



Identification and analysis of Pilot Communities profiles

“Case study methodology and Framework”

task No. 2.1.2 by Sioulas Konstantinos from CRES

April 2009

Supported by

Intelligent Energy  Europe

Table of Contents

1 Introduction3

2 Methodology.....3

2.1 Preliminary phase.....4

2.2 Data Collection.....4

2.3 Data analysis and main findings.....5

2.4 Public consultation.....6

1 Introduction

According to the Description of the project:

"RURENER consortium will prepare a framework for case studies on pilot communities. The objective is to get homogeneous information on our pilot communities. Each partner is then in charge of the case study (ies) on the pilot communities he selected. The conclusions and analysis will help the consortium to define the tools to be set up to support the communities (see 2.2) and will be the first step for the definition of local strategy for energetic neutrality.

The conclusions will then be presented to the pilot communities' actors, to exchange views and share a common strategy.

The case-study framework will be published on the website in the different languages as one module of the energetic-neutral model (state of the art)."

These Guidelines provide the basic principles for a common approach among the partners and the participating Communities in order to facilitate the compilation of the case studies and present homogeneous information and data. The current methodology will be used by the partners in order to provide the case study on the pilot Communities participating in RURENER. The results of this analysis will be the basis and the starting point for the consortium in order to be used for the identification and definition of local strategy for energetic neutrality.

This framework is a simple diagnostic tool that can be further used by other Communities for local development for the redesign the local energy system and encourage renewable energy, energy saving and rational use of energy development and environmental protection.

It will be supported by a specific template to collect information on energy supply and demand, developed later on by RURENER consortium.

2 Methodology

Describing the Community is more than necessary in order to set up the basis for further analysis and strategic planning. This description will include all the necessary data of the Community in a quantitative and qualitative basis. Although every single aspect may not be entirely covered by each community, the analysis of as many data available as possible will give a clear view of the present situation of the community.

As it is widely known, the lack of reliable data on an area is often a problem in designing a strategy in all fields of energy. Thus, data collection and analysis at the local level of both energy demand and supply must be the first step to identify the starting point, conduct a strategy and evaluate the results.

Furthermore, a SWOT (strengths, weaknesses, opportunities and threats) analysis will be used as a baseline and effective tool to diagnose current problems and to sketch future action lines. Of course it must be taken into account that SWOT analysis is a useful tool only if it can be based on a sound knowledge of the present situation and trends of the Community.

The main proposed steps for the Community analysis are presented below:

- Preliminary phase (template compilation, roles and responsibilities, objectives and outputs, main stakeholders' involvement).
- Data collection (eg. interviews, bilateral meetings, feedback from questionnaires, local or regional reports).
- Data analysis and main findings (SWOT analysis).
- Public Consultation (pilot communities actors, stakeholders, general public).

2.1 Preliminary phase

Each partner with the cooperation of the Community representatives will lead this task. Generally, the action to produce a «COMMUNITY PROFILE» can be supervised and lead by a department or appointed working group within the Community, with the support and participation of a few representatives or even energy agencies in order to record the present situation in more effective and detailed manner.

These Guidelines describes the basic means that can be used for that reason and can be amended accordingly.

2.2 Data Collection

The Community description will include basic information and certain energy data (where it is possible). Useful data will be the following:

1. Geographical position, boundaries and extent, administrative classification
2. Natural environment (eg. Meteorological and hydrographic-hydrologic features, geomorphological data, topography, ecosystems, fauna and flora, climatological data).
3. Human environment (eg. Population, age classification, density, immigration rates or population changes, primary, secondary and tertiary production sectors like number of farms, number of firms)

4. Land use, settlements of the area (eg. forests, mines, industries, agricultural and cultivation land, residential areas, public buildings, natural preserved areas, tourism etc)
5. Existing infrastructure of the area (eg. electricity network, gas network)
6. Natural resources – RES potential and current situation (all possible forms)
7. Energy generation (number of plants, installed capacity, generated electricity or heat)
8. Energy consumption (by sector like residential, commercial, industrial, public, transport, agriculture)
9. Imports – exports of energy sources
10. Costs of energy (gas, oil, electricity, vehicle-fuel prices, cost of RES energy in the specific area)
11. Environmental pressure due to energy systems (generation, distribution, consumption), indicators concerning energy and environment (eg. CO₂/kWh, external costs).
12. Information must be gathered concerning relevant legislation, initiatives and incentives, success stories in the area, procedures and administrative process etc.
13. Maps of the area and thematic maps

If it is deemed necessary further to reports search, interviews, bilateral meetings, questionnaires or any other form of data query can be used.

2.3 Data analysis and main findings

The main subject of the research is to build a simplified energy balance of the area and highlight the main characteristics of the Community under the view of energy demand and supply. The analysis will draw the profile of the Community and with the SWOT analysis will diagnose current problems and point out action lines.

It is important to underline that, depending on the data availability in every single Community quantitative and qualitative analysis can be based mainly on a) existing data, b) comparisons with similar areas or situation where data exist (indicators), c) assumptions.

SWOT analysis:

- has proved an effective baseline tool to diagnose current problems and outline future actions
- is the first step of planning and serves as a basis for objectives and strategies proposals.
- can be very subjective
- encourages the discussion and contrast among group members.

An example of a general SWOT analysis matrix for energy is given in the next pages. It must be noted that several variations of the matrix exist according to the fundamental question which seeks answer.

Although the classical SWOT analysis developed mainly for business and marketing strategic planning is now more often used in planning approaches. In a SWOT analysis the Opportunities and Threats dealing with the External Environment, the Strengths and Weaknesses with the Internal and in parallel the Strengths and Opportunities are the positive elements and the Weaknesses and Threats the negative. The main subject is always the opportunities and the critical success factors to overcome or eliminate if possible the Threats

Annex 1 gives an example of a questionnaire that can be answered for the Community Mayor and can be used for the SWOT analysis. Other thematic Questionnaires, bilateral meetings or interview can “feed” the analysis.

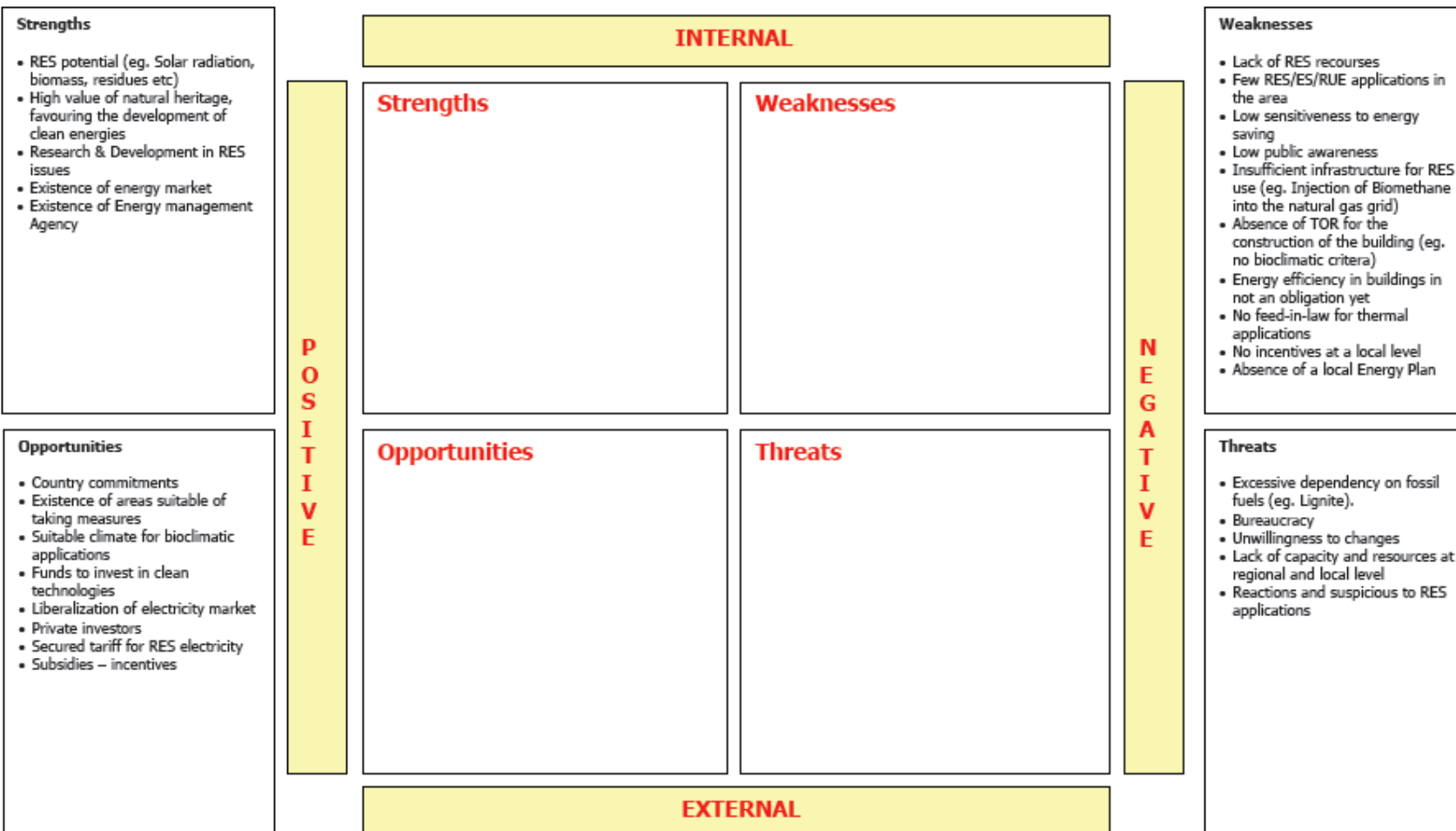
2.4 Public consultation

The conclusions of the analysis will then be presented to the pilot communities’ actors, to exchange views and share a common strategy. This procedure can be done in two phases for the finalization of the report:

- Presentation and discussion of the findings with the stakeholders. In this way the results will be enriched with other approaches and proposals.
- Presentation of the findings by the partner or the appointed Department or working group within the Community to the Mayor and Community Council.

SWOT Analysis Template.
Municipality/Community of

(A certain criterion can apply to more than one quadrant. The list is indicative).



Annex 1

Questionnaire and Mayor Interview

The target group of this Questionnaire and Interview sheet is the Community itself (Mayor, political and high administrative staff). The purpose of this Questionnaire is to initially assess not only the willingness but also the capabilities and progress so far (starting point) toward energetic neutrality at Local level.

The answers can be useful input to the SWOT analysis too.

The Questionnaire should be filled in providing at this stage qualitative information. A more in-depth interview or discussion can take place in certain areas of interest with the appointed municipality staff or stakeholders.

QUESTIONNAIRE TO COMMUNITY REPRESENTATIVE

Community

Date of completion

Name and identity

1. Are Energy matters among the top 5 priorities of your Community?

YES NO

If YES please specify the top 5 priorities of your Community

- 1
- 2
- 3
- 4
- 5

Remarks

.....
.....
.....
.....

2. Has your Community ever developed an energy policy Plan ?

YES NO

If NO is it between your sort-term priorities to do so?

YES NO

3. To what extent your Community undertook actions towards energy neutrality?

.....
.....
.....
.....

4. Which Department of your Community is dedicated to energy matters? How many employees are appointed to energy – environmental issues?

.....
.....
.....

5. Is your Community willing to implement Renewable Energy Sources / Energy Saving / Rational Use of Energy in its territory and in which specific sector/sectors?

.....
.....
.....
.....
.....
.....
.....

6. Are there any estimations, reports, data available concerning the energy supply – demand in your Community?

.....
.....
.....

7. Which is the most energy intensive sector in your Community between the following? Please rank in ascending order (eg 1 the most intensive, 5 the least intensive)

Sector	Ranking
Residential
Industrial
Public Buildings
Transport
Agriculture

8. Which are the most promising Energy Sources in you area (eg. solar, biomass etc., energy efficiency is an option too)?

.....
.....
.....
.....
.....

9. Is your Community aware about the incentives, programmers and financing opportunities for related projects?

YES NO

If YES, please specify

.....

10. Which are the strengths of your Community towards energy neutrality? Please rank in ascending order of importance (eg 1 the most important, 2 the second most important etc)

Strengths

Ranking

- RES potential (eg. Solar radiation, biomass, residues etc) ...
- High value of natural heritage, favoring the development of clean energies ...
- Research & Development in RES issues ...
- Existence of energy market ...
- Existence of Energy management Agency ...

Other (please specify)

.....

11. Which are the weaknesses of your Community towards energetic neutrality? Please rank in ascending order of importance (eg 1 the most important, 2 the second most important etc)

Weaknesses

Ranking

- Lack of RES recourses ...
- Few RES/ES/RUE applications in the area ...
- Low sensitiveness to energy saving ...
- Low public awareness ...

- Insufficient infrastructure for RES use (eg. Injection of Biomethane into the natural gas grid) ...
- Absence of TOR for the construction of the building (eg. no bioclimatic criteria) ...
- Energy efficiency in buildings in not an obligation yet ...
- No feed-in-law for thermal applications ...
- No incentives at a local level ...
- Absence of a local Energy Plan ...

Other (please specify)

.....

.....

.....

.....

.....

.....

.....

.....

.....

12. Which are the threats of your Community towards energetic neutrality? Please rank in ascending order of importance (eg 1 the most important, 2 the second most important etc)

Threats

Ranking

- Excessive dependency on fossil fuels (eg. Lignite, coal) ...
- Bureaucracy ...
- Unwillingness to changes ...
- Lack of capacity and resources at regional and local level ...
- Reactions and suspicious to RES applications ...

Other (Please specify)

.....

.....

.....

.....

.....

.....

.....

.....

.....

**13. Which are the opportunities of your Community towards energetic neutrality?
Please rank in ascending order of importance (1 the most important, 2 the second
most important etc)**

Opportunities

Ranking

- Existence of areas suitable of taking measures ...
- Suitable climate for bioclimatic applications ...
- Funds to invest in clean technologies ...
- Liberalization of electricity market ...
- Private investors ...
- Secured tariff for RES electricity ...
- Subsidies – incentives ...
- Country commitments ...

Other (Please specify)

.....
.....
.....
.....
.....
.....
.....
.....

Thank you for your time