HOW TO REACH ENERGY NEUTRALITY?

follow the guide!

Network of small rural communities for energy-neutrality

Guidelines 2011

Supported by INTELLIGENT ENERGY EUROPE
You want to talk about energy in your rural community?  
You are ready to start concrete action for local development?  
You wish to open your eyes to rural energy in Europe?  
And... you have a lot to share and show in this area?

Become a RURENER Member and start your journey towards ENERGY-NEUTRALITY!

More information about the RURENER NETWORK and rural energy are available online on rurener.eu
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Follow the steps of RURENER’s Roadmap

http://rurener.eu/roadmap/

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“HOW TO” is the repeating theme of the RURENER guidelines. Everyone agrees with capacity building at the community level. But how to deal with it? How to start, who can help? What should I do, what shouldn’t I do?

Taking the initiative and becoming actively involved in scoping, planning and implementing sustainable energy projects and energy saving measures can be a daunting step for any community. Where should one start? Who can provide help? What are the important steps to follow and what are the pit-falls to avoid?

Whether you are a local council in a rural area thinking creatively about how your community can reduce its energy foot-print, or you are a community activist looking to build support for your community, the RURENER guidelines are here to help.

The RURENER guidelines provide advice, examples, templates and ideas to set you on the right track. There’s links to the RURENER website too, where you can find out more and even contribute yourself, sharing your expertise with others.

Your experience is as important as the ones presented as good practice in these guidelines, each recipe has to be adapted to your own situation and wishes.

**We do encourage you to take your first step, and we look forward to supporting you on your journey.**
A local diagnosis is one of the first tasks when starting to reach energy neutrality!

It allows you to know where you are before planning where you want to go! You can call it a “point zero” or a State of the Art, the name doesn’t matter, it is generally your first step!

RURENER is providing you with a guide and a few tools to make your own diagnosis without needing an expensive survey. It starts from qualitative and quantitative information you have in your community.

- **qualitative analysis** is the easiest way to make a first assessment of the situation. It is all the more interesting that you take advantage of the diagnosis to interview stakeholders you are not usually in contact with. You will learn a lot from qualitative analysis, without much effort.

- **quantitative analysis** is important to quantify your actions and have in mind the right orders of magnitude. It also allows you to calculate your initial energy neutrality rate!

### DO

- Define your needs (how will we use the diagnosis?) and the scope of the study
- Search for national or regional figures which will help you to know more about energy consumption structure
- Define what kind of energy you use and what for
- Define where the energy comes from at the moment
- Look for alternatives and analyse the local resources
- Involve local stakeholders in the diagnosis and list the territory knowledge

### DON’T

- Spend too much time on gathering figures or interviews without going into action
- Totally skip this step thinking you already know what actions you would like to perform

**Total:**

**Come and share your experience!**

**Come and learn from others!**

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**what are your local natural resources? Where can you save energy?**

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Qualitative analysis

RURENER suggests that you base your local analysis on the SWOT (strengths, weaknesses, opportunities and threats) method. Energy is not the only issue taken into account: environmental, social and economic data are crucial to make sure your energy strategy answers to the local needs. To gather the information, enquiries to key stakeholders are useful.

SWOT Analysis Template Municipality / Community of ............
(A certain criterion can apply to more than one quadrant. The list in indicatively).

Strengths
- RES potential (e.g., Solar radiation, biomass, residues, etc.)
- High value of natural heritage, favouring the development of clean energies
- Research & Development in RES issues
- Existence of energy market
- Existence of Energy Management Agency

Opportunities
- Country commitments
- Existence of areas suitable for taking measures
- Suitable climate for bioclimatic applications
- Liberalization of electricity market
- Private investors
- Secured tariff for RES electricity
- Subsidies — incentives

Weaknesses
- Lack of RES recourses
- Few RES / ES / RUE applications in the area
- Low sensitivity to energy saving
- Low public awareness
- Insufficient infrastructure for RES use (e.g., Injection of Biomethane into the natural gas grid)
- Absence of TOR for the construction of the building (e.g., no bioclimatic criteria)
- Energy efficiency in buildings is not an obligation yet
- No feed-in-law for thermal applications
- No incentives at a local level
- Absence of a local Energy Plan

Threats
- Excessive dependency on fossil fuels (e.g., Lignite)
- Bureaucracy
- Unwillingness to changes
- Lack of capacity and resources at regional and local level
- Reactions and suspicious to RES applications
- Secured tariff for RES electricity
- Subsidies — incentives

Now let’s come to quantitative data!

There are a lot of different tools developed at the European or global level.

RURENER has produced an easy tool to enable you to get quantitative data for your energy consumption to help your decision making. The most important thing is that you and the main stakeholders of the territory have a good understanding of the orders of magnitude and are able to compare with national or regional ratios.

Download your own tool and SWOT template on rurener.eu/roadmap!
Key figures, useful links and orders of magnitude

- Statistics of European Commission:

Some orders of magnitude in France. The consumption can be different in other parts of Europe.

**Annual Heat consumptions / Western France**

<table>
<thead>
<tr>
<th>Housing unit</th>
<th>Individual house, 120m²</th>
<th>15 MWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairy farm</td>
<td>Hot water for milking, 250 l/day</td>
<td>3 MWh</td>
</tr>
<tr>
<td>Pig farm</td>
<td>Pig house, 3300 m²</td>
<td>170 MWh</td>
</tr>
<tr>
<td>Poultry farm</td>
<td>Henhouse, 2400 m²</td>
<td>320 MWh</td>
</tr>
<tr>
<td>Nursing home</td>
<td>70 beds</td>
<td>500 MWh</td>
</tr>
<tr>
<td>Swimming pool</td>
<td>Indoor equipment, 600m² of pool</td>
<td>1 500 MWh</td>
</tr>
<tr>
<td>Greenhouse</td>
<td>For tomato production, 10 000 m²</td>
<td>5 000 MWh</td>
</tr>
</tbody>
</table>

Average Electricity consumption / France

| Household             | 3 persons                | 3 MWh |

Energy production / Western France

<table>
<thead>
<tr>
<th>Installation</th>
<th>Power</th>
<th>Description</th>
<th>Energy produced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wind turbine</td>
<td>1.5 MW</td>
<td>2 200 hours of nominal operation</td>
<td>3 300 MWh of electricity</td>
</tr>
<tr>
<td>Photovoltaic</td>
<td>200 m²</td>
<td>100 kWh/m²</td>
<td>20 MWh of electricity</td>
</tr>
<tr>
<td>Biogas plant</td>
<td>100 kWé + 120 kWth</td>
<td>8 000 hours of nominal operation</td>
<td>800 MWh of electricity + 960 Mwh of heat</td>
</tr>
<tr>
<td>Woodchips boiler</td>
<td>500 kW</td>
<td>500 tons of wood</td>
<td>1650 MWh of heat</td>
</tr>
</tbody>
</table>

Decimal Prefixes

<table>
<thead>
<tr>
<th>10^3</th>
<th>kilo (k)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10^6</td>
<td>mega (M)</td>
</tr>
<tr>
<td>10^9</td>
<td>giga (G)</td>
</tr>
<tr>
<td>10^12</td>
<td>tera (T)</td>
</tr>
</tbody>
</table>
Quantitative diagnosis in Britany

Based on statistics and surveys, this diagnosis aims at comparing the territory to the entire region or county. It allows determining the sectors that need to be focused on.

**Description:** The study includes the evaluation of energy consumptions by sector, the assessment of renewable energy potential and the establishment of an action plan.

**What was successful:** On the basis of the diagnosis, the following guidelines were proposed for the action plan:
1. Focus in the first place on transport and domestic heating, the two major items in consumption
2. Favour specific territory actions who could not be led at county or regional level
3. Be exemplary in the community buildings and actions
4. Raise stakeholders’ awareness without making them feel guilty

**The difficulties we encountered:** Transport appears as the tricky part of consumption, both because it represents almost 50% of the global consumption, and because there are few possibilities of alternative fuel. It is all the more difficult that a large part of the population works outside the territory. Even if transport issues are difficult to tackle, it will be an important part of the action plan.

**Our advice:** you can supplement the figures with interviews with key persons of the territory.
The only way to facilitate an integrated energy policy at the local level is to create an action plan. It allows you to **anticipate, coordinate and share short and long term visions** about how you can drive a comprehensive policy according to your resources and external support.

An Action Plan talks about objective(s), activities, stakeholders, agenda, financial and technical resources.

The RURENER Roadmap includes guidance about how to build your action plan in 3 steps, tools to help to produce and manage the plan and good practices from successful communities within the Network.

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**DO**

- Build it with your local steering committee to take into account the many issues and the diversity
- Find some actions that can be implemented immediately to motivate everybody
- Set up realistic timing
- Make sure a budget is available for each action or rename the action “Examine the possibilities to finance . . .”
- Write a name of the responsible person in front of each action
- Revise the action plan from time to time

**DON’T**

- Set up a huge action plan knowing you will not be able to perform the actions
- Postpone actions without new deadlines

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**Total:**

**Come and share your experience!**

**Come and learn from others!**

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**who should be on your local steering committee?**

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8
**Definition of local action plan in Peyrelevade**

**Description:** While getting commitment to produce an Energy Local Action Plan, the young Mayor of Peyrelevade, Pierre Coutaud had a clear objective: instead of taking each step as it comes, depending on the opportunities that arise, he would begin with a clear vision of the community’s current energy profile and its potential sources for renewable energy.

The mayor invited several partners to join the steering committee: representatives the regional and departmental authorities, the regional Natural Park which has started an energy audit at the Park level, the departmental agency for electricity in charge of public lightning, the local energy agency “Energy pour Demain”, the municipal council.

This steering committee met twice to build the local action plan:
- **production of a local diagnosis** of the community. The socio-economic profile has been studied as well as the energy potential and strengths, weaknesses, opportunities and threats.
- definition of topics to be addressed, issues to be tackled. This definition has been very large and following a “no limit” principle, so that no solution, topic, idea could be lost.
- selection and **definition of priorities** within the actions. From the list build earlier, what is realistic, what is urgent, what is under our control, etc. . . Once the list has been produced, the steering committee worked on the budget allocated, the expected results, the term of the action.

A sample of the result of this work appears below.

**What was successful:** The fact that each person around the table added value to the process, and the fact that **it does not cost to produce a local action plan**! Beginning with a high-level vision and breaking this down to a detailed analysis ensured that nothing was left out and provided opportunities for **constructive discussion and debate**.

When done, the biggest benefit is a shared document of reference for all the members of the community. Officially validated by the Municipal Council, the Energy Action Plan is used for communication at the local level. Reviewed several times a year, it allows to “know where we are” very easily.

**The difficulties we encountered:**
It has been difficult to raise the participation of the citizens from the beginning of the process. Most of the difficulties and challenges are for the future: ensure the **follow-up of the action plan** and respect the deadlines.
Middle term activities planned in Peyrelevade community in 2009, following the RURENER roadmap template:

<table>
<thead>
<tr>
<th>Name of the action</th>
<th>Description of the action</th>
<th>Action time (from to)</th>
<th>Stakeholders</th>
<th>project leader</th>
<th>financial budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renewable Energies</td>
<td>Survey on renewable resources able to produce more energy locally</td>
<td>2011</td>
<td>Peyrehlevade municipality</td>
<td>10800</td>
<td></td>
</tr>
<tr>
<td>Energy Savings</td>
<td>Sustainable management of waste waters at local level and rational use for new works</td>
<td>2011</td>
<td>Peyrehlevade municipality</td>
<td>Private funding</td>
<td></td>
</tr>
<tr>
<td>Communication – awareness</td>
<td>Information and communication on efforts and actions led by the community</td>
<td>13th of June 2011</td>
<td>Peyrehlevade municipality</td>
<td>Private funding</td>
<td></td>
</tr>
<tr>
<td>Monitoring</td>
<td>Update RURENER tool to calculate energy neutrality</td>
<td>2011</td>
<td>Peyrehlevade municipality</td>
<td>Private funding</td>
<td></td>
</tr>
</tbody>
</table>

Slanic-Moldova plans to become energetic neutral

**Description:** On March 14, 2009, in the presence of Mr. George Kremils, member of the EU Parliament and other Romanian officials, the project “Slanic – green city” was launched. After joining the Rurener project, the plans of the local community have been completed by the ambitious idea that the city would become energy-neutral until 2012.

A medium-term plan was developed, which includes the following projects:

- **Modular geothermal power plant**, combined with a biomass heating system;
- **Solar energy unit** on the sports hall roof. Energy deliveries will be made directly to **electric vehicles** that will replace conventional vehicles in Slanic-Moldova;
- **Biogas plant**;
- **“Slanic-Moldova” Wind Park**;
- **e-mobility** – a programme concerning the use of e-motors produced by Automotive Interior World GmbH Regnitzlosau and Neuesalz and Romanian companies;

The total amount of all these projects, which are meant to ensure the environmental protection – green city and energetic neutrality of Slanic-Moldova, is around 30 million Euros.

**What was successful:** The success of such initiatives depends on two things: quality of the projects and funding from financial sources. In the case of Slanic-Moldova, both objectives were achieved.

The perseverance of the people in Slanic-Moldova, lead by the mayor Andrei Serban, deserves to be mentioned.

**The difficulties we encountered:** The main difficulty was to convince the investors on the determination and the seriousness of the community in reaching the above mentioned objectives.

The City hall succeeded to find support from relevant factors. We believe that the real difficulties might start from now, along with the implementation of the actions.

**Our advice:** Be earnest and persevere with your plans to achieve energy neutrality. Renewable sources of energy are everywhere — just use them.
Communicating and having the communities participating is essential in the Rurener Network. The same goes for your local project: communicating and having your citizens and local players participating in or at least supporting your energy strategy is essential for your success.

This step is about what to communicate, who is your audience, when to communicate, who should participate, what role do the citizens or the stakeholders play?

There are different levels of participation: it varies between being informed, getting involved into decision making, becoming active in planning or implementing action...

Raising participation will bring 2 advantages:

1. Once aware and participating in the project from the beginning, you will find a more positive common spirit and acceptance of the changes implied by the actions.
2. You could be surprised how the ideas of other stakeholders in the community can enrich your action plan: things that you may not think about and that will be performed by others! A real example of community development.

**DO**

- Begin with a communication plan
- Involve a large range of stakeholders, trying to discover their own interest in your approach
- Provide information inside the community AND outside according to the objectives

**DON’T**

- Launch new communications media without coordination
- Start new media without updating them

**Total:**

Come and share your experience!

Come and learn from others!
Use Web 2.0 tools

Social media and Web 2.0 have enabled communities and individuals to use the internet to have their say, gain support and share their stories. Tools like blogs, Twitter, Flickr and YouTube let people publish and share text, short messages, photos and videos quickly and easily without needing specialist technical knowledge.

**DO**

- Have a go - you can only learn how social media works by taking part!
- Set time aside to take part - most of the tools are free or very low cost, but take time to use
- Link and comment when you write online - these links start to build relationships and start to build a community online
- Ask interested people in your community to take part and provide content (younger, retired people, web-addicted citizen!)

**DON’T**

- Worry that you are on your own, you’re not. Everything has to start somewhere and people can help you online once you start to use the tools
- Be someone else - be honest, your personality is important, have fun, share your enthusiasm
- Ignore people - if someone leaves a comment or follows you on Twitter, say thank you. They could be your next volunteer, partner or collaborator

**Total:**

Come and share your experience!

Come and learn from others!

What services do you expect from your website?

Other Useful links:

Social Media Help - tips for blogging, Twitter, Flickr and YouTube
http://podnosh.com/social-media-help/

Talk About Local step-by-step guides

Few ICT skills in your community? Take a look at RURENER tutorial on rurener.eu/roadmap!
Social media in Leith

Description: Leith is a district of the Scottish town Edinburgh. Their site Greener Leith (http://www.greenerleith.org/) use different social media in combination to help promote their activities and engage with the local community as well as with other organisations doing similar work elsewhere.

What was successful: The main website is a blog, where news updates and articles can be published. They use images posted on Flickr, a photo-sharing service to help illustrate their articles. Videos are posted on YouTube and then are embedded on the website. These don’t have to be expensive productions, a short (2-3 minutes) interview or a demonstration to help explain an issue, taken using a mobile phone is acceptable and a useful way of documenting events. They use Twitter to share links to their articles and other interesting websites. They have built up a community of followers on Twitter who are interested in what they do and they listen, discuss and reply to them to help improve their local area.

An essential tool, the communication plan

A communication plan describes your objectives and your strategy concerning your communication within and about your project or your activities. It should be set up at the beginning of a project, should be revised after a certain period and could cover the following contents:

1 Communication Plan -------------------------->
   1.1 Communication purpose
   1.2 The stakeholders; internal and external
   1.3 The messages
   1.4 Basic information
   1.5 Communication costs

2 Internal communication ---------------------->
   2.1 Internal meetings
   2.2 Reporting
   2.3 Financial reporting
   2.4 Web site

3 External Communication Plan --------------->
   3.1 Policy Makers
   3.2 General public
   3.3 Stakeholders
   3.4 Promotion of the funding or involved institutions
   3.5 Promotion or launching events

Advice: make your communication tools easy to understand and pleasant to read:

- agree on a small number of key messages
- avoid technical terms, financial speak . . .
- cite quotes from partners, funders and supporters of the project
- illustrate with photos and charts

Download the Rurener poster and flyer in 7 languages from rurener.eu - search «poster»

find other tips and tools about communication on rurener.eu/roadmap!
RURENER Roadshow

Description: Rurener Roadshow provides information about the RURENER project and promotes energy efficiency and climate protection thanks to conferences, booths and extras like an electric bicycle. It aims at acquainting the citizens with concrete ways of saving energy, through house modernisation for instance.

What was successful: The key is the mixture of exhibition, presentations and fair. Information walls (on RURENER, energy neutrality, technologies (solar, geothermal...), energy supply, top 10 energy saving tips...) allow the visitor to connect the issue to his/her interests and needs. The conferences help the visitor to get a structured vision of the RURENER Network and things he could do and why he should do it.

The fair is the chance to let the citizen act right away. Once the people come out of a presentation on energetic modernization of houses, they can talk to the craftsmen directly about their own home. By doing this there is a good chance of creating local business and doing it now instead of “one day”.

The difficulties we encountered: We noticed that it is of considerable importance to choose skilled craftsmen, a just and balanced choice turned out to be challenging.

Our advice: This type of project would probably make sense in every community as soon as some individual measures have already been started by the local authorities, such as subsidies.

Raising awareness in Keratea

Keratea, 41km South-East from Athens, 13,246 inhabitants

Description: Keratea has already developed a comprehensive Local Energy Plan. An important factor of success set by the plan is the wider dissemination and public participation and awareness. The first Energy Day was held by CRES and Keratea Municipality and included a tour in the Energy Education Park of CRES and a workshop at the Cultural Centre of the City of Keratea entitled “Renewable Energy Sources and Energy Saving at local level”. The target audience was the citizens of Keratea.

What was successful: The Park offers a successful combination of informational, demonstrative and educational activities in Renewable Energy Sources. During the tour the participants had the opportunity to see the various forms of renewable energy operating, to learn about these technologies, and the resulting benefits for the environment and Community in general. In the workshop, 60 residents shared fruitful debate and thoughts! It was a real chance for the citizens to discover solutions that can be applied at local level and created the ground for immediate action!

The difficulties we encountered: The study tour took place during summer and working day (morning). Although the study tour was well organized, the citizens’ participation was not as good as expected.

Our advice: The key is a mixture of presentations by competent speakers and study tour or other activities (like exhibitions, student competitions, etc). The Community profile, local characteristics and needs is a good guide to structure of the events.
Energy Day in Slănic Moldova

Slănic Moldova, member of RURENER Network, is one of the most beautiful resorts in Moldavia. The local authority has committed to turn Slănic Moldova into a “green city”. One step was to attract citizens’ attention on the necessity to use energy in a rational manner. A double event was organised on the 7th of December 2010.

Description: A conference on “The Use of Renewable Energies – a Way to Ensure the Energetic Independence of the Communities”. The City Hall representatives, mayors of some communities in Bacău County and eight mayors from Germany and the representatives of University “Vasile Alecsandri” of Bacău have that raised some important issues concerning RES and RUE. Liliana Topliceanu introduced the RURENER Network (main objectives, communities involved) and future steps that Slănic Moldova follows in order to gain its energy-neutrality.

A drawing contest: One month before this event, a drawing contest on renewable energies was proposed to the pupils of the three schools in Slănic Moldova. On December 7, students from University “Vasile Alecsandri” of Bacău, lead by dr. Elena Nechita, visited the children and presented some information on renewable energy and rational use of energy. A vivid dialog was born between students and young children, who asked many questions. The activity ended with the ceremony that awarded the most beautiful drawings, all gathered in a calendar distributed on a next edition of Energy Day. All children received brochures with tips on rational use of energy and the authors of the awarded drawings received books, pencils, drawing instruments, all marked with the RURENER logo.

What was successful:
• The exchange of important information that have been revealed at the workshop and the interest that the participants manifested to RURENER.
• The dynamic involvement of children, who have done some research on renewable energies, in order to realize their drawings.

The difficulties we encountered:
• No major difficulties were encountered. We found support at the City Hall, from the partners involved in the Romania-German Workshop, as well as in schools.

Our advice: For the success of such an event, we must ask for the help of those who are open to energy issues.
Finding project partners, twinning activities and information about actual financial support possibilities are an important part of the Rurener Network. Moreover, the more the capacity regarding energy issues is built in the community, the more the collective dynamic will grow. It is then more than awareness: it is commitment!

**DO**

- Take any opportunity to share knowledge and know-how in the community (local energy day, visit of enterprises, public meetings, school, …)
- Use the RURENER knowledge bank and ask your question to the RURENER experts!

**DON’T**

- Remain the only one having knowledge in the community
- Think that capacity is only technical knowledge

**Total:**

- Come and share your experience!
- Come and learn from others!

What competences do you need to strengthen?
Training, conferences

Training is provided locally by RURENER partners, local energy agencies, clusters, regional national parks, national energy agencies, etc. To build an energy policy, you don’t need to be an expert, but you need to get a sufficient knowledge of who can help you in your process.

The topics may cover: energy efficiency in building, local materials, biomass, windpower, e-mobility, smart grid, geothermal, hydropower, renewable energy in buildings, collective transports, biofuel, but also European policy and programmes, climate change, hydrogen issue, participative methods, social acceptation, evaluation...

Training is also available on the web, through video-conference, a good way to get trained while saving time, money and carbon!

Experience sharing and twinning:

While the network is growing, you will always find within the members someone from whom you can learn things and someone to whom you can transfer your experience. Twins collaborate more closely than other members. Web-conference and emails help to collaborate at low cost!

Knowledge bank:

Ask your questions to experts and see if other mayors in Europe are facing the same problems; share the solutions you’ve found to support your colleagues. The RURENER knowledge bank is on-line and in 8 languages! All you have to do is raise a question and click on “send”, and you will receive helpful advice from one of our renewable energy specialists. It does not only cover technical questions; the Knowledge Bank can provide answers to some of your planning and funding questions too!

Finding funds

Funds come after building a project. That is why it is important to define precisely what action you wish to finance. From programmes launched at regional and national level to structural funds, programmes for energy (such as Intelligent Energy Europe), for agriculture and rural development, at EU level and to private opportunities such as foundations, public-private partnerships, etc... There is always an opportunity to raise funds. And the road is always tough! A guide has been provided by the European Commission to facilitate the search and RURENER partners can support you individually.
Financing opportunities for Municipalities

Keratea, 41km South-East from Athens, 13,246 inhabitants

**Description:** “EXOIKONOMO” is financed by the Operational Programme of Competitiveness & Entrepreneurship and Regional Operational Programs and the total budget of the initiative (including public and Municipalities contribution) is €100 millions. The programme provides incentives for energy saving activities in municipalities with population over 10,000 inhabitants (2001 census). The deadline for submission of proposals was the 22nd of July 2009.

The aim of the program is related to the improvement of the energy performance of municipal buildings, the energy saving in public lighting, the bioclimatic design of public spaces and the energy efficiency in urban environment. In parallel the programme focuses on the transportation as well as the energy saving in Municipal technical installations.

**What was successful:** Keratea Municipality already having the RURENER network experience submitted an application and provided an integrated energy efficiency strategic plan as well as a detailed action plan in the following axis: a) Municipal buildings, b) Public spaces, c) Transportation, d) Technical installations and e) Dissemination, Awareness and Communication. The implementation of the activities under “EXOIKONOMO” will have a result of energy saving of about 2,500,000 kWh/year, CO2 emission saving of about 790 tones/year and expenditure reduction for the Municipality (more than €250,000/year).

**The difficulties we encountered:** For the time being, the evaluation of proposals is in its first phases.

**Our advice:** There are a series of national or international financial instruments for interventions at local level in place or under development (for public entities or individuals) for RES or Energy Saving. What is needed is the *creation of a “mature environment”* at local level for public and private sector to get ready for taking part in such initiatives like “EXOIKONOMO” for Municipalities in Greece. For example nowadays there are 2 other initiatives in Greece for citizens one for the installation of photovoltaic up to 10kWp in the buildings and the other for energy saving interventions for houses. Continuous Public awareness in energy and environment issues can lead the citizens to immediate action!
Experience sharing and training

9 municipalities in Veneto Region.

**Description:** The 9 municipalities joined in a Club, using the Wigwam® Club Method, a sort of Quality Circle which projects itself outwards and actively involves all stakeholders of a project and which works particularly well with social issues. There are 300 Wigwam Clubs in Italy, promoting projects and activities aimed at improving the quality of the environment, culture, traditions and life in general.

One of the municipalities, Badia Calavena, has applied an active energy strategy for 10 years and has today an wind plant of 100 meters height, a biomass heating system for schools, photovoltaic and thermal solar plants distributed on the territory.

The successive step was to disseminate the experience of Badia Calavena through the **training courses** and giving the other municipalities the proper instruments and preparation for the energy production. The training sessions are based on the analysis of the technical, administrative and legislative aspects that have to be considered by local administration in order to realize a renewable energy production plant. Guided visits are organised in Badia Calavena.

**What was successful:** a key success factor has been recognised in the inhabitants involvement.

**The difficulties we encountered:** we noticed that specific technical support was of considerable importance.

**Our advice:** a list of specialist experts / skilled enterprises was created in order to enable C.E.L. Network members to obtain advice on the technical, management and planning aspects (the supporting structures are paid for their service).

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**Innovations Eco-centre of Renewable Energy**

In Hungary, the local governments, companies, individuals don’t know about the technologies and the benefits of the renewable energy sources. In order to change this situation, it was necessary to establish a promotion-centre, which introduces through Austrian and Hungarian **model projects, training courses, and practical advice**, how to achieve results by using certain technologies and describing the project implementation arrangements. The Eco-centre was built in the Hungarian village of Nagypáli, 380 inhabitants, in 2007.

**Description:** The development costs reached 173 903 388 Forint, to which the European Union and the Republic of Hungary with 90% support for the **Hungary-Austria INTERREG III A Programme**. If the targets become a reality, the Innovations Eco-centre of Renewable Energy generated by the delivery of projects within the 5th Year after year produce 4,574 million forints worth of energy generated by renewable energy, replacing fossil fuel with such a degree, contributing to a cleaner environment and sustainable development.

**What was successful:** Six renewable energy companies committed in providing advice and expertise. The eco-centre is not merely advisory - it also offers training and conferences. The conferences are followed by a 15-day training, where visitors can master a deeper knowledge of the biomass, biogas, solar energy, wind energy, for energy issues.

**The difficulties we encountered:** The building certificate and the public procurement took a long time for the municipality, so the building of the eco-centre was delivered later than planned.
Raising family awareness on energy issues through schools

Nikiforos Dramas, northern Greece, Drama County, 3,819 inhabitants

Description: RURENER established a collaboration agreement with the Nikiforos Dramas high school aiming at increasing family awareness on energy consumption, energy saving and use of renewable energy sources issues. The collaboration agreement involves the following activities: 1) The pupils during their environment class were introduced to the concepts of energy consumption, energy saving and renewable energy sources. Then, they were handed out a specifically designed questionnaire and asked to fill it in with the help of their parents. The questionnaire included questions on their families’ actual energy consumption with reference to heating and transportation. ii) A visit to a site of RES interest, iii) A competition on ideas for saving energy and increasing use of renewable energy source with a money prize to be awarded by the mayor of the community during the energy day event and iv) a demonstration of fuel cell technology during the environment class with fuel cell operated robot toys.

What was successful: A cost efficient way to increase participation of families in the project through their children in schools. Pupils and their families were motivated to think on energy consumption, energy saving and renewable energy sources issues in a more quantitative way through the filling in process of the questionnaires. Also, the information derived through the completed questionnaires was used to supplement the data required for the energy balance tool used for the pilot community.

The difficulties we encountered: A special permit was required from the Ministry of Education to establish a collaboration agreement with the Nikiforos Dramas high school, as well as several meetings with the responsible high school teachers to decide on the concrete collaboration action program.

Our advice: Identify high school teachers with interest on raising awareness on energy issues and keep close contact with them throughout the activity implementation plan. The most important is to post regularly. You can plan the news at the beginning of each month and feed the blog once a week.
Let’s move to concrete action! What to start with? How ambitious can I be? Find some good examples on next pages.

**DO**

- Start concrete action in parallel of building your accurate local quantitative diagnosis
- Launch “small” activities first, with rapid results to stimulate the dynamic
- Prioritize the activities according to the needs, the capacity, the costs, the impact . . . not only your wishes!
- Visit the actions of RURENER members to see how far one rural community can go and get inspired!

**DON’T**

- Skip the analysis of the initial status before launching an action, so that you can compare the result of your new action to what was done before
- Feel that it’s too high-level for you!

**Total:**

**Come and share your experience!**

**Come and learn from others!**

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**Photovoltaic village lightening system**

The Hungarian village of Nagypáli, 380 inhabitants, installed in 2011 photovoltaic panels with the objective of reducing the costs for the village lighting system.

**Description:** the system was financed by the Ministry of Agriculture and Rural Development.

**What was successful:** the project allowed a significant cost reduction for the public lighting and increased the attractiveness for eco tourism.
School thermal insulation and heating

Communauté de communes Cévennes et Montagne ardéchoise.

Saint Etienne de Lugdares is a rural village of 460 inhabitants. It hosts the primary school of the joint community Cévennes et Montagne ardéchoise, with 3 classes and 52 pupils.

**Description:** The substitution of 15 window frames will allow to make substantial energy savings. The community expects at least 20% savings. Total cost of the operation is 17 526€.

A district heating plant powered with woodchips is also under construction and will supply the buildings of the centre of the village with renewable energy. The total surface concerned is 10 000 sq m with more than 50 000 litres of fuel oil spent per year.

**What was successful:** The replacement has just been made. Fuel oil consumption will be monitored during the winter to quantify the savings precisely. The new windows have been installed by local crafts men, adding another local value to this project.

**The difficulties we encountered:** convincing the population that insulation was a priority was not easy. Explaining that the money saved will be used for financing youth activities was a good way to make the project more concrete for everyone.

**Our advice:** Focus your action on public building first. Then the private households will feel the movement and take action. Our second advice is about step-by-step action: you may not have the means to do everything perfectly, but as soon as you improve what was done before, you are going in the right direction! (i.e.: we’ve not come to Passiv’haus standard with the school, but it is much better than doing nothing!).

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**EFFI Spar : a homeowners’ service**

Effi Spar is a service to homeowners who are willing to improve the energy efficiency of their house. It is directed at citizens within the region of Braunschweig. The idea is to provide customers with an individually coordinated concept including all aspects of modernisation and thereby enabling them to save money through reduced heating costs. It is provided by a private company, EnerMaTec.

**Description:** Effi Spar is financed by the customers who are billed a fixed share of construction costs. An important part for credibility is the neutrality and no hidden sponsoring. Partners of the project are the regional chamber of crafts, one of the regional technical colleges, some financial institutes and some others. To have partners from the public sector increases the reputation of the project a lot.

**What was successful:** With Effi Spar, EnerMaTec follows a holistic approach providing the customer with one central contact person for the complete project. Reduction of the information deficit of the owner and starting with a high quality energy consultation are crucial parts of the process. This ensures that the homeowner is supported through every step of the process starting from determining which changes are most effective, recommending skilled craftsmen and overseeing construction.

**The difficulties we encountered:** Some of the difficulties during the process of creating Effi Spar were getting all the right people involved, convincing everyone of the name and coordinating the marketing activities. Through persistent work and patience it was possible to solve all these problems in the end.
I can’t improve my results and impacts if I don’t measure them.

To know **how successful your local energy policy is** you need to monitor or even evaluate the impacts it may have on energy saving, energy neutrality and your community’s sustainable development.

The result of evaluation is **useful for your communication**. You can then communicate on real facts, figures or qualitative elements, both within the community and outside.

### DO
- Be honest with evaluation. The objective is not to be the best, but to see your improvement!
- Analyse the context of the evaluation and the reasons for the results evaluated
- Use the results of evaluation to communicate within the community and outside
- Forward the results of your evaluation to RURENER, in order to consolidate at European level and give inputs to the European institutions
- Be proud of what you’ve performed!

### DON’T
- Over-evaluate or under-evaluate your activities!
- Feel that evaluation is not worthwhile. Evaluation will allow you to better adapt your future plan!

**Total:**
**Come and share your experience!**

**Come and learn from others!**

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How often do you plan to evaluate your action? Who will participate?
Evaluation particularly with respect to local sustainable development is a complex process to assess different types of impacts, such as environmental, social, economic and institutional. To make it simple, RURENER has created:

- the RURENER measurement tool (already presented for local diagnosis). It allows calculating your energy-neutrality rate.

- the RURENER evaluation score board, to assess the impact of your action plan on sustainable community development. This score board allows to allocate a number of points depending on how far you achieve the following indicators:

### INDICATORS

<table>
<thead>
<tr>
<th>Energy Neutrality-RES</th>
<th>(1)</th>
<th>Energy neutrality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Savings-RUE</td>
<td>(2)</td>
<td>Energy savings</td>
</tr>
<tr>
<td>Economic Impacts of LAP</td>
<td>(3)</td>
<td>Cost efficiency</td>
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<tr>
<td></td>
<td>(4)</td>
<td>Profitability</td>
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<td></td>
<td>(5)</td>
<td>Investments</td>
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<tr>
<td></td>
<td>(6)</td>
<td>Capacity building</td>
</tr>
<tr>
<td>Assesses Institutional Impacts</td>
<td>(7)</td>
<td>Institutional impacts</td>
</tr>
<tr>
<td>Social Impacts</td>
<td>(8)</td>
<td>Employment</td>
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<tr>
<td></td>
<td>(9)</td>
<td>Social involvement</td>
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<tr>
<td></td>
<td>(10)</td>
<td>Avoidance of nuisance to neighbours</td>
</tr>
<tr>
<td>Environmental Impacts</td>
<td>(11)</td>
<td>Use of renewable energies</td>
</tr>
<tr>
<td></td>
<td>(12)</td>
<td>Minimization of energy, water and material consumption and land utilization</td>
</tr>
<tr>
<td></td>
<td>(13)</td>
<td>Minimization of green house gas emissions, land and water pollution</td>
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<tr>
<td></td>
<td>(14)</td>
<td>Maximization of resource re-use and or recycling</td>
</tr>
<tr>
<td></td>
<td>(15)</td>
<td>Maintenance and restoration of ecological diversity</td>
</tr>
</tbody>
</table>

Download your own template for local evaluation on rurener.eu/roadmap
BECOME A MEMBER

RURENER brings together small rural communities committed to energy neutrality.

Why did they join?
• to see energy policy as an axis for economic and social development of their territories.
• to bring a positive image to attract investors, new population or tourists in the villages.
• to get on-line and face-to-face support along the road towards energy neutrality
• to learn from each other
• to get promotion at national and European level
• to be part of a strong voice towards European policy and knowledge on rural energy

And how can I join?
1. Get in touch with your national contact point
2. Sign the RURENER charter in the name of the whole community
3. Participate in RURENER activities
4. Get in touch with other members!
5. That’s it!

DO
Start your first step towards energy-neutrality

DON’T
Wait!

Which existing member would you like to twin with?

Contact:
EU : Aline Brachet, Macéo, a.brachet@maceo.pro
UK : David Ellis, Ruralnet Futures, d.ellis@ruralnetfutures.co.uk
Why are you joining the project? What did you learn so far?

The council of Tirano welcomed the proposal of the Lombardy Region (DG Agricoltura) and IREALP to join the Rurener network seeing as it represents an opportunity to improve local strategies for sustainable development.

The comparison with other European real situation is helping us to better understand the different options that we could put into practice in order to improve our energy efficiency.

What are the development objectives/potentials for your region?

The production of energy from renewable sources must go hand in hand with the use of local resources - in our case in particular, the development of forest-wood-energy. We will then further develop co-operation between forestry operators, sawmills and producers of energy from biomass by promoting partnerships with the public sector.

The council of Tirano also aims to work on energy saving via the renovation of public buildings with materials and technologies that improve efficiency. In addition, with regards to the construction of new homes the idea is to apply appropriate urban planning standards which facilitate the construction of energy-efficient buildings (discount charges, etc.)

What is the biggest problem/challenge on the way to energetic neutrality in Tirano?

The production of energy requires a constant supply of biomass that ensures the operation of installations and their profitability: the fragmentation of suppliers and the difficulty in ensuring the provision of local biomass are a problem for the effective sustainability of energy production.

As for the improvement of the efficiency of public buildings, the main problem is posed by the costs of carrying out modernisation and renovation of such buildings. The good news is that the municipality provided, thanks to the participation to a tender, the energy audits for a number of public buildings and this is an important point to start with an assessment for their energy improvement.

What is your advice for newcomers in the network:

Join us and share experience from across Europe! Today’s sustainability will be tomorrow’s quality of life!
**CONCLUSION**

So, you’ve seen the 6 steps! This is only an introduction, and we recommend that you look at the RURENER web-based roadmap to find out more, download the templates and ask questions on the Knowledge Bank! Welcome on board!

Is it done? Have you made the first step? You’ll see now that **you’ll never stop**!

When starting the evaluation of the Cevennes et Montagne Ardéchoise in the centre of France, the mayor Marc Champel said: “let’s do it quickly, I have many other things to do”. After two and a half hours of discussion, he said: “Wow, we’ve done a lot in 2 years! And now I am not feeling the only one convinced, it has become something normal, natural for all my team in the community and for the inhabitants to **think about energy savings and renewable energy**”.

Of course Mr Champel has not started his policy with the RURENER project only, but thanks to the RURENER network, he could **enhance, structure, raise participation and communicate** on his local policy.

Perhaps you feel too small to be of interest to other communities? But many communities just your size may be looking for others to show them the way to energy improvement!

Rural communities have so much impact
- in terms of renewable energy: *where is the renewable resource? Not in big towns!*
- and in terms of energy efficiency — *how to keep people living there? In reducing their costs and stimulating local companies and know-how!*

**Let’s join together to be stronger and show the true energy potential of rural communities.**