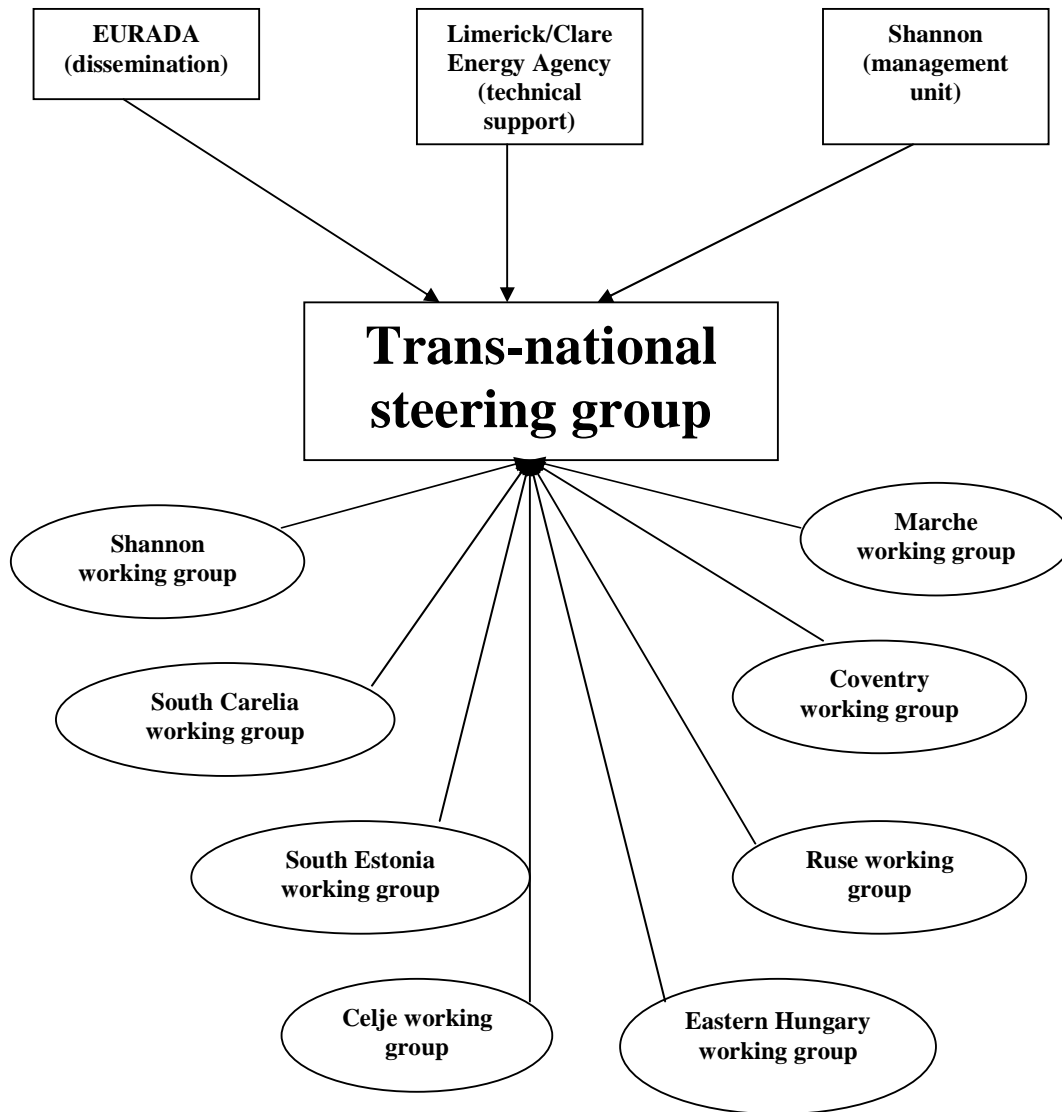
### **Major other specific costs (tasks and foreseen amount):**

None

### **Major subcontracts:**

None

## RegCEP Management Structure



<b>N° of work package: 2</b>	<b>Renewable energy in regional clusters</b>
<b>Duration in months: 11</b>	<b>Leader: Coventry University</b>

## **I. Description of the work:**

### **a) Work package overview:**

This work package will be implemented in parallel with work package 2 and 3 (plan and pilot projects). The aim of the renewable energy work package is to develop a strong trans-national dimension to the issue of renewable energy in the regional clusters. This work package will place the separate experiences of the regional clusters against a common template of renewable energy, addressing the issue as to what are the trans-national dimensions to renewable energy in regional clusters. The work package will be led by Coventry University.

There will be two tasks: collection of shared outlooks with renewable energy from the clusters and, secondly, development of a common framework for renewable energy in regional clusters

### **b) Tasks:**

#### **2.1 Review of renewable energy experiences in the regional clusters.**

Methodology here will be to relate the diverse experiences of the partners against some common benchmarks.

Major sub-tasks will include:

- 2.1.1 Identify existing renewable energy resources available to each cluster;
- 2.1.2 Identify the supply chain challenges and issues for renewable energy in each cluster;
- 2.1.3 Examine the technical and administrative barriers that affect existing supply chains for renewable energy;
- 2.1.4 Examine the existing rate of penetration and usage of renewable energy in each cluster;
- 2.1.5 review the existing measures in place for use of renewable energy; identify the new measures for renewable energy that may be necessary; highlight what is necessary to meet the standards required.

For example, the following list of core renewable energies will be used to assess what are the key renewable energy issues arising from the partners:

- Biomass: wood, crops, agriculture residues, agro-food effluents, waste, with impacts on electricity, heat and transport.
- Hydro-power: a proven mature technology with potential for further exploitation.

- Wind energy: rapidly developing technology and, in some countries, the fastest growing energy source for electricity production.
- Solar thermal: a mature technology but with scope for cost reductions from larger scale production and improvements in production processing and marketing.
- Geothermal and heat pumps – the use of geothermal is growing slowly, limited by risk associated with exploitation, although with increasing use of heat pumps.
- Other renewable technologies, such as tidal, ocean and wave power are relatively undeveloped, but offer significant potential.

### **2.2 Development of a shared renewable energy outlook across the regional clusters**

The common experiences will be identified, leading to some shared questions being developed, such as:

- How can locally developed renewable energy products or components replace imports by regional clusters? This is especially the case in the more mature renewable energy technologies (solar, geothermal, wind). How can regional clusters exploit renewable energy technologies?
- What is the role of existing local technological expertise for renewable energy in regional clusters? Is there an under-use of local technological expertise? How can the reserve of existing expertise be better exploited for renewable energy?
- What are the operational and management challenges of renewable energy in regional clusters? How can clusters of SMEs and local organisations be mobilised collectively to grasp renewable energy opportunities.

Key task here will be to develop local technological expertise. The project will seek to upgrade technological expertise in the clusters to international standards. The harnessing of expertise into professional networks will be examined. Issues of certification, licensing, standards will be addressed. The challenge of international-level skills for harnessing renewable energy will be a key feature of this work package.

For the SMEs, the major issue will be create consciousness about their energy-dependency. SMEs will be encouraged to think in terms of ‘clusters’, how SMEs on an individual basis can do relatively little about resolving their energy challenges, but working in clusters can create the benefits of collective action. Awareness raising of SMEs to engage with clusters for energy planning will be a key tool in this work package.

#### **IIa. Outputs of this work package:**

Trans-national definition of renewable energy and regional clusters

#### **IIb. Deliverable(s) of this work package:**

D.5: Report on renewable energy and regional clusters

**III. Role and contribution (tasks) of each partner in this work package (Award criterion 5):**

<i>Partner</i>	<i>Task(s) of this partner organisation</i>	<i>Related to Task N*</i>
Coventry University (leader)	Review of any renewable energy possibilities in Bayton Road Industrial Estate: solar, and geothermal	2.1, 2.2
Shannon Development	Examination of potential renewable energy from Shannon from wood chip sources; evaluation of technologies and supply prospects	2.1, 2.2
Lappeenranta University	Study into renewable energy possibilities in the metal cluster of South Karelia, particularly in potential energy linkages with the forestry sector	2.1, 2.2
Baltic Innovation Agency	Survey into renewable energy possibilities of the forest and wood cluster in South Estonia, such as wood chip, wind and geothermal sources	2.1, 2.2
Celje regional development agency	Survey of potential of solar cells and geothermal heating for tool making cluster	2.1, 2.2
Eastern Hungary	Database creation and management for renewable energy. The Eastern Hungary pilot-region is a traditional agricultural (underdeveloped rural) territory, where special technical and engineering knowledge of certain technologies (e.g. heat pumps, wind power, photovoltaic) are not wide-spread. This knowledge needs to be collected	2.1, 2.2
Ruse Business Support Centre for SMEs	Survey of renewable energy prospects in the sectors of textiles agricultural equipment and furniture	2.1, 2.2
Asteria	Studies into the renewable energy possibilities of the Marche cluster of electro-mechanical and electronic companies such as geothermal or biogas	2.1, 2.2
Limerick/Clare Energy Agency	Technical support to Shannon in assessment of potential for renewable energy. Technical support to full partnership	2.1, 2.2
Ruse Energy Agency	Support to Ruse BSC. Surveys and provision of technical data on the three sectors	2.1, 2.2
Agena Energy Agency	Technical support to Asteria in the Marche cluster of electro-mechanical and electronic companies	2.1, 2.2
Kssena Energy Agency	Technical support to Celje in the tool-making cluster	2.1, 2.2

**Major other specific costs (tasks and foreseen amount):**

None

**Major subcontracts:**

**Mandatory phrase to keep:** The subcontractors identified / to be identified were / will be selected following the provisions of Article II.9 of the Grant Agreement on competitive grounds on the basis of best value for money.

<b>N° of work package: 3</b>	<b>Energy efficiency in regional clusters</b>
<b>Duration in months: 11</b>	<b>Leader: University of Lappeenranta</b>

## **I. Description of the work:**

### **a) Work package overview:**

This work package, also operating in parallel to the renewable energy work package, will bring together the experiences of the regional clusters in promoting energy efficiencies of SMEs. This will be led by the University of Lappeenranta.

### **b) Tasks:**

#### **3.1 Review of experiences with energy efficiency**

This task will identify the range of current experiences with energy efficiency in the regional clusters. Comparisons and contrast will be made across the regions to highlight the baseline conditions with energy efficiency. The key questions will be:

- how efficient are the clusters in the use of energy?
- what shortfalls and weaknesses have been identified in energy efficiency?
- are there patterns in the current approach to energy efficiency by the SMEs? What are the barriers to a more active approach to energy efficiency by the SMEs?
- is there evidence of local voluntary agreements in energy efficiency?
- What is the attitude of the local SMEs to energy efficiency?

Particular concerns will include: the role of management and work practices in influencing energy efficiency; industrial processes and energy efficiency - what are the impacts of current industrial processes on energy efficiency? what levels of energy efficiency are evident in the buildings and industrial premises of the SMEs?

Key sub-tasks will include:

3.1.1 Benchmarking tool: develop a calculation tool where SMEs can look at their energy consumption; move away from a narrow cost model towards a broader view of how an SME consumes energy overall; develop the tool to help SMEs view energy as a resource.

3.1.2 Each SME calculates its energy performance through the use of a simple spread sheet; this helps the SME to (a) calculate its use of energy; (b) identify its uses of energy (e.g. light, heat, power); (c) benchmark its use of energy against standards in its sector, and against standards in the clusters.

3.1.3 Analyse the benchmarks across the clusters, such as by type of business or type of cluster. Is there a problem for any one business sector? How are clusters performing overall? Looking at different sectors, the project can focus on particular problem areas with high energy costs

### **3.2 Recommendations for improvement of energy efficiency in regional clusters**

Drawing together the conclusions from the several regional clusters, the partners will identify a series of measures which all agree are useful in promoting energy efficiency in regional clusters. For example, these measures could include:

Public private partnerships in energy efficiency in clusters; how can public agencies and SMEs partner together to promote energy efficiency? How can the public agencies clearly add value to the energy efficiency needs of the SMEs?

Are there R&D implications for energy efficiency in SMEs? How can advanced knowledge be usefully applied in practice to the energy efficiency of regional clusters? Do the research institutions have a role in this?

Does management in the SMEs need to be strengthened in relation to energy efficiency? How can energy efficiency goals be introduced in clusters of SMEs, well integrated into their business objectives?

Considerations of other options, such as Combined Heat and Power (CHP), for energy efficiency in clusters, the role of Energy Services Companies (ESCOs), Energy Performance Contracting (EPC)

Overall, how can the clustering approach in regions contribute to energy efficiency?

Promote mentoring across the clusters; establish mentoring activities whereby clusters can learn from each other.

#### **IIa. Outputs of this work package:**

Recommendations on energy efficiency in regional clusters across Europe

#### **IIb. Deliverable(s) of this work package:**

D.6: Report on energy efficiency in regional clusters

#### **III. Role and contribution (tasks) of each partner in this work package (Award criterion 5):**

<i>Partner</i>	<i>Task(s) of this partner organisation</i>	<i>Related to Task N*</i>
Lappeenranta University (leader)	Investigation into energy efficiency issues in the metal cluster of South Karelia. Examination of energy practices of companies, particularly around issues of collaboration between companies.	3.1, 3.2
Shannon Development	Study into energy efficiency potential at Shannon: review of company practices and investigation into possibilities fro company collaboration in energy efficiency	3.1, 3.2

Coventry University	Study of energy efficiency possibilities in Bayton Road Industrial Estate: power supplies, space heating, use of electricity and gas, review of monitoring practices by companies	3.1, 3.2
Baltic Innovation Agency	Survey of companies in the forest and wood cluster of South Estonia; benchmarking of current energy efficiency practices and development of proposals for inter-company collaboration in energy efficiency.	3.1, 3.2
Celje regional development agency	Study of strengths and weaknesses in energy efficiency in the tool making cluster	3.1, 3.2
Eastern Hungary	Measurement of energy efficiency in the individual companies of the Kabai cluster: survey of companies, collection of data, analysis of results Energy efficiency data is not well developed in eastern Hungary and extra effort will be required here.	3.1, 3.2
Ruse Business Support Centre for SMEs	Survey of energy efficiency issues in the companies of the textile, agricultural equipment and furniture sectors in the region	3.1, 3.2
Asteria	Survey of companies in the Marche cluster of electro-mechanical and electronic companies, benchmarking the issues and opportunities around energy efficiency	3.1, 3.2
Limerick/Clare Energy Agency	Technical support to Shannon in assessment of potential for energy efficiency. Technical support to full partnership	3.1, 3.2
Ruse Energy Agency	Support to Ruse BSC with technical data and research	3.1, 3.2
Agena Energy Agency	Technical support to Asteria in the Marche cluster of electro-mechanical and electronic companies	3.1, 3.2
Kssena Energy Agency	Technical support for Celje in the tool-making cluster	3.1, 3.2

**Major other specific costs (tasks and foreseen amount):**

None

**Major subcontracts:**

Mandatory phrase to keep: The subcontractors identified / to be identified were / will be selected following the provisions of Article II.9 of the Grant Agreement on competitive grounds on the basis of best value for money.

<b>N° of work package: 4</b>	<b>Regional cluster plans</b>
<b>Duration in months: 12</b>	<b>Leader: Limerick/Clare Energy Agency</b>

## **I. Description of the work:**

### **a) Work package overview:**

Three core tasks are included in this work package: audit of existing energy situation in each cluster, analysis and definition of energy strategy for the cluster. This will be led by the Limerick/Clare Energy Agency.

The central issue in the cluster plan will be to translate European and national policies down to the level of each cluster. The key difficulty is how to “download” policies to the level of individual clusters, and translate these into deliverable actions. The problem is that policy provides overall targets only, while in reality, needs and resources are not homogeneous, but vary substantially between clusters. Individual clusters are strong in some aspects, weak in others: the key is to develop strategies that both implement the EU/national policies, but are also uniquely appropriate to the circumstances of each individual cluster. The plans will help regional clusters optimize their delivery of resources, and mobilise the assets which they have available. The plans will provide an opportunity for regional clusters to adopt a “bottom up” approach to energy planning.

The challenge of supply chains and the role of security of supply will need to be addressed. The issue of effective and reliable supply chains is vital in considering appropriate energy policies for individual clusters. The choice of alternative approaches to energy will be influenced to a considerable extent by the existence of supply chains.

### **b) Tasks**

#### **4.1 Audit**

**4.1.1 Energy usage:** Document existing energy performance in the cluster; identify amount of energy used: electricity, natural gas, fuel oil; different types of energy, how much of each type; is the usage trend upward or downward? identify cost of energy in the cluster; is the energy use high or low compared to international standards for that sector and generally for all industry; identify any examples of renewable energy being used, such as solar thermal, wind, hydro, geothermal, bio-energy, combined heat/power (polygeneration); identify the factors that influence energy use: key companies, weather (vary through the year), impact of production volumes.

**4.1.2 Energy efficiencies:** role of heating and cooling systems; role of buildings: level of energy efficiency of existing buildings; are buildings energy efficient? type and condition of buildings; role of operating systems: do different operating systems contribute to energy efficiencies? Energy efficiency measures will be identified at the appropriate level of detail – in some cases at the level of individual firms, in other cases at the level of groups of firms

*4.1.3 Energy management:* do firms have an energy manager? is energy management part of management structure of firms? do firms have an energy policy? On-going projects, preliminary initiatives, expectations, aiming to improve energy uses will be investigated involving all the actors involved (companies, associations, agencies, public bodies, NGOs)

*4.1.4 Current policies* The project partners will carry out a comparative assessment of existing public policies, in particular at regional-local level (rules, codes, incentives, supporting tools and other measures, playing a role in fostering innovative energy approaches in industry) on-going in the areas/regions involved by the project. The role of audits will be to provide the starting point for the cluster plans.

A shared methodology will be developed, focused on a standard web-based questionnaire devised by the Limerick/Clare Energy Agency. The questionnaire will help the clusters gather consistent information on energy in the SMEs. This will be aggregated at cluster level, producing three sets of consistent indicators for each cluster:

- Gross energy consumption in the cluster
- Energy imports in the cluster
- CO2 emissions in the cluster

This will provide a common set of benchmarks across the 8 regional clusters.

Other aspects of the audit will vary between the partners, depending on local conditions, and will include surveys through face-to-face interviews, focus group, desk research, questionnaires, telephone calls, email and other conventional methods of data collection.

## **4.2 Analysis of strengths, weaknesses, opportunities and threats**

*4.2.1 Strengths:* Are there particular strengths identified in the clusters, such as established use of renewable energy, or strong energy efficiencies? Do the strengths provide a basis for future strategy? Do energy strengths in particular clusters provide trans-national learning opportunities for the other partners?

*4.2.2 Weaknesses:* What strategic weaknesses in energy have been identified? Do these weaknesses impede future development? Are there any common weaknesses shared between the partners? Are there any trans-national lessons among the partners on how particular energy weaknesses in the companies can be overcome?

*4.2.3 Opportunities:* What are the opportunities for renewable energy and energy efficiencies for the regional clusters? How might these opportunities be grasped? Can ideas about opportunities identified in one cluster be transferred to other partners?

*4.2.4 Threats:* Are there serious threats? Can the threats be readily identified so as to facilitate coherent action? Are there threats common between the partners? Is that a trans-national approach that can help counter energy threats in regional clusters?

Methodology of the analysis will include brainstorming sessions, workshops, seminars and desk research. The two levels – regional policies and clusters specificities – will be examined separately but in an integrated manner. Companies association – agencies – networks representing their point of view, representative of other key actors as local administrations, NGOs, etc,... will be actively involved in the sessions, helping them to develop creative approaches to energy use and energy policies. Trans-national meetings will be critical at this phase also as the shared experiences between the partners will be used to illuminate core issues for energy strategy in the regional clusters.

The benchmarking data from the audit will be analysed to produce a hierarchy of energy across the clusters. This will be done by comparing the three energy benchmarks to economic output (€m per annum) in the clusters:

- Gross energy consumption in proportion to economic output
- Energy imports in proportion to economic output
- CO2 emissions in proportion to economic output

Each cluster will thus have a clear indicator of its energy position in comparison to the other clusters. In addition, comparisons against European norms will also be made.

#### **4.3 Strategy definition**

The strategy definition will set out the priorities and main lines of action for intelligent energy through energy efficiency and renewable energy in the cluster. The energy strategy for each cluster will be based on the data and research. But, most important, the strategies will be informed by the trans-national dimension. Thus each regional cluster will base its energy strategy, not only on its own experience, but on the trans-national experience and lessons from the other partners. The unique aspect of this strategy phase will hence be the use of trans-national insights for regional energy action.

The strategy definition will thus have three major components:

- (a) International: Adoption of the good practice international lessons available through the European networks, policies and programmes.
- (b) National: Relate the energy policies from the clusters to the national targets and objectives in each case.
- (c) Local: Develop the cluster policy related to the local potential, and what the cluster can achieve; build the strategy based on local resources and aims; take account of local constraints; examine the role of different sectors within each cluster. Some clusters may adapt more readily to renewable energy and energy efficiency than others.

These components will dominate the form and structure of the plans

#### **IIa. Outputs of this work package:**

Audit: The output will be clear information on the present energy situation in each regional cluster, and how regional clusters across Europe compare and contrast in their existing use of energy. Potential trans-national learning opportunities will be identified, even at this early

stage. The policies assessment will focus in particular on barriers encountered in cases of failures or lack of policies implementation, and on success factors in cases of good practice and best results

Analysis: The output of the energy analysis will be agreement on the strengths, weaknesses, opportunities and threats both within the individual clusters and across the clusters in the trans-national dimension.

Strategy: The output will be a clear energy strategy for each regional cluster, with a trans-national overview on the shared approaches and policies.

### **Ib. Deliverable(s) of this work package:**

D.7: Intelligent energy plans for each regional cluster

### **III. Role and contribution (tasks) of each partner in this work package (Award criterion 5):**

Partner	Task(s) of this partner organisation	Related to Task N°
Limerick/Clare Energy Agency (lead)	Technical support to Shannon for the cluster plan work package; technical support to full partnership.	4.1, 4.2, 4.3
Shannon Development	Definition of energy strategy for Shannon Industrial Zone: energy efficiencies, renewable energy, improvements to buildings	4.1, 4.2, 4.3
Coventry University	Development of an integrated energy plan for Bayton Road Industrial Estate, particularly focusing on new measures for energy efficiency by companies.	4.1, 4.2, 4.3
Lappeenranta University	Develop collaborative energy plan for the metals cluster of South Karelia. Prepare proposals for the combined use of new measures in renewable energy and energy efficiency within the cluster.	4.1, 4.2, 4.3
Baltic Innovation Agency	Development of strategy for the forest and wood cluster in South Estonia, including recommendations for use of renewable energy and energy efficiency	4.1, 4.2, 4.3
Celje regional development agency	Development of data in companies for energy usage, energy efficiencies, energy management and current policies	4.1, 4.2, 4.3
Eastern Hungarian European Initiatives Foundation	Development of an energy plan for the Kabai cluster, including the integration of results from renewable energy and energy efficiency for the cluster.	4.1, 4.2, 4.3
Ruse Business Support Centre for SMEs	Analysis of survey results for the textile, agricultural equipment and furniture clusters; production of recommendations for strategies	4.1, 4.2, 4.3
ASTERIA	Provision of strategic proposals for the Marche cluster of electro-mechanical and electronic companies, specifically with recommendations for new energy efficiency measures in the cluster, and possibly new use of	4.1, 4.2, 4.3

	renewable energy.	
EURADA	Advisory support at steering group level	4.1, 4.2, 4.3
Ruse Energy Agency	Technical support to Ruse BSC in the analysis and plan	4.1, 4.2, 4.3
Agena Energy Agency	Technical support to Asteria for the plan in the Marche cluster of electro-mechanical and electronic companies	4.1, 4.2, 4.3
Kssena Energy Agency	Technical support to Celje for the cluster plan in the tool-making sector	4.1, 4.2, 4.3

**Major other specific costs (tasks and foreseen amount):**

None

**Major subcontracts:**

Mandatory phrase to keep: The subcontractors identified / to be identified were / will be selected following the provisions of Article II.9 of the Grant Agreement on competitive grounds on the basis of best value for money.

<b>N° of work package: 5</b>	<b>Specification of pilot projects</b>
<b>Duration in months: 9</b>	<b>Leader: Baltic Innovation Agency</b>

## **I. Description of the work:**

### **a) Work package overview:**

Following completion of the energy plans for each regional cluster, the partners will proceed to specify pilot projects for intelligent energy in each cluster, transforming the strategy definitions into specified pilot projects. This will be led by the Baltic Innovation Agency.

### **b) Tasks:**

Pilot projects will be specified in each cluster. The pilot projects will represent new initiatives for energy efficiency and renewable energy, arising from each plan's audit, analysis and strategy. Typically, the pilot projects could be in new ways of operating efficiencies or building modifications. In renewable energy, the projects could be proposed in wood, wind, solar, thermodynamics or other areas. Each pilot project proposal will be the outcome of a feasibility study, including:

- a) Objectives
- b) Relevance to the issues in the cluster
- c) Potential energy outcomes
- d) Trans-national comparisons
- e) Costings and value for money
- f) Implementation arrangements

Pilot projects may be multiple i.e. a large volume of small actions within individual companies, grouped as a mini-programme or multi-project group of initiatives; alternatively, some clusters may define single pilot projects for the whole cluster. The choice of approach here will depend on the specific circumstances for each cluster

While the pilot project developments will be in several phases, varying between the partners, this work package is described as a single task

The criteria for selection of the pilot projects will be clear and transparent, and will be as follows:

- Consistency with objectives of the regional cluster energy plan (WP4)
- Relevance to the energy issues identified in WP2 and WP3
- Impact on energy consumption in the cluster

- Value for money
- Ease of implementation

## IIa. Outputs of this work package:

Proposals for pilot projects in each regional cluster

## IIb. Deliverable(s) of this work package:

D.8: Pilot project specifications

## III. Role and contribution (tasks) of each partner in this work package (Award criterion 5):

<i>Partner</i>	<i>Task(s) of this partner organisation</i>	<i>Related to Task N*</i>
Baltic Innovation Agency (lead)	Definition of pilot projects for the forest and wood cluster of South Estonia, possibly in use of renewable energy through wood chip, geothermal and wind, as well as inter-company collaboration in energy efficiencies.	5
Shannon Development	Specification of pilot projects for Shannon Industrial Zone., mostly likely in wood chips as a source of energy, combined heat power and collaborative energy efficiency by companies.	5
Coventry University	Specification of pilot project for Bayton Road Industrial Estate, most likely in combined heat power and collaboration by companies in energy efficiency measures	5
Lappeenranta University	Specify pilot projects for the regional metals cluster in South Karelia, both in renewable energy (such as through forestry) and energy efficiency by inter-company collaboration.	5
Celje regional development agency	Study of potential centre for environment and energy engineering for transfer of energy technologies, development of energy projects and organisation of project team	5
Eastern Hungarian European Initiatives Foundation	Specify pilot projects for the Kabai cluster, in both renewable energy (possibly geo-thermal, wind, solar, biomass), with energy efficiency measures through inter-company collaboration	5
Ruse Business Support Centre for SMEs	Development of proposals for pilot actions in the textile, agricultural engineering and furniture clusters. Identification of any potential pilot projects shared by the three clusters.	5
ASTERIA	Definition of pilot projects for the Marche cluster of electro-mechanical and electronic companies, most likely in inter-firm collaboration in energy efficiency measures	5
Limerick/Clare Energy Agency	Technical support to Shannon for the specification of the pilot projects; technical support to the full partnership	5

Ruse Energy Agency	Technical support to Ruse BSC, particularly in developing cross-cluster possibilities	5
Agena Energy Agency	Technical support to Asteria for the pilot projects in the Marche cluster of electro-mechanical and electronic companies	5
Kssena Energy Agency	Technical support to Celje for the pilot projects in the tool-making cluster.	5

**Major other specific costs (tasks and foreseen amount):**

None

**Major subcontracts:**

Non

<b>N° of work package: 6</b>	<b>Definition of trans-national tool kit</b>
<b>Duration in months: 4</b>	<b>Leader: Shannon</b>

## **I. Description of the work:**

### **a) Work package overview:**

Following the completion of the cluster plans and the specification of the pilot project, the partners will collectively draw together their experience and bring this on to the common European agenda, through the completion of the trans-national toolkit.

The toolkit will add value to other energy management tools. Most tools deal with companies on an individual basis. Where tools deal with groups of companies, this tends to be on a sectoral or thematic basis. There are no energy management tools specifically for planning on a territorial basis, especially regional clusters. The additional value of the RegCEP toolkit (compared to other energy management tools) will be to strengthen the territorial dimension of energy planning. There have been no significant initiatives of a similar type for energy planning in regional clusters. The RegCEP toolkit will therefore fill an important gap. This tool will deal with companies as members of regional clusters, and facilitate the adoption of energy actions by regional clusters. The toolkit will present specific techniques appropriate for use by regional clusters. The impact of the toolkit will be to give regional clusters a new set of relevant techniques to inform energy planning.

### **b) Tasks:**

The process of regional clusters and energy planning will be broken down into its component parts, such as the following:

Step 1	Defining the policy and programme context (European, national and regional objectives); need to take account of broader frameworks; role of policy frameworks in informing local action.
Step 2	Integration of energy themes at local cluster level (energy efficiency, renewable energy, buildings); how the different themes and policy concerns can be integrated and coordinated at the level of the industrial cluster.
Step 3	The three stages in the planning process: audit, analysis, strategy; examples of the demonstration of each of the three steps from the partner experiences; alternative techniques and methodology for each of the three steps; critical review of issues that can arise in each of the steps; examples of added value from the application of the cluster planning process.

Step 4	Role of pilot projects; why it is important to demonstrate the concrete outputs of the plan with real short term benefits; how the integration and plan phases can generate good ideas and definition for pilot projects; role of the pilot projects in implementing strategy and in attracting local support.
Step 5	Dissemination through the life of the project; winning support; important role of local partnerships and networks; collaboration between public and private interests; interfaces between companies; how organisational networks and good local governance can promote energy planning in regional clusters; case studies of good practice from the partner experiences.

The “tool-kit” will define the steps and process by which regional clusters can address the energy challenge. The relevance of the tool-kit will be to provide a practical technique to regional development agencies to apply energy-planning processes to clusters in their regions.

### **IIa. Outputs of this work package:**

The toolkit will be a “manual” on the steps in the process of regional clusters in energy planning, setting out the framework of the different stages. The manual will also present practical demonstration, drawing from the partner experiences, of alternative approaches within each stage. The partner experiences will be generalised to the European level. Difficulties in various tasks, including potential errors and mistakes arising from the partners’ experience, will also be documented.

### **IIb. Deliverable(s) of this work package:**

D.9: The aim of this work package is to produce a document that present the process of regional clusters in energy planning, in a way that can be applied to different regional and local situations across Europe.

### **III. Role and contribution (tasks) of each partner in this work package (Award criterion 5):**

<i>Partner</i>	<i>Task(s) of this partner organisation</i>	<i>Related to Task N°</i>
Shannon Development (lead)	Application of the Shannon Industrial estate lessons to the trans-national tool kit	6
Baltic Innovation Agency	Transfer of experience from the forest and wood cluster in South Estonia to the international level.	6
Coventry University	Promotion of the Bayton Road Industrial estate experience to the trans-national toolkit, particularly the role of CHP in industrial estates	6

Lappeenranta University	Transfer of experience from the metals cluster in South Karelia to the toolkit. Definition of implications of results from South Karelia for international approaches.	6
Celje regional development agency	Provision of research results from tool making cluster in energy efficiency, renewable energy use and buildings	6
Eastern Hungarian European Initiatives Foundation	Promotion of the eastern Hungary experience with renewable energy and energy efficiency to the international level	6
Ruse Business Support Centre for SMEs	Input to toolkit from experience of textile, agricultural engineering and furniture clusters of Ruse. Transfer of international experience to Ruse clusters	6
ASTERIA	Transfer of experience of the Marche cluster of electro-mechanical and electronic companies to the trans-national tool kit	6
Limerick/Clare Energy Agency	Technical support to the full partnership for the development of the trans-national tool kit	6
Ruse Energy Agency	Technical support to Ruse BSC	6
Agena Energy Agency	Technical support to Asteria in the development of the tool-kit arising from the experiences of the Marche cluster of electro-mechanical and electronic companies	6
Kssena Energy Agency	Technical support to Celje in the development of the tool-kit to reflect the issues in the tool-making cluster	6

**Major other specific costs (tasks and foreseen amount):**

None

**Major subcontracts:**

None

<b>N° of work package: 7</b>	<b>Communication and Dissemination</b>
<b>Duration in months: 8</b>	<b>EURADA</b>

## **I. Description of the work**

The cluster energy plans will be communicated and disseminated to the target groups, tailoring to the specific needs of each target group. Dissemination will be at two levels: regional and trans-national. EURADA (European Association of Development Agencies) will lead this work package.

## **IIa Tasks**

### ***6.1 Regional dissemination***

The major regional dissemination is the Intelligent Energy Plan, disseminated regionally and nationally, leading to start-up of the pilot projects.

The formal Intelligent Energy Plan for the cluster will be published in easy-to-read format, including survey, analysis, strategy and pilot projects. The cluster plan will be related to the specific conditions in each cluster, but also benchmarking the cluster against international experience. The specific recommendations unique to the cluster will be compared to examples from other clusters. The key message will be that the future competitiveness of the cluster is dependent on the successful achievement of the energy plan.

The cluster energy plan will be presented at the closing seminar in each area. This will conclude the workshops which have been held in the cluster during the life of the project. The crucial challenge will be to convince the enterprises that intelligent energy is central to their competitiveness. Feedback will be given to companies, both individually and collectively, on how they rank across the benchmarks of energy. The aim of the feedback will be to alert companies that intelligent energy is a central part of their competitive advantage and costs of production. By responding to the intelligent energy challenge, companies can reduce their strategic vulnerability in the future. The key outcome will be the number of firms which are adopting intelligent energy practices in each area.

The key component of this closing seminar will be the commencement of the post-RegCEP implementation phase. Each cluster will start the implementation of its pilot project, securing support from the private companies and public agencies for taking action on the pilot projects. This will include initial steps with the necessary investments, organizing the resources required for the pilots and arranging delivery of the actions.

The Intelligent Energy Plan for each cluster will also be disseminated nationally to the appropriate organisations and interests. This will be through circulation of the report to national bodies, and through featuring the report in relevant publications. The plan will demonstrate how intelligent energy can be applied to regional clusters within the context and setting of the particular member state, showing how intelligent energy principles can be relevant to the regional policy considerations of each country.

### ***6.2 Trans-national dissemination***

Dissemination will aim to create consciousness at European level about regional clusters for energy planning. EURADA, the European association of development agencies, will support dissemination. EURADA has over 150 members in all the member states. EURADA will promote awareness of the RegCEP project through the EURADA web site. Also, RegCEP will be profiled in EURADA publications and reports. EURADA is also promoting other projects related to clusters in regional development. EURADA will integrate the RegCEP recommendations to its own work in clusters.

### ***6.3 National dissemination***

Each partner will follow a systematic two-step process to engage and commit their respective national programmes in the RegCEP project. Typical stages in this process will be as follows:

#### **Step 1:**

At the launch of the project, at the start of WP2, each partner will alert the relevant national energy authority, briefing them on the project and developing an agreed view on the potential of the RegCEP project to benefit the national policies. Each national energy authority will be invited at the earliest possible stage to give advice to the RegCEP partner on how the RegCEP project can most effectively impact on the national energy programme. At this stage, each RegCEP partner will review how the local project can best be adapted to benefit the national programmes to the greatest possible extent. Thus the RegCEP partners may need to make adjustments to their individual work programmes to ensure that they bring highest added value to the national energy authorities.

#### **Step 2:**

At the completion of WP4 (Regional cluster plans) and at the start of WP5 (selection of pilot projects) each partner will brief their national energy authorities on the results of the work to date (including WP2/renewable energy and WP3/energy). The input and advice of the national energy authorities will be sought in finalising the regional cluster plans and in the selection of the pilot projects.

Both these steps should ensure the effective mainstreaming of RegCEP into the national energy policies.

### **IIa Outputs of this work package**

Cluster plans  
Seminars commencing the pilot projects  
Features in publications  
Final report

### **IIb Deliverables of this work package**

D.9 Eight cluster energy plans  
D.10 One closing seminar in each region promoting the cluster energy plan with start-up of the pilot project  
D.11 One publication at national level in each country about RegCEP  
D.12 Presentations and reports to EURADA members  
D.13 Final report of the partnership

### III. Role and contribution (tasks) of each partner in this work package (Award criterion 5):

<i>Partner</i>	<i>Task(s) of this partner organisation</i>	<i>Related to Task N°</i>
EURADA	Leader	6.2
Shannon Development	Promotion of awareness of the Shannon industrial energy projects among the companies, and to the regional/national authorities.	6.1, 6.2
Coventry University	Promotion of awareness of the Bayton Road Industrial Estate project to the companies, and to regional/national policy-makers	6.1
Lappeenranta University	Awareness-raising in the metals cluster about the RegCEP conclusions, and development of support for proposals for metals cluster in South Karelia	6.1
Baltic Innovation Agency	Promotion of awareness through workshops and seminars to the companies in the forest and wood cluster of South Estonia	6.1
Celje regional development agency	Preparation of closing seminar – invitations, arrangements, advertising, dissemination	6.1
Eastern Hungarian European Initiatives Foundation	Seminars and workshops to promote results of project from Kabai cluser to eastern Hungary companies	6.1
Ruse Business Support Centre for SMEs	Promotion of awareness of project outcomes from textile, agricultural equipment and furniture clusters to companies	6.1
Limerick/Clare Energy Agency	Participation in workshops and seminars promoting the rsulst of the project in Shannon	6.1
Asteria	Seminars and workshops to promote awareness of the project in the Marche cluster of electro-mechanical and electronic companies	
Ruse Energy Agency	Technical support to Ruse BSC in promotion of awareness.	6.1
Agena Energy Agency	Technical support to Asteria in the awereness-raising seminars and workshops	6.1
Kssena Energy Agency	Technical support to Celje for aaarerens –raising in the tool-making cluster	6.1

#### Sub-contracts

None

#### Major other specific costs

None

<b>N° of work package: 8</b>	<b>IEE dissemination activities</b>
<b>Duration in months: 30</b>	<b>Leader: Shannon and Limerick/Clare</b>

### **I. Description of the work:**

#### **a) Overview of the work package:**

The work package covers resources to contribute, upon request by the IEEA, to common dissemination activities to increase synergies between, and the visibility of IEE-supported projects.

#### **b) Tasks**

- Creation and regular update of your project information for IEE online information systems (according to your reporting schedule).
- Contribution, upon request by the IEEA, to the development of additional information material (Intelligent Energy News Review, videos, images etc.) in the quality and form specified.
- Participation and/or contribution, to information and dissemination events (contractors' workshops, conferences, briefing days, exhibitions, etc.) related to IEE or other relevant EU programmes.

#### **II.a. Outputs of this work package**

- Delivering of contributions to the IEE online information systems
- Participation in information and dissemination events, such as contractor's workshops, conferences
- Delivery of common presentation material and media tools

#### **II.b. Deliverable(s) of this work package**

D.12: Creation and regular update of the project information.

D.13: Inputs to additional common information material related to IEE actions, such as articles for newsletters, posters, interviews, visuals.

D.14: Project presentations and background material presented at information and dissemination events including feedback analysis thereof.

### **III. Role and contribution (tasks) of each partner in this work package (Award criterion 5):**

<i>Partner</i>	<i>Task(s) of this partner organisation</i>	<i>Related to Task N°</i>
Shannon Development	Common dissemination activities	8
Limerick/Clare Energy Agency	Common dissemination activities	8

#### 4.3. Overview Lists of Outputs and Deliverables

##### Overview List of Outputs and Deliverables

**(a) Outputs:** Please insert the outputs of each work package in this overview table.

Work Package N°	Outputs <sup>a)</sup>	Specification as appropriate <sup>b)</sup>
1 (Management)	1.1 Management	
	1.2 Project steering	
	1.3 Local steering	
	1.4 Communications	
2 (Renewable energy)	2.1 Review of experiences	
	2.2 Shared outlook	
3 (Energy efficiency)	3.1 Review	
	3.2 Recommendations	
4 (Regional cluster plans)	4.1 Audit	Local meetings and seminars
	4.2 Analysis	
	4.3 Strategy	
5 (Pilot projects)	5.1 Specification of pilot projects	
6 (Trans-national toolkit)	6.1 Toolkit	
7 (Dissemination)	7.1 Regional dissemination	Closing seminars and publications
	7.2 Trans-national dissemination	
8 (Common dissemination)	8.1 Information update for IEE	
	8.2 Additional information for IEE	
	8.3 Participation at IEE events	

a) Please use the same output name/description & quantitative data as you used in the work package itself

b) Please add here additional information which is not yet provided in the Work Package itself and which you find helpful to understand the characteristics/scope/level of ambition of the output(s)

**(b) Deliverables**

Work Package N°	Deliverable N°	Deliverable name <sup>a</sup>	Type of deliverable <sup>b</sup>	Size/Form <sup>c</sup>	Language(s) <sup>d</sup>	Target group <sup>e</sup>	Lead participant <sup>f</sup>	Dissemination level <sup>g</sup>	Month of completion <sup>h</sup>
1	D3	Consultations with local groups	Minutes of meetings	Electronic (1-2 pages per minute)	En, It, Sl, Hu, Bl, Fin, Est	Local partners	partner	CO	30
	D4	Web site	web site	Electronic (15 pages)	En	SMEs, agencies	Shannon	PU	7
2	D5	Renewable energy in regional clusters	report	Electronic (15 pages)	En	Partnership, IEE	Lappreenranta	PU	12
3	D6	Energy efficiency in regional clusters	report	Electronic (15 pages)	En	Partnership, IEE	Coventry	PU	12
4	D7	Intelligent energy plan for each cluster	report	Electronic (15 pages)	En, It, Sl, Hu, Bl, Fin, Est	SMEs included	Limerick/ Clare Energy Agency	PU	15
5	D8	Pilot projects specifications in each cluster with defined savings of energy efficiency and/or use of renewable energy	report	Electronic (15 pages)	En, It, Sl, Hu, Bl, Fin, Est	SMEs, agencies		PU	23
6	D9	Trans-national toolkit	report	Electronic and printed (15 pages)	En, It, Sl, Hu, Bl, Fin, Est	SMEs, agencies	EURADA	PU	23
7	D10	Closing seminars to present intelligent energy plan and pilot projects in each cluster	meetings	press release (1-2 pages)	En, It, Sl, Hu, Bl, Fin, Est	SMEs, agencies	EURADA	PU	27
	D11	National publication in each country profiling intelligent energy in clusters	articles	Electronic/ Printed (3 pages)	En, It, Sl, Hu, Bl, Fin, Est	SMEs, agencies	EURADA	PU	29
	D12	Presentations to EURADA members	meetings articles	presentations electronic	En	EURADA members	EURADA	PU	29
	D13	Final report	report	electronic and print (50 pages)	En, It, Sl, Hu, Bl, Fin, Est	SMEs, agencies, IEE	EURADA	PU	30

4.4 RegCEP schedule

Project phase	Month																													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
WP1 Management	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WP2 Renewable energy		X	X	X	X	X	X	X	X	X	X	X																		
WP3 Energy efficiency		X	X	X	X	X	X	X	X	X	X	X																		
WP4 Cluster plans				X	X	X	X	X	X	X	X	X	X	X																
WP5 Pilot projects															X	X	X	X	X	X	X	X	X							
WP6 Toolkit																		X	X	X	X	X	X							
WP7 Communication & Dissemination																							X	X	X	X	X	X	X	X
WP8 IEE dissemination																				X	X	X	X	X	X	X	X	X	X	X
Project meetings		X							X						X						X						X			
Project reports to IEEA										PR									IR											FR <sup>c</sup>
Project Information Sheet to IEEA		X								X									X											X
Project deliverables	D1	D3	D2		D3		D1 D4	D3	D2		D3	D5 D6	D1	D3	D7 D2		D3	D1		D3	D2		D3 D8 D9	D1		D3	D2 D10		D10 D3 D11 D12	D1 D10 D13

*Note: schedule and deliverables for work package 8 (common dissemination) not included in above.*

<sup>a</sup> Please use the same deliverable name as indicated in the work package descriptions in section 6.2. The deliverable name should be self-explanatory.

<sup>b</sup> The type of deliverable could be: a publication (flyer/brochure/working paper/paper/article/press release/slides/Cd-rom), website/webtool, etc.

<sup>c</sup> The Size/ Form could be: printed and/or electronic (downloadable), the approx. number of pages / number to be printed of a publication

<sup>d</sup> Please specify each languages in which your deliverable will be available - indicating 'all' or 'national' is not sufficient.

<sup>e</sup> Please indicate the specific target group for each deliverable. The target groups indicated should be consistent with section 4. Indicating 'all' is not sufficient.

<sup>f</sup> Name the participant of your consortium who will lead the preparation of the deliverable.

<sup>g</sup> Please indicate the dissemination level using one of the following codes:

PU = Public, to be freely disseminated, e.g. via the project website

CO = Confidential, only for members of the consortium including the Commission/EACI Services (only in exceptional cases)

<sup>h</sup> Month in which the deliverables will be actually completed (not the submission to the EACI services). Month 1 marks the start of the project, and all deadlines should be relative to this starting date

<b>Participant</b>	<b>Co-financing source(s)</b>	<b>Comments related to case a) or b) above</b>
Shannon	Own resources	Shannon will benefit from RegCEP by being enabled to accelerate its programmes for sustainable energy in Shannon Industrial Estate
Limerick Clare	Own resources	LCEA will, through the experience of trans-national collaboration, enhance its own technical ability to address local energy issues.
Lappeenranta	Own resources	The University of Lappeenranta will strengthen its expert capabilities to develop intelligent energy solutions.
Baltic Innovation Agency	Own resources	The BIA will be empowered to intensify its work in sustainable energy in Soputh Estonia
Celje	Own resources	Celje will develop its skills and capacities in energy-related issues, as well as resolving some practical issues in the tool-making cluster
Eastern Hungary	Own resources	Eastern Hungary will be able to capitalise on international expertise, through the partnership, to address pressing energy challenges in its regions.
EURADA	Own resources	EURADA will mainstream energy policies into its trans-national membership
Ruse BSC	Own resources	Ruse will be enabled to strengthen its cluster of SMEs in their use of intelligent energy. Ruse BSC will also gain from improved energy
Asteria	Own resources	Asteria will be able to accelerate its energy programmes for the Marche cluster. Astreria will benefit from stronger energy programmes within its own organisation
Coventry	Own resources	University of Coventry will gain from improved experience and expertise in dealing with energy issues in industry, and well
Agena	Own resources	Agena will have its energy programmes enhanced and improved, as well as increasing its impact on the SMEs in its cluster
Kssena	Own resources	Kssena will develop its energy programmes for SMEs, together with strengthening its internal capabilities in intelligent energy
Ruse REA	Own resources	Ruse REA will enlarge its energy support services for SMEs, and a wider range of skills and experiences to deal with energy challenges

