

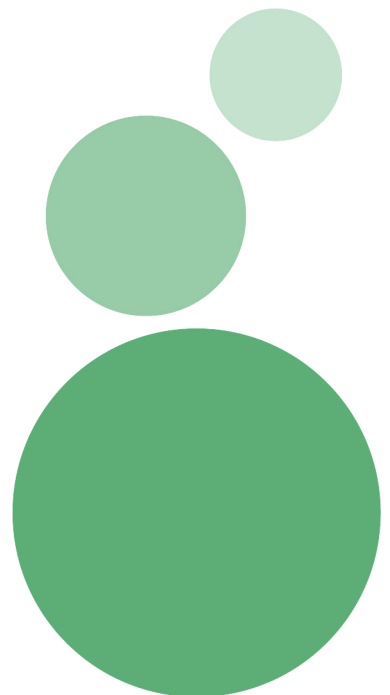


Executive Agency for Competitiveness and Innovation (EACI)

Energy agencies: evaluation of the relevance of Community funding of local and regional energy agencies

Annexes to the Final Report

May 2010



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Annex 1: Research steps

This section describes the different research steps undertaken as part of the study. These steps were designed to:

- provide all interested agencies, authorities and a large number of stakeholders with an opportunity to engage with the evaluation;
- provide an in-depth perspective on all evaluation issues across a large number of countries ; and
- generate highly robust and valid findings with maximum buy -in from a wide range of stakeholders .

Overview of research steps

- Initial desk research to understand background and develop logic model tools
- Initial interviews with EU networks
 - Objective: gather feedback on research tools, methodology and issues in the terms of reference
 - Description: in-depth interviews
 - Scope: FEDARENE, ISLENET, Energie -cités and Climate Alliance
- Open Day Interviews
 - Objective: Scan of main issues in the terms of reference from the perspective of public authorities and some agencies
 - Description: 15 interviews, nominated by FEDARENE and Energie -cités
- Survey with agencies
 - Objective: broad coverage of a wide range of issues in the terms of reference
 - Description: 1 online survey questionnaire to Managing Directors of over 300 agencies
 - Scope: 31 countries; contact details provided by EACI
- Round 1 of case studies
 - Objective: in-depth investigation of selected issues in the terms of reference
 - Description: 8 case studies with 5 interviews each (Managing Director, establishing authority and three stakeholders/users)
 - Scope: Germany, UK, Spain, France, Italy, Poland, Slovenia, Sweden
- Focus groups with energy agencies
 - Objective: in-depth investigation of selected issues in the terms of reference and discussion of early survey and case study findings
 - Description: 4 moderated focus groups/workshops
 - Scope: all 80 IEE agencies

- Round 2 of case studies
 - Objective: build on interim findings and close information gaps via in -depth investigation of selected issues in the terms of reference
 - Description: 4 case studies with 5 interviews each
 - Scope: Belgium, Ireland, Bulgaria, Croatia
- Telephone interviews
 - Objective: perspective of authorities without IEE or other agencies
 - Description: in-depth telephone interviews of 15 -30 minutes
 - Scope: 10 interviews, contact details provided by EACI

Annex 2: References

Policy documents

Communication from the Commission to the European Council and the European Parliament - an energy policy for Europe, COM/2007/0001 final, Brussels, 10.1.2007
 An Energy Policy for Europe , Summary of COM/2007/0001 final,
http://europa.eu/legislation_summaries/energy/european_energy_policy/l27067_en.htm
 Green Paper - A European Strategy for Sustainable, Competitive and Secure Energy,
 COM/2006/0105 final, Brussels, 8.3.2006
 Green Paper: A European strategy for sustainable, competitive and secure energy , Summary of
 COM/2006/0105 final,
http://europa.eu/legislation_summaries/energy/european_energy_policy/l27062_en.htm
 DG Environment. The Climate action and renewable energy package. Europe's climate change opportunity, http://ec.europa.eu/environment/climat/climate_action.htm

IEE and SAVE Programme documents

Decision No 1230/2003/EC of the European Parliament and of the Council of 26 June 2003 adopting a multiannual programme for action in the field of energy: 'Intelligent Energy — Europe' (2003 — 2006), OJ L 176, 15.7.2003, p. 29 -36
 Decision No 1639/2006/EC of the European Parliament and of the Council of 24 October 2006 establishing a Competitiveness and Innovation Framework Programme (2007 to 2013), OJ L 310, 9.11.2006, p. 15 – 40
 Intelligent Energy Europe – Guide for Proposers 2010.
 Intelligent Energy – Europe 2003-2006 Global Work Programme for the years 2003 -2006, 15 October 2003
 IEE Work Programme 2008
 IEE Work Programme 2010
 List of grants awarded by the Intelligent Energy Executive Agency in 2005
 List of grants awarded by the Intelligent Energy Executive Agency in 2006
 List of grants awarded by the Intelligent Energy Executive Agency / Executive Agency for Competitiveness and Innovation in 2007
 List of grants awarded by the Executive Agency for Competitiveness and Innovation in 2007
 List of grants awarded by the Executive Agency for Competitiveness and Innovation in 2008
 Text of the 2010 call for proposals

Mid Term Evaluation of the Multiannual Programme for Action in the Field of Energy "Intelligent Energy - Europe, 2003-2006", A Final Report to Directorate - General Energy and Transport, ECOTEC Research & Consulting Limited, Birmingham, UK, 2006

Ex ante evaluation of a renewed multiannual Community programme in the field of energy (2007 - 2013), Final Report, Ref: TREN/A1/17 -2003: Lot 1 - Framework Contract for Impact Assessments and Ex-ante Evaluations, by ECOTEC Research and Consulting Ltd and ECORYS Nederland BV, September 2004

DG TREN – Study of outputs, performance and future perspectives of SAVE energy agencies, Ecuba srl, Bologna, IT, 2005

Energy agencies – IEE

<http://www.managenergy.net> , including agency case studies

<http://ec.europa.eu/intelligentenergy>

http://ec.europa.eu/energy/strategies/2008/2008_01_climate_change_en.htm

http://ec.europa.eu/energy/sustainable/covenant_mayors_en.htm

<http://www.energie-cites.eu/>

Local Energy Action - EU Good Practice 2008, EC (2009),

<http://www.managenergy.net/products/R2366.htm>

Annex 3: Survey Questionnaire

Evaluation of the relevance of Community funding for local and regional energy agencies

Welcome to the European Commission Evaluation of Community Funding for Energy Agencies

This survey is a part of an important study for the European Commission to evaluate the relevance of Community funding for energy agencies. The study supports the current implementation of the Intelligent Energy programme and will influence its future development.

For the findings of this study to be accurate and valid, it is vital that we collect your opinion on the functioning of energy agencies. By completing this survey, you will ensure that our final recommendations are relevant to your agency. When the study is completed, the findings will be made available to energy agencies who have completed this survey.

If you need any assistance, please email:

luke.forty@matrixknowledge.com

1. Which country is your agency based in?

Austria	Belgium	Bulgaria
Croatia	Cyprus	Czech Republic
Denmark	Estonia	Finland
France	Germany	Greece
Hungary	Iceland	Ireland
Italy	Latvia	Lithuania
Luxembourg	Malta	Netherlands
Norway	Poland	Portugal
Romania	Slovak Republic	Slovenia
Spain	Sweden	Switzerland
UK		

2. What level does your agency operate on?

National
Regional
Local

3. Please estimate the population of the area that your agency aims to reach.

Less than 100,000 people
100,000 to less than 200,000 people
200 000 to less than 500,000 people
500,000 to less than 1 million people
Above 1 million people

The following questions ask about the history, size and management of your energy agency

4. In what year was your agency set up?

Before 1990	1990 – 1992	1993 – 1994
1995 – 1998	1999 – 2002	2003
2004	2005	2006
2007	2008	2009

5. How many people work at your agency?
Please enter the number of full time equivalents (FTEs).

How many Experts (engineers, lawyers, economists, scientists, etc)?

How many Support staff (admin, IT, etc)?

6. What is the legal status of your agency?

- Governmental
 - Public commercial organisation
 - Public non-profit organisation
 - Private non-profit organisation
 - Private for profit organisation
-

The following questions ask about the funding your agency receives

7. Please specify the following budgets in Euros (€)

What was your agency's total running budget in the last financial year in euros? By running budget we mean all income including project funding, grants and other revenue used to cover running costs (building, staff, etc.)

What was your agency's total action-specific budget in the last financial year in euros? By action-specific budget we mean all income including project funding, grants and other revenue used to cover action-specific costs

8. Please estimate the percentage (over the past 3 years) of this budget that was from public and private sources?

Percentage

- a. Private funding (e.g. sales, fees) %
- b. Public funding (e.g. grants, tenders, fees) %

TOTAL (must sum to 100)

9. Please rank the following sources by their contribution to your budget (where 1 is the largest contribution).

Do not rank options which are not relevant.

	Order					
a. Establishing authority grant	1	2	3	4	5	6
b. EU grants	1	2	3	4	5	6
c. Other public grants	1	2	3	4	5	6
d. Membership fees	1	2	3	4	5	6
e. Tenders	1	2	3	4	5	6
1 2	3	4	5	6	1	2

10. Does your energy agency receive Intelligent Energy Europe (IEE) funding?

Yes – IEE establishing grant

Yes – IEE project grant

No – but we receive other European Community funding

No – we receive no European Community funding

Does your agency receive other European Community funding?

Yes

No

IF you answered NO to question 10(a) please go to question 18 (p7)

11. What was the total value of IEE funding over the last financial year?

€

12. Do you think the agency's IEE grant is adequate?

Is more than adequate

Is less than adequate

Is about right

13. Which aspects of an agency should IEE funding focus on? Please rank the following options (where 1 is the most important)
Do not rank options which are not relevant.

	Order		
a. Staff	1	2	3
b. Buildings & equipment	1	2	3
c. Activities	1	2	3

14. IEE funding has a ceiling of €250,000 over the 3-year work programme. Do you think this ceiling should be increased or reduced, or is it about right?

Increased a lot

Increased a little

Is about right

Reduced a little

Reduced a lot

15. Some energy agencies may have encountered difficulties with IEE funding. Do you agree or disagree with the following statements?

		Lower β Agreement \Rightarrow higher				
		Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
a.	IEE funding is not sufficiently focused on the agency's needs					
b.	IEE funding is too complicated to apply for					
c.	IEE funding requires too much monitoring & reporting					
d.	IEE funding duplicates ERDF funding					

16. An IEE grant's work programme lasts for three years. Do you think this is too long, too short, or about right?

- Too long
- Too short
- About right

17. When your current European funding ends, what will be the main source of funding for your agency?

- Public funding (national, regional or local public bodies) will be the main source of funding
- EU grants will be the main source of funding
- Selling products and services will be the main source of funding
- Don't know
- Other, please specify

Specify other way funding structure will change here

Continue here if you answered NO to question 10(a)

The following questions ask about the activities of your agency

18. The IEE programme has set broad activity types for energy agencies. An energy agency might take action within all, most or only some of these types.

Which three of these activity types do es your agency spend most time and resources on? And how would you rank these in order of importance from 1 = 'most important' to 3 = 'least important'?

	Order		
a. Promote improvement of regulation and legislation in favour of new energy technologies	1	2	3
b. Change public and business behaviour in favour of energy efficiency and use of renewable energy	1	2	3
c. Reduce barriers to market entry for energy efficiency and renewable energy initiatives	1	2	3
d. Improve access to capital for energy efficiency and renewable energy initiatives	1	2	3
e. Provide training in the areas of energy efficiency and renewable energy	1	2	3
f. Other, please specify	1	2	3

Describe activity you described as 'Other' here

19. Which of the following are your agency's five main actions/tasks?
Please tick up to five options.

- | | |
|--------------------------|--|
| <input type="checkbox"/> | Change building code |
| <input type="checkbox"/> | Change the urban planning priorities |
| <input type="checkbox"/> | Increase speed of procedures for RES/EE projects |
| <input type="checkbox"/> | Technical project implementation |
| <input type="checkbox"/> | Networking with local actors (businesses, local authorities) |
| <input type="checkbox"/> | Support professional training |
| <input type="checkbox"/> | Organise education in schools |
| <input type="checkbox"/> | Teach university courses |
| <input type="checkbox"/> | Organise events, workshops, seminars, etc |
| <input type="checkbox"/> | Carry out "Touch & See" activities |
| <input type="checkbox"/> | Implement EU projects |
| <input type="checkbox"/> | Contribute to certification activities |
| <input type="checkbox"/> | Help local actors with fundraising |
| <input type="checkbox"/> | Develop ESCO-type activities |
| <input type="checkbox"/> | Energy efficiency in buildings |
| <input type="checkbox"/> | Other (please specify below) |

Specify other actions here

--

20. Within the next three years, do you think your agency will need to change its activities substantially, or will they remain the same

Change substantially

Change a little bit

Remain the same

Don't know

Why do you think this is

The following questions ask you to consider who your stakeholders are and how you work with other organisations

21. Which of these are your four most important stakeholders?
Please tick up to four options.

- | | |
|--------------------------|---|
| <input type="checkbox"/> | Public authorities (local/regional/national) |
| <input type="checkbox"/> | Public (citizens, consumers) |
| <input type="checkbox"/> | Industry (SMEs, large companies) |
| <input type="checkbox"/> | Utilities (public and private) |
| <input type="checkbox"/> | Third sector (NGOs, charities) |
| <input type="checkbox"/> | Educational and research bodies (universities, schools) |
| <input type="checkbox"/> | Financial institutions |
| <input type="checkbox"/> | Media |

22. Which stakeholder groups have representatives on your agency's management board?
Please tick all that apply

<input type="checkbox"/>	Public authorities (local/regional/national)
<input type="checkbox"/>	Public (citizens, consumers)
<input type="checkbox"/>	Industry (SMEs, large companies)
<input type="checkbox"/>	Utilities (public and private)
<input type="checkbox"/>	Third sector (NGOs, charities)
<input type="checkbox"/>	Educational and research bodies (universities, schools)
<input type="checkbox"/>	Financial institutions
<input type="checkbox"/>	Media
<input type="checkbox"/>	Do not have a management board

In your opinion, what proportion of your **management** board should be local/regional elected representatives?

- There should be only elected public officials on the management board
- The elected public officials should be in majority, with other stakeholders in a minority
- The elected public officials should be in a minority, with other stakeholders in the majority
- There should be no elected public officials on the management board

In your opinion, how useful is your **management** board?

- Very useful
- Quite useful
- Not very useful
- Not at all useful

23. Which stakeholder groups have representatives on your agency's **advisory** board?
Please tick all that apply

<input type="checkbox"/>	Public authorities (local/regional/national)
<input type="checkbox"/>	Public (citizens, consumers)
<input type="checkbox"/>	Industry (SMEs, large companies)
<input type="checkbox"/>	Utilities (public and private)
<input type="checkbox"/>	Third sector (NGOs, charities)
<input type="checkbox"/>	Educational and research bodies (universities, schools)
<input type="checkbox"/>	Financial institutions
<input type="checkbox"/>	Media
<input type="checkbox"/>	Do not have an advisory board

In your opinion, how useful is your **advisory** board? Would you say the board was:

- Very useful
- Quite useful
- Not very useful
- Not at all useful

24. To the best of your knowledge, which of the following local, regional, national and EU initiatives or networks does your agency participate in, if any?
Please tick all that apply

- Local or regional networks of stakeholders
- National network of energy agencies
- Covenant of Mayors
- Managenergy
- Enterprise Europe Network
- Islenet
- Other EU networks (eg FEDARENE, Energie -cites)
- We do not participate in any networks
- Don't know

In your opinion, what are the main benefits of participating in an EU network?
Please tick all that apply

- Exchange of experience/best practices
- Study tours
- Promotion of the city/region
- Motivation of local stakeholders
- Influence the decisions taken at EU level
- Develop cooperation with SMEs (technology transfer)
- Don't know
- None

The following, final section asks what changes could happen to your energy agency

25. Some energy agencies would like to change their legal status, while others are happy with their legal status.

Which of the following statements is closest to your agency's position?

My agency is happy with its legal status and has no plans to change it

My agency is happy with its legal status but may want to change it in future (e.g. if legislation changed)

My agency is not happy with its legal status but it cannot change it

My agency will change its legal status

My agency has changed its legal status

26. What would be your "ideal" administrative structure?

More organisational autonomy from public authorities

Less organisational autonomy from public authorities (but not fully integrated within a public authority)

Fully integrated within a public local/regional authority

Don't know

27. What would be your "ideal" future funding structure?

Mainly publicly funded

Mainly privately funded

Don't know

28. Which of the following would you consider appropriate performance indicators for your agency?

Please tick all that apply

- | | |
|--------------------------|-------------------------------------|
| <input type="checkbox"/> | Number of jobs created |
| <input type="checkbox"/> | Amount of investment attracted |
| <input type="checkbox"/> | Amount of CO2 emissions reduced |
| <input type="checkbox"/> | Number of EU projects completed |
| <input type="checkbox"/> | Number of non-EU projects completed |
| <input type="checkbox"/> | Number of people trained |
| <input type="checkbox"/> | Amount of advice disseminated |
| <input type="checkbox"/> | Number of energy plans monitored |
| <input type="checkbox"/> | Other, please specify |

Specify other main performance indicator here.

--

Survey Completed

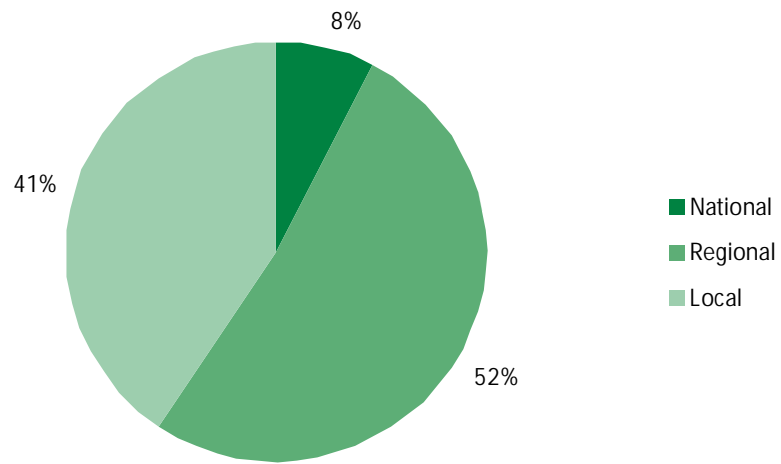
Thank you for participating.

Annex 4 - Description of the sample of survey respondents

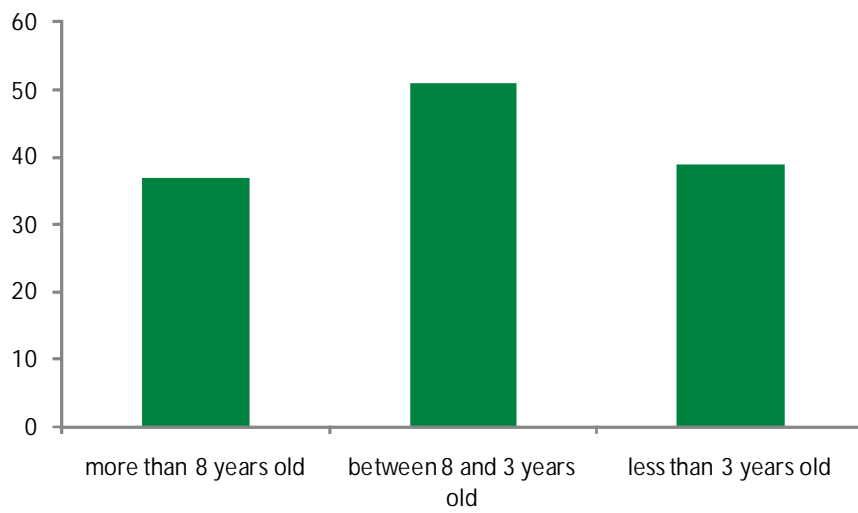
This section describes the main characteristics of the sample of survey respondents.

Country	Sample size	Respondents which receive IEE establishment grant (%)		Respondents which receive IEE project grant (%)		Respondents which do not receive IEE funds (%)		Partial Responses		No response	
AUSTRIA	12	0		2	16.7%	0		1	8.3%	9	75.0%
BELGIUM	4	0		0		2	50.0%	0		2	50.0%
BULGARIA	12	1	8.3%	2	16.7%	0		1	8.3%	8	66.7%
CROATIA	5	3	60.0%	0		0		1	20.0%	1	20.0%
CYPRUS	2	0		1	50.0%	0		0		1	50.0%
CZECH REPUBLIC	9	2	22.2%	2	22.2%	0		0		5	55.6%
DENMARK	16	0		1	6.3%	0		0		15	93.8%
FINLAND	10	1	10.0%	0		1	10.0%	1	10.0%	7	70.0%
FRANCE	27	5	18.5%	5	18.5%	2	7.4%	0		15	55.6%
GERMANY	33	1	3.0%	2	6.1%	3	9.1%	2	6.1%	25	75.8%
GREECE	10	1	10.0%	1	10.0%	3	30.0%	0		5	50.0%
HUNGARY	6	1	16.7%	0		0		1	16.7%	4	66.7%
ICELAND	2	0		0		0		1	50.0%	1	50.0%
IRELAND	16	0		2	12.5%	6	37.5%	1	6.3%	7	43.8%
ITALY	42	4	9.5%	4	9.5%	2	4.8%	1	2.4%	31	73.8%
LATVIA	4	1	25.0%	2	50.0%	0		0		1	25.0%
LITHUANIA	3	0		0		0		1	33.3%	2	66.7%
LUXEMBOURG	2	0		0		0		0		2	100.0%
MALTA	2	0		0		0		2	100.0%	0	
NETHERLANDS	2	0		0		1	50.0%	0		1	50.0%
NORWAY	2	0		0		0		0		2	100.0%
POLAND	12	1	8.3%	3	25.0%	0		1	8.3%	7	58.3%
PORTUGAL	23	3	13.0%	6	26.1%	0		2	8.7%	12	52.2%
ROMANIA	8	3	37.5%	2	25.0%	0		0		3	37.5%
SLOVAK REPUBLIC	3	0		0		0		1	33.3%	2	66.7%
SLOVENIA	6	4	66.7%	0		0		1	16.7%	1	16.7%
SPAIN	41	5	12.2%	7	17.1%	3	7.3%	6	14.6%	20	48.8%
SWEDEN	12	0		1	8.3%	3	25.0%	1	8.3%	7	58.3%
UNITED KINGDOM	26	0		0		3	11.5%	2	7.7%	21	80.8%
TOTAL	352	36	10.2%	43	12.2%	29	8.2%	27	7.7%	217	61.6%

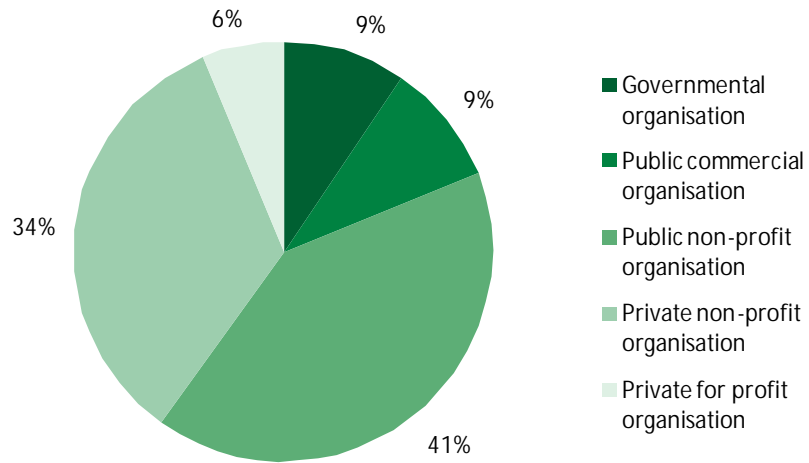
Survey responses by type of agency (national, regional or local)



Year of establishment of the respondent agencies



Legal status of survey respondents



Annex 5: Topic Guides for Case Studies

Case study topics	Most Relevant Stakeholder Groups
<p>1. Background and Context</p> <p>a. What is/was your role involvement with regard to energy agencies/the IEE programme?</p> <p>b. Can you point us to any existing documentation/research, studies of relevance to this project?</p> <p><i>Additionally, for Energy agencies:</i></p> <p>When was the energy agency founded?</p> <p>How many people currently work there?</p> <p>The agency is indeed a local [regional] agency?</p>	<ul style="list-style-type: none"> - Desk Research - All stakeholders
<p>2. Objectives</p> <p>a. Why did the public authority decide to create a local energy agency? Why not?</p> <p>Prompt: Existence/lack of agency, funding schemes, need, awareness of IEE</p> <p>b. How would you describe the current objectives of the energy agency? Have they changed over time?</p>	<ul style="list-style-type: none"> - Public authorities - Energy agencies
<p>3. Legal status, internal governance and funding</p> <p>3.1. Is the IEE prescribed legal status of an independent, non-profit entity still appropriate?</p> <ul style="list-style-type: none"> • Advantages / disadvantages of this model • Alternative models • Reasons for choosing the given model <p>3.2. Is there a critical minimum size for a sustainable agency?</p> <p>Prompt: in terms of staff, funding</p> <p>3.3. What is the impact of</p> <ul style="list-style-type: none"> • funding structures • composition of the management board • composition of the advisory board • composition of the team <p>on the success and sustainability of the agency?</p> <p>3.4. Are there any activities which are not undertaken / which have been discontinued due to lack of funding? If yes, which ones?</p> <p>3.5. Do you also make use of alternative funding sources? / What proportion of your total budget is IEE, national, regional/local,</p>	<ul style="list-style-type: none"> - Public authorities - Energy agencies

Case study topics	Most Relevant Stakeholder Groups
<p>own resources, private, EU project related funding, loans?</p> <p>3.6. What funding is planned for the future, once IEE has expired?</p>	
<p>4. Activities</p> <p>4.1. Is the 3-year IEE work programme of activities still appropriate for energy agencies?</p> <p>4.2. Among the IEE priorities what is your main focus?</p> <ul style="list-style-type: none"> • Policy promotion, improvement of regulation • Changing public/business behaviour • Remove market barriers • Ensure access to capital • Provide Training <p>4.3. What field of activity is the agency specialised in?</p> <ul style="list-style-type: none"> • Energy efficiency • Renewable energies • Energy and transport • Cross-over <p>4.4. What stakeholders are the main target group?</p> <ul style="list-style-type: none"> • Commercial players • Public authorities • Research institutes/NGOs • Public <p>4.5. How relevant are the activities funded under IEE? Do you expect these activities to be relevant in the future? Which activities do you consider most / least relevant?</p> <p>4.6. Has the relevance of the different types of activities changed over time?</p> <p>4.7. How have changing attitude and public awareness of energy efficiency affected the agency's activities?</p> <p>4.8. Can you give an example of a particularly successful project?</p> <p>Prompt: topic, objectives, funding, contribution, partners</p> <p>4.9. Can you give an example of an unsuccessful project?</p> <p>Prompt: topic, objectives, funding, contribution, partners</p>	<ul style="list-style-type: none"> - Energy agencies - Chambers of commerce, large industry & SMEs - Research institutions - Utilities - Commercial energy consultancies
<p>5. Contribution/Output/Outcome</p> <p>5.1. What was the situation in the RE market in your country / region before IEE started in 2003 (policies, market, business</p>	<ul style="list-style-type: none"> - Public authorities - Energy agencies - Chambers of

Case study topics	Most Relevant Stakeholder Groups
<p>environment)? How does it look like today? And what caused the changes?</p> <p>5.2. What added value has the local energy agency brought to local communities and public authorities?</p> <p>5.3. What has the impact of the agency been on commercial market actors (e.g. jobs created, advice provided, crowding out of commercial consultancies)?</p>	<p>commerce, large industry & SMEs</p> <ul style="list-style-type: none"> - Research institutions - Utilities Commercial energy consultancies
<p>6. Impact</p> <p>6.1. How relevant do you consider the agency, national authority, local authority, etc. in the implementation of your country's / region's energy policies?</p> <p>6.2. Is there sufficient awareness of IEE funded energy agencies?</p> <p>6.3. What is the quality and the intensity of the information exchange (with stakeholders, general public, media etc.)? Prompt: How is information exchanged / disseminated?</p> <p>6.4. How would you measure the performance of the agency? Prompt: indicators such as jobs created, CO2 emissions reduced, number of projects, amount of future funding, number of local/regional partners/contacts, etc.</p> <p>6.5. How would you rank the agency's output in terms of relevance, quality, impact? Is there a system for evaluation / self-assessment / quality control?</p>	<ul style="list-style-type: none"> - Public authorities - Energy agencies - Business associations, Chambers of commerce, large industry & SMEs - Research institutions
<p>7 Future of the energy agency</p> <p>7.1. Was/is there a "snowball" effect for the creation of new energy agencies?</p> <p>7.2. Is there a need for more IEE funded energy agencies?</p> <p>7.3. In a world without restrictions, what would your agency do and what would be additional needs (e.g. funding, infrastructure, networks, etc.)?</p> <p>7.4. What factors (e.g. administrative/legal structures, etc.) enable/hinder the best provision of energy agency services?</p> <ul style="list-style-type: none"> • Legal structure? • Institutional set up (reporting, partners, etc.)? • Management and administration? <p>7.5. What are the most pressing changes that are necessary in your opinion?</p> <p>7.6. How should relevant agency capabilities be strengthened?</p>	<ul style="list-style-type: none"> - Public authorities - Energy agencies - Research institutions

Annex 6 – Distribution of agencies

	No of agencies	Population (million)	Agencies per 1M population	Population '000 per Agency
Iceland	2	0.3	6.67	150
Slovenia	8	2	4.00	250
Ireland	15	4.2	3.57	280
Denmark	15	5.4	2.78	360
Malta	1	0.4	2.50	400
Portugal	24	10.7	2.24	446
Luxembourg	1	0.5	2.00	500
Bulgaria	13	7.8	1.67	600
Sweden	15	9.2	1.63	613
Austria	13	8.2	1.59	631
Finland	8	5.3	1.51	663
Croatia	6	4.6	1.30	767
Cyprus	1	0.8	1.25	800
Slovakia	5	5.4	0.93	1080
Greece	10	11	0.91	1100
Spain	42	46.6	0.90	1110
Latvia	2	2.3	0.87	1150
Estonia	1	1.3	0.77	1300
Czech Republic	8	10.5	0.76	1313
Germany	62	82	0.76	1323
Italy	43	59	0.73	1372
Hungary	6	10	0.60	1667
Lithuania	2	3.6	0.56	1800
Poland	18	38	0.47	2111
Romania	10	22	0.45	2200
Norway	2	4.7	0.43	2350
France	27	65	0.42	2407
UK	25	61	0.41	2440
Belgium	4	10.4	0.38	2600
Netherlands	1	16	0.06	16000
Total	390	508	0.77	1303

Annex 7 - Case Study Reports

1. Klimaschutzagentur Region Hannover, Germany
2. Agencia Municipal de la Energía de Málaga (AGMEM), Spain
3. Arc de Seine Energie, France
4. Energy and Sustainable Development Agency (AESS), Modena, Italy
5. Podkarparcka Agencja Energetyczna (PAE), Rzeszow, Poland
6. Gävle Dala Energikontor (GDE-Kontor), Gävle, Sweden
7. Pomurje Energy Agency, Slovenia
8. ALLenergy, Argyll, UK
9. Life Cycle Services of Buildings Unit (formerly: Helsinki Energy Management Agency), Finland
10. REGEA North-west Croatia Regional Energy Agency, Croatia
11. Energy Agency Plovdiv, Bulgaria
12. Agência de Energia do Porto (AdEPorto), Portugal

6.1 Klimaschutzagentur Region Hannover, Germany

1.0 Background and context

The City Council of Hannover has been actively promoting climate policy since the 1990s. In 1994, the City Council established a dedicated climate protection unit in the administration (“Klimaschutzleitstelle”) and, in 1998, a financing mechanism for energy efficiency and renewable energy projects (“ProKlima Fonds”). When the region of Hannover was created in 2001 through a merger of the county of Hannover, the association of the local authorities in Greater Hannover and parts of the city administration, officials of the newly-founded entity decided to integrate climate protection efforts throughout the region. Together with a number of business stakeholders, they established the Climate Protection Agency Hannover Region (“Klimaschutzagentur Region Hannover”).

Today, the agency serves 17 cities and four municipalities with 1.2m inhabitants in total. The agency is organised as a not-for-profit company (“gemeinnützige GmbH”) and in its Management Board the Hannover City Council and the Hannover Region together have the majority vote. In addition, board members include two utilities, seven companies working in the energy field and an association of smaller stakeholders (“Förderverein”) representing approximately 50 companies, NGOs and universities who support the agency’s work. Currently, the agency has 21 staff members, up from 5 in 2001. It did not receive EU funding.

2.0 Objectives

Two objectives were central when the agency was founded:

1. Increase the communication efforts to promote energy efficiency and renewable energy investments and expand advisory services for citizens and businesses.

Before the agency was founded, the City Council’s climate protection unit was already running campaigns and the ProKlima Fonds provided financial incentives. But no institution specialised on communication and advisory services existed.

2. Integrate the climate mitigation efforts in the whole Hannover region through promoting stakeholder networks and supporting communities with limited resources.

While efforts to promote climate mitigation measures were relatively advanced in the City of Hannover even before the agency was founded, many smaller municipalities in the surrounding region did not have the resources and expertise to actively promote a climate policy agenda. Hence, the agency was founded to expand existing and new services to the whole region.

The main objectives of the agency have not changed since it was founded, even though the scope of activity has expanded over time. The target audience also remained stable: The

agency's communication campaigns are focused on citizens and companies. In addition, the agency also provides strategic expertise to local authorities in the region that wish to develop climate policy programmes.

3.0 Institutional set-up

3.1 Legal status

The Climate Protection Agency Hannover Region is a not-for-profit company ("gemeinnützige GmbH), whose majority owners are the Hannover City Council and the Hannover Region. **According to the interviewees, the chosen legal status was the most viable option and has proven to be appropriate over time.** A profit-orientated status was not an option given the large share of public funding and the other alternative – an association ("Verein") – would have made accounting procedures and decision-making much more difficult.

3.2 Internal governance

In 2001, the agency started with five staff and now employs 21 people. According to the Director, critical minimum size depends on the number of inhabitants covered by the agency. He assumes that 3 employees is the absolute minimum plus 1 for every 100.000 inhabitants. Every employee can deliver project work worth 50.000 to 100.000 Euro if basic funding for rent and equipment is provided (appr. 50.000 Euro for an office of 5 employees).

By contrast, one interviewed business partner of the agency noted that, in his regard, there is no minimum size for any local effort to promote climate mitigation to be successful. All depends on the size and make-up of the community in question. The interviewee cited the example of a local community that increased the awareness for the issue of climate mitigation merely by initiating an entrepreneur forum and providing two consultation hours per week. In another municipality, four experts with excellent networks in the field founded a commercial consulting business to advise citizens and businesses. Even though both communities are very small compared to Hannover they illustrate that other models are viable, according to the interviewee.

According to the Director, the composition of the Management Board has proven successful for the agency's purpose of networking and awareness-raising because it includes important stakeholders from all relevant industries (utilities, energy efficiency, renewable energies, transport), but secures independence at the same time, since none of the former can block a decision in the Board on its own. He admitted, however, that independence is limited in practice by the fact that the two utilities provide an important share of the overall funding. A decision against their interest, even though it is possible in theory, would thus be financially risky.

All interviewees also emphasised the importance of the Advisory Council for acceptance and visibility of the agency, but also more broadly for information exchange of all stakeholders in the region. The Council meets twice a year. Its members encompass representatives from all political parties in parliament, including representatives from the

opposition party, science, and business. The interviewee from the public authority stressed that the membership of politicians was crucial to secure lasting political support for the agency. Since representatives from the government administration, not from parliament, represent the City and the Region in the Management Board, the Advisory Council is the principal vehicle for direct information flow between the agency and politicians. Another interviewee from a partner organisation described the Council as an important forum for exchanging information on ongoing work in all member institutions.

3.3 Funding

In 2008, the agency had a total budget of 2,1m Euro, of which 360.000 Euro were basic funding provided by all 12 members of the management board (“Gesellschafter”). In addition, the public authorities provided 400.000 Euro for specific projects. Overall, the City of Hannover and the Region together provide 25% of funding, the ProKlima Fonds contributes 20%, the utilities cover 35% and 20% stem from external sources, including national-level programmes. Table 1 provides an overview.

Table 1: Overview of budget 2008

Source	€	%
City Hannover and Region	525,000 €	25%
ProKlima Fonds	420,000 €	20%
Utilities	735,000 €	35%
External sources	420,000 €	20%
SUM	2,100,000 €	100%

The agency did not receive IEE or SAVE funding. Interviewees of the Public Authority and the agency did not remember that EU funding had been considered in the establishment phase, but could not state any particular reasons why not. Overall, the awareness of the IEE programme did not seem to be very high. In the current budget, the share of EU programme funding is negligible and willingness to apply for EU funding is limited due to bad experiences with overstretched budgets and bureaucratic demands in the past. The agency does however benefit indirectly from EU funding since it cooperates with one its partners, a project developer named Target, on EU projects where the agency provides the mandatory co-financing.

The first contract of the agency ran for 5 years after which it was expected to reach financial independence. Yet, this could not be achieved and the contract was prolonged for another 5 years in 2006 without any changes to the mandate. According to the agency’s Director, financial independence is simply not possible with the agency’s current portfolio of activities since no money can be earned with advice and information campaigns. Climate mitigation should be understood as a service of general interest (“Daseinsvorsorge”) and as such as a service that justifies spending taxes on it. In his opinion, the only viable business model without public support would be to offer contracting services like the Berlin Energy Agency. The trade-off would be a danger to weaken the agency’s biggest strength: its neutrality. Those receiving its advice on energy investments might have less trust if the agency worked as a commercial

service provider itself. According to the Director, contracting could also alienate some of the partner who would start to perceive the agency as a competitor rather than a partner.

More recently the agency did succeed in increasing the share of third-party funds, primarily by applying for national-level funding and by winning the utility E.ON. Avacon as a new partner. However, most of this funding is tied to certain activities and does not pay for basic services. According to the representative of the public authority, it remains unclear what will happen after the second contract ends in 2011. Although there is broad support for the agency, continuation cannot be guaranteed given the squeeze of public budgets after the economic crisis.

4.0 Activities

4.1 Overview

The Klimaschutzagentur Region Hannover is highly specialised in terms of the instruments it applies: the primary focus is on information campaigns and advice. The most important target groups are businesses and private households, but some projects also target associations and clubs as well as local authorities. The specialisation results from the fact that the region already had a well-developed set of institutions dealing with climate mitigation measures when the agency was founded. The ProKlima Fonds is specialised on distribution of grants for energy efficiency and renewable energy investments, the City Council's Climate Protection Unit implements mitigation measures within the administration, and the Competence Network for Energy Efficiency ("Kompetenzzentrum für Energieeffizienz") coordinates R&D and teaching activities in the field. Training is provided by the relevant industry associations. Although, there was some initial scepticism if another institution was really required, interviewees from both the public authority and the business partner now see the value added of an agency with information as its main focus. The interviewee from the Chamber of Crafts particularly praised the separation of funding and information as each activity demands a different set of competences in his opinion.

As another important instrument to raise awareness for climate change mitigation, the agency facilitates stakeholder networks. The regular meetings with different themes convene representatives from public authorities, business and universities and aim at increasing the information flow between the different spheres of society. Participation is limited to partners of the agency, i.e. to Management Board members and members of the association of smaller stakeholders ("Förderverein").

Relative to the amount of funding by area, the **fields of activity** covered by the agency can be ranked as follows:

1. Building refurbishment to increase energy efficiency;
2. Reduction of electricity consumption;
3. Promotion of renewable energies, with a focus on solar and pellet boilers;
4. Promotion of combined heat and power technology in companies;
5. Development of climate policy programmes.

The longest-running and probably best-known project is an information campaign and advice service for home owners (“Gut beraten starten”). The agency offers an individual consultation on refurbishment options and funding mechanisms free of charge. In addition, it also runs a service hotline and distributes information material. All interviewees cited the campaign as a success story. In 2008, around 700 households took part in the programme.¹ Furthermore, the interviewee of the Chamber of Crafts also highlighted the e.co bizz campaign, a similar advice service for companies who want to increase their operations’ energy efficiency. The campaign stands out because its success attracted replication on the national level. Bafa, a federal agency responsible for handing out energy efficiency and renewable energy grants, adopted the e.co bizz idea and turned it into a nation-wide initiative.

Reduction of electricity consumption both in households and businesses has risen higher on the agenda over the past few years as statistics still show rising consumption levels. The main project in this field is an advisory service for tenant households (“Strom abwärts”). In 2008, roughly 500 households took part.² To what extent, they reduce their consumption as a result of the advice is unclear. Moreover, the agency also finances trainings for unemployed workers to become energy advisors for low-income households. The idea is to educate the families about options to reduce electricity consumption and thus reduce their energy costs. The agency cooperates with Caritas, a major German charity. According to the agency, the project’s social benefit is larger than its environmental impact, simply because low-income households tend to have comparably low electricity consumption. To actually reverse the trend of rising electricity demand, the agency would need to substantially increase its efforts in this area, but, according to the Director, does not have the funds to do so at the moment.

Over the past few years, developing climate protection programmes has become another important activity of the agency. Together with all relevant stakeholders, including the utilities, the agency is currently in the process of drafting programmes for 19 out of 20 communities in the region. The new field of activity is a result of a new funding opportunity, the National Climate Initiative, a national programme financed through revenues from the emissions trading scheme.³ The activity has been added to the portfolio on top of existing activities.

Sustainable transport has so far received less attention. According to the agency, the reason is that the issue is covered by üstra, the regional public transport company and a partner of the Klimaschutzagentur, which has been running a comprehensive campaign to advertise public transport recently. The agency’s main activity in the transport field is an annual action day on natural gas vehicles. It is, however, a relatively small project and continuation is currently under debate. The government’s cash-for-clunkers scheme has

¹ Klimaschutzagentur Region Hannover, Annual Report 2008, p. 15.

² Klimaschutzagentur Region Hannover, Annual Report 2008, p. 13.

³ See website of the Federal Ministry for Environment, Nature Protection and Nuclear Safety: http://www.bmu.de/english/climate_initiative/general_information/doc/42000.php.

undermined the willingness of car dealers to participate since natural gas vehicles remain a niche technology hard to sell to consumers. According to the interviewee of the public authority, electric vehicles are likely to gain in importance in the future as the national government recently launched an initiative with the aim of putting 1m electric cars on German roads by 2020. At the moment, however, no concrete project has been planned.

None of the interviewees could cite a project that clearly failed. The Director explained that the agency always runs a small trial round whenever they design a new initiative to avoid spending huge sums on something that doesn't work. In a few areas, however, the agency considers progress to be limited, most prominently in the field of CHP promotion. This is mainly due to lack of support from utilities and the housing societies that manage big housing estates (see also Section 7).

In the first three years, the Region continually decreased funding for the agency (because the President of the Region did not support the agency). As a response, the agency reduced its environmental education activities and concentrated on the projects with private sector support. This clearly shows that some activities, most notably education programmes for kids, cannot be run without some form of public funding.

The agency's programme of work is defined on a yearly basis, while the 5-year contract with the City Council and the Hannover Region provides an overarching guidance on work priorities.

4.2 Assessment of the IEE programme

As mentioned above the agency did not receive IEE or SAVE funding. The example of Hannover clearly shows that it is possible to secure funding for a sizable agency without EU support if private, public and national-level sources can be tapped effectively. However, this might not be the case in other regions in Germany and in the EU in general.

5.0 Contribution and impacts

When judging on the Klimaschutzagentur's contribution, it is important to keep in mind that the City of Hannover already pursued a very active climate mitigation policy long before the agency was founded in 2001. Continued political leadership, active stakeholder involvement and dedicated institutions such as the KlimaFonds had already increased awareness for the issue and put a set of instruments in place. Starting in this comparatively advantageous setting, the agency has nonetheless brought a number of genuine additional benefits. According to all interviewees, it succeeded to further raise the profile of energy efficiency and renewable energies in the region.

In particular, it creates added value for business:⁴

⁴ Statements based on interviews with representative from the Chamber of Crafts and the utility.

- By serving as a neutral broker of information when consulting households and businesses and thus removing information deficits which are the most important barrier for energy efficiency investment. Unlike companies, utilities or commercial consultancies, citizens trust the agency to deliver neutral information and, in addition, the advice is free of charge. As sponsors acknowledged on the brochure, companies can at the same time increase their own visibility.
- By contributing to a stable level of high-quality construction activity through informing citizens about refurbishment options and small-scale renewable energy (according to the Chamber of Crafts);
- By strengthening the reputation of Hannover region as a business environment where climate mitigation is high on the agenda and increasing its attractiveness for companies in the field.⁵

For public authorities in the region, the agency creates added value:

- By offering expertise and professional campaigns in smaller communities around Hannover unable to cover the field themselves;
- By providing a neutral forum for network facilitation, particularly with business partners;
- By acquiring third-party funds.

The general public profits from:

- Free advice service, including a service hotline;
- Information on funding options for energy efficiency and renewable energy investments;
- A number of events, competitions and fairs;
- Environmental education opportunities for children and teenagers.

For the utility E.ON. Avacon the main reason to fund the agency is its work with local authorities on climate mitigation action plans. The utility noticed the local authorities' growing demand for advice on energy efficiency and climate mitigation but company had not yet developed an appropriate service in-house. Instead of building up a unit to respond to the need, they decided to co-operate with the agency. According to the utility representative, the company particularly values the agency's orientation towards actual implementation on the ground rather than focusing on workshops or networking alone. For the utility, the success indicator is the agency's ability to convene all the relevant stakeholders around the table, including a sizeable participation of citizens, and mediate in case of conflict. Working with the agency, the utility hopes to improve its own image and its relations with the local authorities as customers.

Due to the **strong focus on soft measures**, quantifiable performance indicators such as CO₂ savings are hard to determine. In its self-evaluation, the agency uses **classical performance indicators** from the communications field, including visits to the website, number of phone calls at the service hotline, number of consultations delivered, number of participants in events, number of media appearances etc. In large parts, the information is documented in its Annual Report.⁶

⁵ When consulted about the continuation of the agency's funding in 2005, the Chamber of Crafts mentioned increased demand for construction and reputation of the region as the main benefits of the agency's work.

⁶ Klimaschutzagentur Region Hannover: Jahresbericht 2008 [Annual Report]. 2009.

To evaluate the networking activities and the overall satisfaction of the agency's stakeholders, a student intern interviewed all relevant partners in 2003 with overall positive results.⁷ The interviewed partners indicated that the agency fulfilled their expectations and communicated in an engaging way. Suggestions for improvement mainly concerned logistics such as a better coordination and timing of different events and activities. The agency's partners also demanded that the agency should increase visibility of each partner's contribution. In the opinion of the City Council representative, the increasing number of partners organised in the association of smaller partners ("Förderverein") clearly demonstrates how successful the agency's networking activities are. Gaining access to the closed network forums is one of the main reasons for joining the Förderverein since the information exchanged at these meeting, e.g. on new funding schemes, can be a competitive advantage for businesses.

Another **interview-based evaluation** was carried out in 2007 for the energy efficiency in buildings advisory campaign.⁸ It found that 66% of the building owners which had participated in the individual energy advice session eventually decided to invest in energy efficiency. The agency's director suggested, however, that self-selection in the response to the questionnaire might have slightly skewed the results to the upper end.⁹ Over the next year, a more thorough evaluation of the programme will be carried out by a professional institute. The new evaluation will rely on telephone interviews. In any case it is clear that the agency's advice service is only one factor in the decision-making process of the target group. According to the Director, an upward dynamic in energy costs is a much more powerful driver to initiate investment.

6.0 Conclusion and future of energy agencies

All interviewees noted a "snowball" effect of agency creation in the region. New energy agencies are currently in the process of being set up in Göttingen, Nienburg and Hameln – all of them middle-sized cities in Lower Saxony, the Land of which Hannover is the capital. The number of requests for assistance received by the Director is perceived as an indicator that the Klimaschutzagentur serves as a role model for these new establishments.

This does **not necessarily imply a need for more IEE funding.** The example of Hannover demonstrates the possibility to secure sufficient funding for a sizable agency from private, public and national-level sources only. However, as outlined above, the success depends on the availability of sources besides EU funding and varies across regions.

⁷ Klimaschutzagentur Region Hannover: Presentation of the results of a partner survey 2003.

⁸ Strehlow, Tessa: Effects of a social marketing campaign using the example of „Gut beraten starten!“, an energy efficiency advice campaign by the Klimaschutzagentur Hannover. Master Thesis University of Applied Science Hannover 2006 [German Title: Auswirkungen einer Social-Marketing-Kampagne auch unter Berücksichtigung wertschöpfender Elemente am Beispiel der Kampagne „Gut beraten starten!“ der Klimaschutzagentur Region Hannover gGmbH].

⁹ 217 households answered the written questionnaire out of 529 which received the request, i.e. the response rate was 41%.

Regarding future challenges, **all interviewees emphasised that continuity is crucial**. For this reason, the Director would prefer a 10-year mandate instead of the current 5-year contract. In his opinion, it would avoid to have such a frequent debate about the agency's "raison d'être". The business representative also stressed that the trust of all stakeholders can only be earned over a period of at least 10 to 15 years of valuable work. That said, the same interviewee and the representative of the City Council also noted the importance of securing third-party funding while the Director advocates that public funding is indispensable.

In terms of future pressing issues to be tackled, three interviewees suggested a debate about how intensively and in which form the agency should offer its services outside its own constituency region, acknowledging the high demand from outside. The representative of E.ON Avacon envisioned the possibility of a franchise approach where the agency supports local authorities that want to copy the model. However, for the moment the constraint is the fact that Hannover region cannot easily justify spending tax money on helping authorities outside its territory as the representative from the public authority explained.

With regard to future activity fields, the Director considered the field of energy saving in households and SMEs as most pressing. Although campaigns are already running in this field, response rates had to be stepped up substantially to ensure reduction. Out of 50.000 SMEs in the region only 150 take part in energy management advice service run by the agency every year. In addition, he also envisions a campaign on decentralized use of CHP and even considers the option of establishing a private subsidiary of the agency specialised on contracting. However, such a step is very likely to create tensions with the utilities in the Management Board and would thus be risky. According to the Director, this is one of the rare examples where the otherwise highly successful private-public partnership model of the agency limits its instrument choice. Overall, however, all interviewees confirmed that the stakeholder mix represented in the Management Board and in the Advisory Council was crucial for the agency's success. Other enabling factors include the high and continuous political support through the City Council and the Region and the presence of a funding mechanism ("ProKlima Fonds"). The interviewee from the utility stressed that the passion, the professionalism and the good network of the agency's staff and its Director in particular were important success factors.

By contrast, one limiting factor the agency is grappling with according to the Director is the lack of thorough information about its target groups, their preferences and decision-making procedures. All ongoing and planned activities could therefore profit considerably from detailed market research. In the view of the agency, a survey would be a valuable contribution to be delivered through a national-level body such as the German National Energy Agency dena. Yet, dena did not take up this task so far.

List of interview partners and consulted documents

Interviews 28 October 2009

- § Mr Udo Sahling, Managing Director, Climate Protection Agency Hannover Region
- § Ms Astrid Müller-Kallen, Climate Protection Unit, Hannover City Council, Management board member
- § Mr Dr. Frank-Peter Ahlers, Chamber of Crafts Hannover, Advisory council member
- § Mr Sven-Frederic Andres, Competence Network for Energy Efficiency at the University of Applied Science and Arts Hannover, Advisory council member

Telephone Interview on 5 November 2009

- § Ms Franka Simon, E.ON Avacon, Management board member

Documents:

- § Klimaschutzagentur Region Hannover: Jahresbericht 2008 [Annual Report]. 2009
- § Klimaschutzagentur Region Hannover: List of Advisory Council Members 2009
- § Handwerkskammer Hannover (Chair of Crafts): Letter to the Hannover City Council supporting the renewal of the Agency's Contract. 2005
- § Klimaschutzagentur Region Hannover: Presentation of the results of a partner survey 2003.
- § Strehlow, Tessa: Effects of a social marketing campaign using the example of „Gut beraten starten!“, an energy efficiency advice campaign by the Klimaschutzagentur Hannover. Master Thesis University of Applied Science Hannover 2006 [German Title: Auswirkungen einer Social-Marketing-Kampagne auch unter Berücksichtigung wertschöpfender Elemente am Beispiel der Kampagne „Gut beraten starten!“ der Klimaschutzagentur Region Hannover gGmbH]

6.2 Agencia Municipal de la Energía de Málaga (AGMEM), Spain

1.0 Background and context

The Energy Agency “Agencia Municipal de la Energía de Málaga” (AGMEM)¹⁰ is a local energy agency that was established on June 9th 2005 by the **Málaga City Council** under the legal form of “Local Autonomous Organism” (in accordance with Spanish law) with the support of the European Commission program “Intelligent Energy For Europe”. AGMEM is located in Spain, in the autonomous community of Andalusia in Spain’s south-east. Málaga is the capital of the province of Málaga.

AGMEM is furthermore the coordinator of a consortium with REAP (Regional Energy Agency of Pazardjik – Bulgaria) and EAMS (Energy Agency of the Province of Massa Carrara-Italy), in the framework of the “Intelligent Energy – Europe” Programme of the European Commission.¹¹

AGMEM is responsible for the municipality of Málaga (approx. 570,000 inhabitants) and currently employs **six staff members** (two industrial engineers, two lawyers, one economist and one administrator). When the agency was established, there were four staff members.

2.0 Objectives

Before the energy agency was created in 2005, energy efficiency and renewable energies were not an important issue on Málaga’s agenda. The energy market was based on fossil fuels and a market for renewable energies did not exist at the time.

As a result, the public authority saw the necessity for a local energy agency in Málaga in order to promote sustainable energy use, in other words, to promote energy efficiency and the use of renewable energies. The City Council decided to create an energy agency and at the same time learned about the IEE programme so that the date for founding the agency was consciously chosen in order to seize the opportunity for receiving EU support.

AGMEM’s representative highlighted two major goals of the agency:

1. **Change the behaviour of Málaga’s citizens** towards more energy efficiency and the use of renewable energies.

¹⁰ <http://energia.malaga.eu/opencms/opencms/agmem/portal/es/index.html?cont=none&lang=en>

¹¹ See: <http://energia.malaga.eu/opencms/opencms/agmem/portal/es/modules/paginaEstandar/LaAgencia?cont=detPaginaEstandarLaAgencia#Legal%20set-up%20and%20status>, retrieved 30 October 2009.

2. **Reduce the city's CO₂-emissions by 20 %** within the next 11 years – in line with Europe's 20-20-20 vision (20 % reduction of CO₂ emissions and 20 % renewable energy by 2020).

Furthermore, the agency is currently working on its **Energy Action Plan** that will be finalized within the next couple of months. The objectives have not changed but were defined more precisely over time.¹² In the beginning the main objective was focussed on **awareness-raising**, in other words, to make people think about energy efficiency and use of renewable energies. Waste, water and forests were issues already much debated before the creation of AGMEM, but energy was not on the agenda. Consequently, the City Council decided to take another step towards sustainability and to also focus on energy issues.

Concerning the objectives, the website also lists the following:

- Increase energy efficiency as well as the use of renewable energies in municipal buildings and facilities.
- Promote savings and energy efficiency in the city.
- Encourage the installation of thermal solar and photovoltaic energy systems in the buildings of the city.
- Increase the energy information and training of the citizens, companies, and professionals.¹³

3.0 Institutional set-up

3.1 Legal status

As mentioned earlier, AGMEM was founded as a “local autonomous organism” (in accordance with Spanish law) (i.e. as a public body and as a part of the City Council). The interview partner of the energy agency mainly highlighted advantages of this legal status:

- The budget is prepared together with the City Council's budget and is decided for one year. As a result, AGMEM has no financial pressure and can concentrate on projects and on executing them (instead of being occupied with raising money).
- The legal form therefore enables the agency to focus on working towards their targets.

The disadvantages mentioned by the agency's representative were:

- For various reasons, public bodies sometimes work more slowly than private entities.

¹² The **Covenant of Mayors** was in this respect perceived as a great opportunity to define the same goals with hundreds of other cities all around Europe. Concerning the objectives of AGMEM its director stated that it is easier for them since they signed the Covenant of Mayors on 18th November 2008.

¹³ See

<http://energia.malaga.eu/opencms/opencms/agmem/portal/es/modules/paginaEstandar/LaAgencia?cont=detPaginaEstandarLaAgencia#Main%20aims>, retrieved 1 November 2009.

When the energy agency was founded, alternative models were not seriously considered. In principle, the legal form of foundations or societies (with public and private money) would also have been possible, but since the legal form of a “local autonomous organism” has the above-mentioned advantages, it was very soon clear that this legal form would be chosen. This is also due to a law adopted in 2003, namely the law on actions to modernize local government, that only provided the opportunity of creating “Local Autonomous Organisms”.¹⁴

The representative of the energy agency clearly stated that an **independent not for profit legal entity is the only appropriate form for an energy agency**, particularly for a local energy agency, since the agency is working in the public interest. If the public interest would be mixed with private money, independence would, in the Director’s view, be in question.

3.2 Internal governance

The agency’s team is composed of two industrial engineers, two lawyers, one economist and one administrative staff. Soon, there will be two more staff members (amounting to then eight staff members), namely a technical engineer and a technical drawer. According to the Director, the more **specialised** the staff is, the more success the agency has. The minimum size concerning staff is in his view **three staff members** (for small populations).

The agency’s president is Mr. Francisco de la Torre Prados, Mayor of the city of Málaga. The **management board** is the chief executive and management organ of the Agency. It consists of 12 members, constituted by six representatives of Councillors of the city (one from each party), including the Mayor as a president. The vice-president is the Deputy Councillor for Sustainability and there are Councillors from the opposition. The six external members are representatives of: Málaga University, Andalusia Energy Agency, Business People Confederation, Consumers Associations Federation, Industrial Engineers Official Association, Energy Distribution Company “Endesa Distribución Eléctrica”.¹⁵

Although AGMEM is independent, it is still dependent on the city council’s funding. The management board is composed by different stakeholders but the mixture of Councillors and non-Councillors supports both, the success (through the external experts) and the sustainability (through the Councillors) of the agency.

3.3 Funding

AGMEM is mainly funded by the **City Council of Málaga**. The overall amount received by the **IEE programme was 200,000 Euros** over 4 years (2005-2008). However, AGMEM’s overall budget developed as presented in Table 1.

¹⁴ Precisely “Ley 57/2003, de 16 de diciembre, de medidas para la modernización del gobierno local”, see http://noticias.juridicas.com/base_datos/Admin/l57-2003.html, retrieved 12 November 2009.

¹⁵ See <http://energia.malaga.eu/opencms/opencms/agmem/portal/es/modules/paginaEstandar/LaAgencia?cont=detPaginaEstandarLaAgencia#Legal%20set-up%20and%20status>, retrieved 5 November 2009.

Table 2: Budget development 2005-2009

Year	2005	2006	2007	2008	2009
Budget in EUR	100,000	370,000	1,000,000	7,000,000	1,200,000

The exceptional high budget in 2008 is owed to two important investment projects: The municipal public lighting network was equipped with stabilizers or reducers of electric flow to save 25 % electric energy. Moreover, 25 small photovoltaic plants were installed mainly in public schools in order to bring renewable energy solutions closer to children.

Apart from the IEE and the City Council's financial support, other funding sources are:

- The **energy agency of Andalusia** which co-funds projects of AGMEM (they receive funding from the Spanish government and the EU). For instance, in 2008 AGMEM received 800,000 Euros from the Andalusian energy agency.
- **Bank loans and the Municipality Budget are the main source of financing for investments.**

The agency's representative highlighted that a **funding perspective over several years** is essential for success because only then can the agency concentrate on the substance and does not have to search for money every year. In his view, local energy agencies need to be an independent part of the City Council.

Concerning particularly the EU funding, he stated that the quantity was not so important (concerning AGMEM, the funding of the City Council is much more important in quantitative terms) but the image related to a European project. It is easier to attract the interest of the Mayor if you are involved in a European project. It is **prestigious** and, therefore, makes the start of the agency easier.

The **EU funding was not sufficient** in order to undertake all the projects at AGMEM but since the expenditures were covered by the City Council there was no lack of funding. Lack of funding is therefore not an obstacle to carrying out project. One can always do more, if there is more money, but at AGMEM they are prioritizing their projects and are working through their agenda step by step. The City Council will also be the main and essential funder in the future but there may also be additional EU-projects (which are, however, not essential for the agency).

4.0 Activities

4.1 Overview

AGMEM is specialised in **energy efficiency** and **solar energy** since there is a lot of potential for solar energy in Málaga. Concerning the instruments, AGMEM has helped the City Council to improve regulations; they are promoting energy efficiency and focus on changing public behaviour. Furthermore, the City Council hosts a training institute with which AGMEM is

collaborating and the energy agency helps to teach people in energy efficiency and renewable energies.¹⁶

By contrast, AGMEM is not concerned with removing market barriers or ensuring the access to capital. Instead, they are focusing on awareness-raising. The **main target groups** for communications are (1) the general public, (2) school children and the school community, and (3) municipality workers in order to raise awareness for energy savings and energy efficiency as well as for renewable energies.

One particular successful project was a **public campaign** in summer 2009 aiming at raising awareness for saving energy. The campaign consisted of a TV spot, a song that was distributed through the radio and a drawing in order to make citizens not only remember to save energy but also to provide them with concrete hints where energy could be saved. Another quite successful project (funded with 4 m Euro in 2008) was the **improvement of public lights**. The energy of the lights and, therefore, the consumption were reduced by 20 % (i.e. 40,000 lights were changed). Furthermore, during the last 3-4 years **42 photovoltaic plants** were installed mainly in public schools so that the school children not only know theoretically about renewable energies but also experience it in practice.

By contrast, a project together with the University of Málaga, Endesa and Acciona (a construction enterprise) has been less successful. It aims at building an example of a sustainable house in Málaga.¹⁷ However, this project has been unsuccessful so far due to its related workload and required expertise. AGMEM is now aiming at recruiting experts to work on this research project. The problem is that the agency wanted to investigate on the possibilities before the building was funded. However, it was too difficult to include these investigations in the daily work of the agency.

According to the website, the following are also main tasks of AGMEM:

- To evaluate the energy situation of the City and the City Council.
- To improve municipal energy for buildings and facilities.
- To promote energy saving and efficiency among citizens and the municipality.
- To improve energy management of street lighting and historical monuments.
- To encourage the use of solar thermal and photovoltaic energy.¹⁸

4.2 Assessment of the IEE programme

¹⁶ The Municipal Institute for Training and Employment (Instituto Municipal para la Formación y el Empleo, IMFE) is like the agency a local autonomous organism dependent on the City Council.

¹⁷ See

<http://energia.malaga.eu/opencms/opencms/agmem/portal/es/modules/paginaEstandar/AsuntosDeInteres?cont=detPaginaEstandarAsuntosDeInteres#The%20Mayor%20of%20Malaga%20signs%20an%20Agreement%20to%20design%20a%20model%20of%20sustainable%20housing>
retrieved 17 November 2009.

¹⁸ See the presentation held by Mr. Jaime Briaes Guerrero at the Open Days Meeting on October 8th 2009 in Brussels.

Concerning EU policies affecting the agencies' activities, it was stated that the agency's work is easier, if the policies state **concrete targets** (for instance like the 20-20-20 vision), because EU policies can then be more easily applied at the local level. Concerning the content of EU policies, no specific policy was mentioned that would affect the agency's work.

The activities funded under the IEE were considered very important, particularly for the start-up. The IEE funding was essential for **convincing the policy-makers** to support a local energy agency. If the issue (i.e. energy efficiency and renewable energies) is an EU priority, it can be argued that EU funding is available and then it is easier to convince the policy-makers. What is also important is that the **EU funding links different agencies** from different countries in order to collect and share best practices and to build on other practitioners' experiences. The IEE funding particularly improves **networking in Europe** and this is considered very valuable. Thus, the IEE funding was very helpful to get started and to be able to finance the basic costs in the beginning. Today, the City Council is aware of the issues so that the agency is no longer dependent on EU funding for its existence. Also, the 3 or 4-year IEE work programme was considered appropriate because it leaves enough time to go through the different phases of setting up an energy agency so that the institution is no longer dependent on the EU funding once it expires.

5.0 Contribution and impacts

AGMEM was very successful in contributing to **awareness raising and mainstreaming** sustainability issues: energy efficiency is a criterion that is today considered in various fields like transport, the creation of sport centres, public schools, etc. Also, a snowball effect of creating new agencies was observed in Spain, for instance, AGMEM was created as a response to the energy agency of Grenada and after the creation of AGMEM Murcia's energy agency was founded. Concerning the issue of public funding, the agency's representative stated that more funding allows more work and vice versa and furthermore funding influences impact in his view.

Concerning the impact of the agency on commercial market actors, AGMEM's representative stated that they nowadays regularly have interviews with a variety of energy actors. There are a lot of companies and persons that used to work in housing projects, a sector in crisis now. The agency has detected that renewable energy and energy efficiency are increasingly considered as an important alternative economic sector in Malaga.

In Málaga, **the RE market did not exist before the agency was created**. Today, 1 MWh of RE is used in the city of Málaga (both, in public and private entities) and the tendency is growing. Also, the licensing procedure for new EE and RE installations has become easier thanks to AGMEM. Basically, three licences are necessary for EE and RE installations, one from the distributing energy company, one from the regional and one from the local authority. AGMEM improved the local procedure so that it is today the fastest in Spain.

AGMEM contributed to the EU's overall 20-20-20 objective. In the agency's representative's view, particularly local authorities are able to implement measures for the policy goals since

they are in direct and permanent contact to the people. Concerning the city's climate and energy policies, AGMEM is essential for its implementation since the agency keeps the topic on the agency and continuously raises awareness for energy efficiency and renewable energies.

The agency is involved in information exchange on a daily basis: Through emails, the website, and particularly the local media (radio, TV and local newspapers) as well as campaigns and leaflets. The communication of the agency has indeed changed over time since communication is considered essential – but so far there are no best practice examples. AGMEM has been working hard to change the behaviour of the people and, therefore, they communicate on a trial and error basis to identify best practices themselves.

So far, there is no quality control system in place (i.e. measuring the impact of the agency on people's behaviour). However, the agency is planning to put an evaluation system in place and, therefore, is collecting experiences from other agencies. So far, there are only some indicators that show general trends, for instance the energy consumption per capita in Málaga. However, this indicator does not show a clear trend since the creation of AGMEM. In particular, the energy consumption per capita in Málaga was 1.55 t/capita in 2005, 1.53 t/capita in 2006, 1.60 t/capita in 2007, and again 1.55 t/capita in 2008.¹⁹ By contrast, the share of renewable energies with regard to the overall energy consumption augmented since AGMEM's creation: The share of renewable energies was 0.30 % in 2005, 0.40 % in 2006, and 0.50 % in 2008.²⁰

6.0 Conclusion and future of energy agencies

Generally, a need for more energy agencies is perceived, particularly in the new EU member states. More precisely, the energy agency's representative stated that **each city with 100,000 or more inhabitants should have its own energy agency**. He assumes that if the city is smaller, it will be difficult to set up an energy agency. There is also a need for more IEE funded energy agencies. However, AGMEM is working so well, that there is at present no need for additional funding, neither concerning specific fields of activities, nor concerning specific projects.

Generally, particularly experts working in the energy sector are aware of IEE funded energy agencies. This is also true for the general public in policy makers in Málaga.

The most valuable impact of IEE funding is that energy agencies across Europe **exchange experiences** and create a network. The most relevant output of the agency is the **change in people's behaviours**; all the activities are aiming at this overall goal.

¹⁹ See the Agenda 21 Indicators for Málaga at http://www.omaumalaga.com/subidas/archivos/arc_2518.pdf, p. 19, retrieved 27 November 2009.

²⁰ See the Agenda 21 Indicators for Málaga at http://www.omaumalaga.com/subidas/archivos/arc_2518.pdf, p. 19, retrieved 27 November 2009. There are no data available for 2007.

Energy is at present a political priority on all policy levels (EU, national, regional and local) – 3-4 years ago this was not the case so the current situation depicts a stark amelioration.

List of interview partners and consulted documents

Telephone Interview:

- James Briales, Director, Energy Agency “Agencia Municipal de la Energía de Málaga” (AGMEM), 12 November 2009.

Documents:

- Agenda 21 Indicators for Málaga, at http://www.omaumalaga.com/subidas/archivos/arc_2518.pdf, retrieved 27 November 2009.
- Briales, Jaime Guerrero, 2009, Intelligent Energy Europe Programme: Cities and regions working towards a sustainable energy future, Presentation held at the Open Days Meeting, 8th October 2009, Brussels.
- ManagEnergy, no date, Technical Days to promote energy saving and efficiency, AGMEM – Municipal Energy Agency of Málaga, Spain, Case Study No. 257, AGMEM, Spain.

Websites:

- www.agmem.malaga.eu
- www.managenery.net
- www.omaumalaga.com

6.3 Arc de Seine Energie, France

1.0 Background and context

The Arc-de-Seine Local Energy agency was founded in February 2008. Its territory and location are 3 important urban communities at the immediate South-East of Paris. The population of this area amounts to 165.000 inhabitants. Its staff is 4: the director, 2 people dedicated to advising public and communities, and 1 communication specialist dedicated to organizing events. The establishing authority is the communities grouping organization (*communauté d'agglomération*) to which the 3 member communities have delegated some local services responsibilities. This was done in close partnership and co-financing with the national agency for energy and environment (*Ademe*).

2.0 Objectives

Prior to the EA's creation, the establishing authority run a local information point, which was assessed as a rather passive tool (reception of public and answering questions on energy saving). This was assessed as low-profile and inadequate (establishing authority and agency interviews). The establishing authority had the possibility of devoting a limited staff to the energy issues, and this would be limited then to a general orientation of the community's policy, but not to *operate* the policy.

The rationale is based on 3 objectives:

- 1°) expand and enhance the action in terms of information, communication and advising in the field of energy saving and renewable energy, and provide a policy operator to the local territory.
- 2°) reach SMEs and increase involvement of businesses in the energy policy.
- 3°) provide a comprehensive consulting capability for the local communities' policy design, with high skills but also with neutrality.

These objectives are of course still valid, the EA being young. Correspondence of IEE's objectives with local and EA are ensured very globally, "like a general framework with which we are easily in line, and which is re-affirmed at the Covenant of Mayors". (establishing authority).

3.0 Institutional set-up

3.1 Legal status

Type of legal status: non-profit association (*association loi 1901*).

- **Advantages:** possibility to combine different types of partnership, either financial and on operations. Over being an administration service, the advantage is a relative independence to the power of local elected representatives. An administrative service could not easily resist to pressures for exclusive politician priorities, as can the EA, with its multiple partners, its agreement, its programme, etc.
- **Disadvantages:** for additional financing, now and in the future.

The EA is asked to perform new services for communities, with specific financing needs (i.e. communication expenses, technical materials,...). This is seen as growingly important for the future of the EA and its relation to public funding, including IE programme. For the establishing authority, the rationale is based on the principle that those services are not currently provided by the private sector, either because they are not yet technically ready, or because they are not profitable. But still, this engages public funds allotted to a statutorily private body. The funding has then to comply to public procurement rules. However, the difficulty is in assessing whether the given service could be provided by the private sector or not. Indeed, in that field the situation changes rapidly: competencies develop, innovation diffuses, and markets evolve. For instance, aerial thermography was developed first by the public or non-profit sector, and is now a well-developed private business. Ideally, communities and EA should restrict this kind of co-operation to the fields where the private sector is not interested yet. But it is found difficult to assess, and partners are sometimes deterred by the juridical risk.

Alternative types: no real alternative has been balanced prior to EA creation. In the mind of the elected representatives involved, the alternative would have been creating a specific (public) department of the community. However (source: EA interview), this would have been precluded by current strong limitations in staffing in the French public sector and reluctance of elected representatives to increase municipal staff.

Reasons for choosing the non-profit association type: (1) need to associate different kinds of partners (public, private business, private individuals, non-profit...) (2) Allowing quasi-public intervention and simultaneously avoiding directly increasing public sector.

3.2 Internal governance

Critical minimum size: it appears very contextual and based mostly on the kind of action undertaken by EA, on the needs and specific demands it has to fulfil. According to EA interview, the critical minimum size is 3 (more or less the actual size of Arc-de-Seine), in order to fulfil (1) administrative tasks, (2) current advising of public and communities, and (3) development, innovation and new projects.

Composition of the team: 1 director, 1 energy adviser devoted to individuals, 1 energy adviser devoted to communities, and 1 communication specialist devoted to events organisation.

Composition of management board: 5 municipalities, 1 individual, 1 consumer association, 1 energy provider (GDF-Suez), 1 public social housing organisation (Office Public d'Habitat), 1 mixed municipal-private urban development organisation (Société d'Economie Mixte), 1 housing development group. Management board is functioning more as a council. It is not involved in

management decisions and specific orientations. Its role is to control and validate general options taken by the agency and its establishing authority. Benefits for EA's sustainability will stem from the broad recognition that this membership produces as regards the actors of the immediate environment. Weakness, though, may derive from a low involvement of members

3.3 Funding

The total budget was €190,300 in 2009. The composition is presented in Table 1.

Table 3: Overview of budget 2009

Source	€	%
IEE	53,300 €	28%
Local authority (community)	60,000 €	32%
Regional partner (Region)	45,000 €	23%
National agency (Ademe)	25,000 €	13%
Subscriptions	7,000 €	4%
SUM	190,300 €	100%

Commentary: for sustainability of the EA, service provision is seen as the ideal way of gaining autonomy and stability. But it is partly precluded by the issue of competition with the private sector. Hence, service provision is yet limited.

Planned funded structure once IEE has expired:

- Ideally, in the views of EA and of the Establishing (local) authority, the share of IEE would be replaced by payment of service provisions. But, due to limitations because of free market competition issues, this is expected to increase slowly. Then, part of the future share will more probably be replaced by additional funding from the local authority, for which IEE financing was not seen as a sine qua non condition for the project (see below).
- Thus, it can be expected that approximately half of the IEE share will be replaced by service provisions (i.e. from 3 % now up to 15 % in 3 years), and the other half by the local establishing authority (i.e. from 34% to 50 %). (Source: consultant; not validated by EA nor Est. Auth.).

4.0 Activities

4.1 Overview

Field of activities: 1) Energy efficiency 2) Renewable energy. Transport issues are hardly addressed. This is due to the sharing of responsibilities: transports are not in the field of the establishing authority yet, and thus intervention is limited in that field, however it would be highly relevant (source: EA and Est. Auth). *How to address better the transportation issue appears as*

an important issue for the future. Besides, local policy-making has put the onus on RE, however (in that densely urban region inside the Parisian agglomeration), energy efficiency, and above all housing isolation, would appear as the most relevant in terms of final carbon efficiency (source: interviewees).

Instrument: 1) changing public/business behaviour by way of specialised advising and of communication; 2) removing market barriers by way of fostering local energy efficiency businesses with clients; 3) training of businesses and of local administration specialists.

Additional instrument not in the list: local capacity building (providing local communities, under-staffed and under-equipped in the field of energy, with qualified advice, services, techniques, and thus increasing their action capacity).

Targeted stakeholders (ranked by order of effective importance in the action field): 1) public, 2) local public authorities (communities), 3) public social housing organisations. 4) SMEs

Example of a particularly successful project:

A well-focused, reasonably dimensioned, and highly professional communication/training event: professional “breakfast” with only 2 highly specialised and experienced speakers, and audience being twice more than expected (more than 50 instead of less than 20). Success criteria: highly valued audience (notably elected representatives) and satisfaction expressed. Success factors: quality of speakers, nature of audience (good mix of elected people, public, local authorities’ technicians, and small energy businesses).

Example of unsuccessful project:

A too general, too ambitious, and heterogeneous training event on public lighting, with half audience as expected, low satisfaction expressed, heavy preparation work. Failure factors: choice of topic, number and homogeneity and didactic qualities of speakers.

Every stakeholder interviewee states a high satisfaction with the activities of the agency, thanks, in particular to its reactivity in response to a demand for information.

In addition, information provided by the agency is unanimously recognised of high quality. It is mostly “generalist” information, which is judged accurate: on legislation, possibilities of funds and news related to environment. It was also said that the agency provides relevant experience feedback and advice for recruiting in the field of energy. Two interviewees also put forward the visits of installations, which provide concrete information.

However, one local authority stakeholder stated that the information provided by the agency should be more technical-oriented (type of heat, type of windows...). For instance, the interviewee added that he would need technical advices on a day to day basis to further include energy issues.

Other stakeholders interviewed consider that the agency increases networking between stakeholders in the field of energy. As an example, one interviewee put forward the thematic

breakfasts gathering local authorities and experts (see above). Another interviewee pointed out that the agency organises meetings between technical services of the five cities included in the Arc de Seine territory.

Interviewed stakeholders also consider that the agency has a good communication strategy. One said that they are present in every show in the Arc de Seine territory, ensuring a good visibility. However, it seems that the agency is well known by the local authorities but rather less by inhabitants. The Agency has but one adviser in charge of raising the awareness of inhabitants: he ensures permanence at the agency and in every city of the Arc de Seine Territory. One interviewee pointed out for instance that one person is inadequate to provide energy advice to 300 000 inhabitants. Consequently, interviewee stakeholders generally consider that public awareness is still the area where the agency needs to improve and further develop its activities.

Finally, one stakeholder expresses the need to a clear road map of the agency's strategies and focus. This interviewee suggested that the objectives are not always well defined and there is a sense of *going everywhere*.

4.2 Assessment of the IEE programme

Interview partners expressed that that a number of energy agencies in France were set up without IEE funding. Those, aware of the IEE programme, highlighted the high effort and need for human resources as the main reason for not applying for such funding. It was recommended to simplify the application procedure of the IEE programme.

5.0 Contribution and impacts

All interviewed stakeholders expressed a strong need for an energy agency in the Arc de Seine territory. As stated above, the Agency provides a wide range of information in the field of energy.

All stakeholders pointed out that the agency objectives are globally in line with environmental objectives at local²¹ and national level²². The Agency aims at promoting energy saving and renewable energy in order to contribute to the reduction of climate change effects:

- **At national level**, France launched two years ago the "Grenelle de l'environnement", a large national consultation, which produced a series of key points that government adopted by law for its sustainable development policy for the coming years. Combating

²¹ At local level, several

²² At national level, France launched two years ago the "Grenelle de l'environnement" which defines the key points of government policy on ecological and sustainable development issues for the coming years. Fighting against climate change (through the promotion of renewable energy and energy saving) is one of the key issues targeted by the Grenelle de l'environnement. The ADEME (National environmental Agency) is responsible of managing funds dedicated to tackle energy issues.

climate change (through the promotion of renewable energy and energy saving) is one of the key issues targeted by the Grenelle de l'Environnement.

- **At local level**, due to the increase of environmental considerations, local authorities implement public actions toward a better use of energy. For instance, the City of Issy les Moulineaux developed an agenda 21 and an environmental quality building charter.

The stakeholders recognised also that the agency has a strong value added to the following objectives:

- A **high visibility of energy policies**: Having a specific entity, separated from the local authority Arc de Seine, enables to show that energy is a strong challenge on the territory.
- **Bringing competencies on energy of which local authorities are deprived internally**: in order to improve the functioning of their installations and the setting up of their policies, local authorities needs the help of experts in the field of energy.
- **Specific competences to target inhabitants**: As indicated by one interviewee, awareness raising toward inhabitants is highly specific and needs competences that local authorities don't have internally. Consequently, the agency implements tasks that local authorities couldn't properly manage.

For several interviewees, the level of intervention of the agency appears to be relevant to the needs of local actors. The territory is small enough to enable a relation of proximity between the agency and local authorities and to ensure a better visibility on the territory. As regards inhabitants, before the implementation of the agency, energy advice to households was given at departmental level. For several interviewees, this level was too large and inappropriate.

The agency is less than two years old; therefore the identification of effects is rather difficult considering the youth of most of agency actions. However, the stakeholders consider that the agency enables to improve the knowledge and the awareness of local authorities and inhabitants.

As stated above, effects of action are probably observed more by local authorities than by inhabitants. However, several interviewees pointed out that almost no action towards inhabitants was implemented before the agency; therefore its creation enables to increase the level of efforts on the territory. This level of effort is twofold:

- The creation of the agency increased the number of communication actions: for instance, one interviewee pointed out that the agency had several communication actions during the sustainable development weeks.
- The creation of the agency increased the number of personalised advice: with the "*Espace Info Energy*", many inhabitants receive advice for their actions in the field of energy saving and renewable energy.

It should be noted also that the **agency grants funds to inhabitants** to help them achieve their projects in the field of energy. Even if the main incentive comes from the national tax credit/relief programme²³, this is an additional incentive.

Regarding local authorities, some interviewees acknowledged that the agency is well known by the various local authorities of the Arc de Seine territory. The creation of the agency enables to develop a specific service towards the local authorities. This service appears to be well perceived by interviewees because it is personalised to the needs of each local authority. In terms of effect, interviews highlighted that agency actions contributed to increase the knowledge of local authorities energy departments in terms of which are the *possibilities to act more*. They contributed also to increase the awareness in those energy departments: the agency is perceived as a help to increase internal awareness. However, one interviewee said that the actual context is nevertheless highly favourable to such awareness.

Examples of agency results:

-City of Vanves: With the agency, the city is better taking into account energy issues in its functioning. The city is, at the present time, implementing an oriented energy advice (conseil d'orientation énergétique). The city discovers this service because of the agency and receives from it information in order to design and implement such a service: method of implementation, good practices, job description....

-City of Issy les Moulineaux: with the agency, the city improves the internal awareness: the agency developed awareness raising actions towards users of some public buildings. The agency brings also specific expertise to the city: in the frame of the environmental quality charter developed by the City (aimed to better integrate environment in buildings by delivering a label), the agency helps the city to analyse projects.

For SMEs, little information has been gathered on the effect of the Agency. One interviewee was doubtful on the fact that the agency had any added value toward this kind of public as other public stakeholders (e.g: chamber of commerce, professional organisations...) may be more relevant.

Finally, Interviewees pointed out that the main factors of success of the agency intervention are the followings:

- The size of the territory: the agency interacts with actors on a relatively small territory; services of local authorities and the agency staff know each other and a trustworthy relation has been created.
- The structure of an agency: the form of an agency is a small structure which enables higher reactivity as compared for instance with a local authority. The agency is also independent and can better work with any stakeholder.
- The type of communication tools: the agency develops relevant communication tools such as visits of installations, networking, presence in shows and thematic breakfasts.

²³ In France, a tax relief (a reduction of the amount of income tax) or a tax credit (a payment by the tax authority when the level of income tax is low) is granted for the installation of certain energy saving and renewable energy materials.

6.0 Conclusion and future of energy agencies

No interviewees identified any snowball effect for the creation of new energy agencies, either at local or regional level:

- At local level, this is not surprising: considering the small size of the Arc de Seine territory, there is no need for further energy agencies.
- At regional level (Ile-de-France), two other energy agencies are in place, but they have been implemented earlier than the Arc de Seine Agency. Some organisations including public awareness raising (Espace Info Energie) are also considering turning into an energy agency. But, at the present time no snowball effect has been identified by interviewees.

When asking for the future prospects of the energy agency, every interviewed stakeholder expresses the interest of seeing the agency carrying out its work with the same level of high quality.

Several stakeholders express also the need to further develop inhabitant's oriented activities. As most of Arc de Seine inhabitants live in buildings, significant efforts should be put on **targeting owner' representatives (syndicat de copropriété)**. However they unanimously acknowledged that the agency needs further human resources to be able to tackle this issue. One interviewee also said that advisers focused on inhabitants should be more experienced: but the strong competition with consultancy firms and the little perspective of such a job make it difficult. Finally, one stakeholder added that the agency should give up targeting SMEs and concentrate its efforts towards inhabitants.

Two stakeholders stress also that more synergy should be developed between the agency activities and the various public bodies working in the field of environment and energy. Firstly, this will enable to develop a more effective and visible public intervention. Secondly, more synergy with other public bodies could improve the Arc de Seine inhabitant's awareness of the agency of activities.

Stakeholders also express the need for further financial and human resources in order for the agency to tackle the growing needs in the field of energy. But no stakeholder interviewee expresses the needs for more IEE funds. This is particularly due to the fact that **most of them didn't know the existence of such funds**.

One interviewed stakeholder, aware of this IEE fund, pointed out that the demand for such funds involve time and human resources. He added that searching for EU funds, implies delays in the implementation of an agency. Therefore, it was said that procedures should be simplified.

List of interview partners and consulted documents

Interviews:

- Muriel LE BOULANGER, EA director
- Maria SPENDEL, in charge of environment and sustainable development in the establishing authority (Communities group)
- Fabienne SCHIMENOVITZ, project officer French environment Agency (ADEME) in region Ile-de-France
- Céline BRAILLET, Sustainable development project officer, city of Issy les Moulineaux
- Benoit Moisan, technical service deputy director, City of Vanves
- Antoine Sauvage, Member of the administration council of the Energy Agency

6.4 Energy and Sustainable Development Agency (AESS), Modena, Italy

1.0 Background and context

The Energy Agency "Agenzia per l'Energia e lo Sviluppo Sostenibile" (AESS) was created in 1999 with the support of the EC SAVE II Programme as an association of five founding partners (Municipality and Province of Modena, Chamber of Commerce, META²⁴ - the energy utility of Modena, and ATCM - the local transport company). Legally it is a not-for-profit association and it operates on the regional level in the province of Modena (a province of 688.286 inhabitants, with the main city of Modena of 181.807 inhabitants).

According to the director of HERA²⁵, AESS has established itself as a reliable and innovative partner and has a strong position in the energy market. According to all the interviewees, this is largely due to its flexibility, innovation and business-like approach that makes the agency distinct from the authorities and public administration services. At the beginning, there were 4 employees – 1 full time and 3 part-time, while currently 11 people are employed. In addition, AESS has a vast network of external consultants specialised in particular fields with which they team up for individual projects.

2.0 Objectives

Energy appeared increasingly on the environmental agendas of the municipalities but they perceived a lack of a specialised expertise in this field. The EC SAVE II programme was identified as optimal scheme by the Project Office and Chamber of Commerce to establish a regional energy agency. Herning (Denmark) acted as a tutor, the partner was Almada (Portugal) and the support partner was Energie-Cite. The funding was much dispersed: 30% provided by SAVE, 60% by public authorities and 10 % from selling its services.

The objective of AESS is to give impartial advice and to help the local communities to achieve their social and environmental goals. AESS primarily works on promoting renewable energy sources, energy efficiency and reduction of energy consumption in Local Authorities, SMEs, schools and consumers. The objectives have not changed over time. At the beginning, AESS closely followed the objectives of the key shareholders (Municipality of Modena, Chamber of Commerce etc.), but now it follows more and more the smaller municipalities.

²⁴ In 2005 META has undergone a merger between 11 publicly traded multi-utility companies and has thus been transformed into HERA Group active mostly in the Emilia Romagna region. HERA decided to shift from the shareholders to the clients of AESS and keep working together on the same type of projects as before (e.g. improvement of installations, boiler rooms, lighting of public buildings) and expanding the cooperation even further. During the start up period additional shareholders joined: Legambiente (environmental association), Unione Italiana Consumatori, (consumer association), AIMAG (the energy utility operating in the Northern part of the province), SAT (the energy utility operating in the Southern part of the province) and Vignola Municipality.

²⁵ META has undergone a merger between 11 publicly traded multi-utility companies and created HERA group

In the opinion of the interviewees, **the Agency has not changed its objectives, but it has matured, increased its competences and amplified effects of its work**; they have also stressed the importance of the director of the agency with a vast network of contacts, support and skills for working with the public administration and an understanding for the youth.

3.0 Institutional set-up

3.1 Legal status

AESS was established as and remains a **not-for-profit association**. No disadvantages of this legal status were pointed out. The status of a profit-making organisation was discussed but according to the AESS director the current status allows for greater flexibility to secure funding and strong public image, while the agency is still able to sell their services. Public authorities believe it is better to work on a non-profit basis and pay for the costs of cooperation on a project basis. In their opinion this also supports better the structures and processes of regional development. According to the HERA director it is important for AESS to be independent and that is why HERA shifted from a shareholder to a client. AESS itself found initially the industry sector to be more cautious and sceptical of their neutrality; here, their non-profit orientation helped them to show that they give impartial advice.

3.2 Internal governance

According to the AESS director, the **critical minimum size is approx. 10 staff from 3 sectors**: energy engineers, public relations experts and planning experts. He argues that agencies of 3 staff members might be comfortable but do not consider the fact that internal competences are unlikely to grow.

Currently, the Agency employs 11 people: the director, the secretary, 5 employees in the field of energy assessment and design, 3 employees in the field of energy planning and EU projects and 1 person in the field of information dissemination and external assessments. The general impression from the visit was that the team spirit is strong as well as the sense of responsibility.

Currently, there are 29 **AESS shareholders** are:

- Province of Modena,
- 19 Municipalities and 1 Mountain Community,
- Other organisations: Modena Chamber of Commerce, Atcm (public transport supply company), University of Modena and Reggio Emilia, Geovest srl, National Union of Consumers, Federconsumatori, Legambiente (an environmental NGO), Aimag Spa.

The AESS **Management Board** consists of 6 members from various shareholder organisations so that the mix represents the composition of the shareholders. There are representatives of the

Municipalities, of Chamber of Commerce, of the public transport supply company, a consumers' organization and an environmental NGO. This allows for efficiency and flexibility of the Management Board and also ensures that issues and interests of all types of shareholders are considered.

AESS has also a Scientific Committee that acts as an **Advisory Board**. This is composed of 6 people: 4 representatives of various levels of public authorities (municipality, province, region and Ministry of Environment), a representative of Styria Region (Austria) and a representative of "Azero CO2", an association similar to AESS which promotes activities for reduction of greenhouse gasses. In this way, AESS keeps in touch with contemporary developments in other countries and fields related to energy, and coordinates with the need of local communities.

3.3 Funding

AESS is mainly project-funded. The shareholders provide approx. 10% of the budget and receive a discount on the projects AESS implements for them. Approx. 20% of budget is secured from various EU projects. AESS tries to keep this level as the maximum cap since an increased share could threaten the agency's sustainability because of the experienced delays in payments. The remaining approx. 80% of funding (84 % in 2008) consists of payments for various local and regional projects.

Thus, the composition of funding is very fragmented and a lot of effort has to be dedicated to search for project ideas and detection of needs of potential clients. Advising SME and industry is growing and AESS in general does not find any problem in finding enough projects and funding, largely also due to its good reputation.

The AESS director emphasises the general principle of never working completely for free for public organisations or authorities, but ask for an affordable fee. In this way, the organisations first think well about their needs and channel both the money and their human resources to achieve as useful results as possible.

While the SAVE programme provided full funding for 3 years and thus enabled the Agency staff to work on energy issues and increase its knowledge and competences, this approach does not encourage the Agencies to find funding on time for the period after SAVE funds expire. However, **AESS's Management Board has required the agency to prove within 3-years its sustainability in order to receive financial support from the shareholders.** AESS thus gradually increased workload and took aboard other, externally paid projects (e.g. 2 projects funded by the Province of Modena: assessment of Province biomass potential, Energy Diagnosis of Fermi di Modena), paid for the extra hours of work and was gradually able to fully employ the 3 part-time employees. **Such approach of funding external to the SAVE programme** is not supported by the programme but in particular thanks to the AESS desk officer the agency attracted the interest of the municipalities and achieved sustainability within 3 years.

In 2008, the total budget of AESS was 489.660 €²⁶. The data on revenues and its sources are shown in Table 1.

Table 4: Revenues and costs

Year		Shareholders contribution		Other sources of revenues		Revenues total in €	Expenditure in €
		in €	in %	in €	in %		
1999	1 st	93.841	75,99	29.655	24,01	123.496	61.866
2000	2 nd	94.980	56,91	71.920	43,09	166.900	149.940
2001	3 rd	94.980	46,49	109.315	53,51	204.295	190.950
2002	4 th	84.237	29,69	199.484	70,31	283.721	280.240
2003	5 th	97.693	27,81	253.544	72,19	351.237	297.992
2004	6 th	92.690	25,29	273.878	74,71	366.568	327.752
2005	7 th	67.330	14,47	397.911	85,53	465.241	356.636
2006	8 th	72.389	14,97	411.120	85,03	483.509	430.638
2007	9 th	44.754	7,89	522.580	92,11	567.334	554.855
2008	10 th	47.847	9,77	441.813	90,23	489.660	524.305

The contribution of the shareholders has gradually decreased to half the original size over the years, while the income from various projects has increased almost 15-fold. In terms of share, initially the shareholders contributed three quarters of funding; in the 10 years of AESS existence, their share of contribution has decreased more than 7-fold, while the share of the contributions from various projects, including EU funds, has increased from 25% to more than 90%.

It is likely that the AESS will grow in terms of staff and revenue only a bit more (10 – 15 regular staff), as quality of their work and support to knock-on effect is preferred to quantity. Increased and/or more specialised demand will be met with support of specialists and ESCOs.

²⁶ The balance of the accounts closed on 21st December 2008 (Agenzia per l'energia e lo sviluppo sostenibile, Bilancio dell' esercizio chiuso al 31/12/2008)

4.0 Activities

4.1 Overview

AESS primarily deals with projects promoting energy efficiency, reduction of energy use and use of renewable energy among Local Authorities, SMEs, schools and consumers.

All the projects are designed in line with the SAVEII/IEE requirements, national, regional and province programmes and plans related to energy efficiency and use of renewable energy. The agency has **decided not to work on energy issues of transport** as there are enough other programmes and initiatives in this field and there a special agency was formed on the province level to deal with all the transport issues.

In the 10 years from its establishment, **AESS has moved from awareness raising to more complex projects and consultancy for businesses, ESCOs, innovative approaches to contracting and management while still implementing awareness campaigns.**

Examples of activities in the field of policy promotion and provision of training are:

- Consultancy for the improvement of local energy systems, planning of energy use and improvement of its regulatory instruments in the Local Authorities.
- Information dissemination, training and promotion campaigns on energy and environmental issues (initiatives targeting specific stakeholders/institutions: schools, companies, public bodies, citizens, etc);
- Energy Trophy – an EU-wide competition on savings within the office buildings;
- Participation at public events and fairs (e.g. Expoenergy, Solarexpo etc.);
- Courses of installers of PV equipment (EU-funded project PV-PROSPECT);
- Internship for students from the local university.

Examples of activities for changing the public/business behaviour.

- Energy Audits - diagnosis and consequent energy efficiency measures at local level both in the public and private sector;
- Preparation of feasibility studies and engineering design for improvements in energy efficiency and shift from fossil fuel to renewable sources (e.g. CHP, district heating systems, PV installations);
- Improvement of energy efficiency of street lighting for the Local Authorities and Public Utilities (e.g. HERA);
- Preparation of tender documentation for Energy Performance Contracts for heat supply of public buildings (schools, public offices, sport halls, libraries, retirement homes etc.);
- Installation of PV, solar thermal and biomass systems in schools, Protected Areas, sports facilities (sports hall, swimming pool) and public buildings (e.g. Modena Fair);
- Consultancy for the improvement of local energy systems (private companies and citizens);
- Preparation of Memorandums of Understanding and Purchase Groups to outreach the implementation of renewable energy systems and efficient energy use, also in the private sector.

AESS is also an Energy Saving Company accredited by AEEG - the Italian Energy Authority and as such traded White Certificates for the Province. It stimulates ESCOs at local level for energy saving in buildings (e.g. through preparation of tender documentation) and therefore indirectly helps to provide access to capital that is needed for investments in energy efficiency. Moreover, AESS is indirectly indirectly involved in improvement of regulations on the local level through consultancy on local regulatory instruments, and on the national level through its active membership in RENAEL – Network of Italian Energy Agencies, a network of 29 Energy Agencies.

AESS is working closely with the commercial players through provision of specialist training for installations for energy efficiency and renewable, support of ESCOs, formation of Purchase Groups and advice on energy efficiency at reconstruction of facilities and brown field development. Moreover, AESS is co-operating in the promotion of fuel cells production and supports the producers of EE systems and RES: the Agency is targeting certification of the products and companies and investment in EE and RES of selected companies through various projects. The trainings in EE and RES installations are already yielding results, working closely with CNA (National Association of Crafts and SME) and LAPAM (Federation of Entrepreneurship Associations of Modena Province). The activities in this field is growing due to vast opportunities (e.g. industrial zones being transformed/regenerated) and effects of recession on local industry.

AESS has formed an Energy Cluster for coordination of 6 “green economy” companies for joint innovation and entering new markets. In addition, AESS is trying to reach most of the businesses through information campaigns and projects, e.g. Greeneffect – Saving electricity in office buildings and purchasing “green electricity” (funded by ALTENER). Lately, AESS and local authorities together promote introduction of EE and RES at warehouse restoration (e.g. asbestos roofs replaced by more sustainable ones and PV panels) and use of new renewable sources of energy (e.g. CHP, energy from waste of cereal production).

With public authorities and their associations (e.g. GEOVEST, the Union of Lands of Castles) AESS mostly works in the field of awareness raising, energy efficiency and use of renewable energy sources in public buildings and at public utilities services. For example, it has prepared the Energy and Sustainable Development Plan for the Province of Modena and Urban Energy Plan of the City of Modena, which contains 23 actions addressed to reduce energy consumption and promote RES. This was followed by energy audits and feasibility studies for measures for EE and RES in 26 schools, including PV installations. Moreover, AESS has developed with the Municipality of Modena a methodology for energy certification and energy audit of Public Buildings. For the Municipality of Modena, it has inspected about 500 boiler houses in two years; through this, AESS gained permanent contact with final users, which will enable to further promotion of energy efficiency in the domestic, commercial and industrial sectors. For the Municipality of Mirandola, AESS has prepared an Energy Action Plan through an IEE-funded project “Innovative Thinking”. With GEOVEST, it has implemented 18 PV plants with the capacity of 20-50 kW each. AESS also provides help related to the Covenant of Mayors committed to urban sustainable energy to improve their energy

efficiency and promote low-carbon business and economic development. Together with HERA AESS is researching the potential of the district heating.

AESS is largely targeting schools and research institutes and to a lesser extent the NGOs. For example, it has strong school information campaigns through the Energy Days and the Class Energy Managers initiative and it provides internship for research institutes and vocational schools. The project “Energy and Schools in Modena” is now one of the good practice case studies used by Managenergy of the DG Energy and Transport (see <http://www.managenergy.net/products/R317.htm>). In this project, performance contracting was done to an external company for energy rehabilitation and management of public buildings, mainly schools and a Voluntary Agreement was signed between schools and Modena Municipality Administration, where the money saved through energy saving is allocated 50% to the schools itself.

AESS further undertook 23 **energy audits at schools**, created an electronic data-base of components, conducted an evaluation of energy conservation opportunities and a comparative cost-benefit analysis. The main partners were Modena Province, Modena Municipality, the local energy agency AESS and several primary and secondary schools located in the area. The performance contracting lasted 7 years, with an annual budget of about € 2.15m and an investment of more than € 1.6m. A compulsory investment for about 10% of the overall amount was requested, and a guaranteed energy saving of at least 15% is imposed. A remote energy control of all buildings was also required, and the AESS acted as a performance and maintenance programme verifier. The **direct investments** included conversion of boiler houses to gas or biomass fuel, a solar thermal DHW plant for a school sports hall, PV roofs (the latter under the 10,000 PV Roofs governmental / regional programme, a centralised room heat and light control in one school (pilot intelligent school) etc. The performance contract had reduced costs for the administration respect to the amount it spent for energy. In another project single schools of Modena Municipality have gained from 200 to 10,000 €. The money distributed to schools according to the Voluntary Agreement came from energy savings. Children got involved as class energy managers.

The main lesson learnt was that an interest by the local administration in improving their buildings and sufficiently high motivation by the users are crucial for this kind of investments.

Concerning the general public, AESS is targeting them mostly through extensive information campaigns conducted together with the Municipalities, implementation of activities of Energy Action Plans and providing technical assistance to the people for easier decisions (e.g. checks of project design for PV installation or energy efficiency investments in housing, technical checks of implemented works). Moreover, AESS implemented an IEE-funded project “Energy Neighborhood” where 100 families dedicated to decrease their energy consumption for 8% in 6 months. In spring 2009 AESS together with GEOVEST organised a campaign “Book Your Place in the Sun” for the people to join a Purchase Group of 130.000 inhabitants in 11 Municipalities for getting a PV installation for their households, with adhesions from already 100 families. The project is now in the PV implementation phase. In addition to

these activities, AESS supports the national tax credit programme for physical and legal persons on the local scale

4.2 Assessment of the IEE programme

The agency believes that instead of creating new agencies the IEE programme should in future rather **better support the successful existing energy** agencies and develop an efficient model to finance their activities from various projects and transmit their success to other energy agencies that are not as efficient and successful. Some of the energy agencies in the wider region, for example, had to close down after the expiry of IEE or SAVE funding.

The agency further highlighted that there are relevant activities which are **not funded at the moment, such as are integration of energy efficiency and use of renewables in everyday business and products of the SMEs.**

From the agency's perspective, **both IEE and SAVE II programme for establishing new agencies could be criticised for the fact that the programmes do not stimulate the newly formed agencies to search for sufficient new funding and develop new activities that would allow for their financial independence and sustainability after the 3-year period.** Due to acquiring additional projects agencies can gradually increase their skills and capacity, test innovative approaches and develop towards sustainability.

5.0 Contribution and impacts

According to the interviewees, the **AESS has very high profile and is highly recognised and respected not only in province of Modena, but also in the entire Emilia Romagna region.** The quality and intensity of the communication with all the stakeholders is very high. Besides a very well structured and informative website numerous leaflets and brochures are prepared and distributed to the target groups.

In early 2000s the energy efficiency and renewable energy market was relatively small on the level of province of Modena, region of Emilia Romagna as well as entire Italy. As Modena is one of the more industrial and prosperous regions, environmental awareness and innovation tradition have started to combine into formation of ESCOs as well as gradual increase in EE and RES industry. HERA has formed with a merger of several public utility companies and has started to provide more innovative public utility services and combine them with energy efficiency and use of renewable energy, e.g. at management of street lighting. Previously one of the shareholders of AESS, HERA is now one of its largest and most regular clients.

The number of experts in the EE and RES field in the Province has increased to 2700 and 85% of the businesses in this field is less than 2 years old. It is estimated that there are 4.000 – 5.000 companies that are directly or indirectly involved in the EE and RES business. Most of the projects in EE and RES are TPF (third party financing) because the banks do not

have an understanding for investments in the EE and RES and because of the investments diverted into this field from the automotive and machinery industry for which Modena is known.

The **expected energy saved** due to the investment of the three boiler houses at schools for example is 1.1 million m³ of methane, corresponding to 30.7% of the total heat consumption. The energy produced by renewables corresponds to the substitution of 44.000 kWh of electricity and 60.000 m³ of methane per year, increasing from 0% to 1.4% of the total energy consumption of the Province administration. The main economic benefit for the Province is the **improvement of the heating facilities without investment costs. Environmental benefits were estimated at 2.200 tons of avoided CO₂**. The project has high multiplier potential if the local administrations show interest in school energy efficient management and if there are sufficient ESCOs in a region. **It has been now replicated in about 20 Municipalities.**

The main drivers of changes are increased environmental awareness, legislative changes and the recession in the industry. Environmental awareness has been rising through various campaigns on national, regional, province and local level and even more so through policy planning. Local Agenda 21 have combined with Energy Action Plans to yield environmental effects as well as savings in terms of money and GHG emissions. Legislative changes have promoted use of EE and RES on all levels and changed taxation and lower production costs have caused the price of the PV panels to drop by 30-40%. In addition, due to the recession the industry is seeking harder for new opportunities in the field of EE and RES.

The interviewees at **Local Authorities** have pointed out that for them it would be very difficult without AESS to work on energy efficiency and RES on local level. First of all, they pointed out the lack of funding and even more so the mental barriers that prevented them from being active in this field. Not only they lack skills, but also found their employees incapable of innovative thinking, goal-setting and taking project management approach. Through cooperation with AESS this has largely changed, the **Municipalities' staff has become more flexible, proactive and oriented to seeking the opportunities**, not only solving problems, while AESS provides the expertise needed (e.g. feasibility studies, reviews of engineering design) and successfully links public and private sector. Moreover, through various AESS projects that directly (e.g. Purchaser Groups) or indirectly (e.g. through Energy Action Plans) targeted the general public and local communities, the inhabitants started to change their behaviour and invest in energy efficiency of their households. This was probably largely also due to synergistic effects of the projects that targeted schools. The mayor of Castelnuovo Rangone also stressed that through cooperation with AESS the work culture of the Municipality staff has changed and has become more goal-oriented, flexible and capable of thinking on a bigger scale and working on projects with an EU dimension.

AESS has influenced also the commercial market actors through training, innovative concepts (e.g. inclusion of LCA concept and CO₂ calculations for the EE and RES installations), quality control and certification and support to ESCOs. Here, interviewees pointed out the importance of provision of vast number of information, assistance at understanding the key issues and decision-making (e.g. in selection of the best services), scouting for good quality service and the best options.

No negative remarks from professionals or other businesses have been reported, due to a possible unfair competition of AESS in offering services to the private and public sector: AESS is seen as a promoter of new opportunities instead than a competitor.

The Agency has a well-established system of monitoring and evaluation of its work. It regularly reports both to the Management Board and Scientific Committee and publishes annual balance of the accounts and annual report briefs. **Output, result and impact indicators are measured on the project level** regardless of the project size and then integrated to show annual results. Thus it is possible to see e.g. the number of participants of AESS training courses, m² of PV installed, tonnes of CO₂ reduction, number of partners in a project, number of users of certain services etc.

6.0 Conclusion and future of energy agencies

“Snowball effect” for creation of new energy agencies exists through best practice projects and application of successful approaches to local authorities and businesses. In the opinion of the interviewees there is **no need for more IEE funded energy agencies** as they are satisfied with AESS.

Independent non-profit status of the energy agencies seems to be the most appropriate form as it stimulates trust and independent opinion. **However, the Energy Agencies in Italy face some problems at provision of certain services as they might be in conflict with the EU Utility Directive.** For example, inspection of boilers which is a substantial part of the Agency’s work, could count as a public utility service, falling below the corresponding regulation. A potential solution would be to create in-house expertise in the municipalities and fully separate it from other work of the agency. It also seems that the EACI and Managenergy have two different models of the operation of EU energy agencies, and that might produce misunderstandings in new agency directors.

Working closely with the local and province authorities has shown to be a success factor as it enabled capacity building for the authorities and efficient knowledge of the baseline conditions, local problems and potentials on the basis of which projects could be set up and implemented.

The Management Board should be composed of all the stakeholder groups in the area. In case of AESS, it has proven to be beneficial that it is supported by numerous local authorities that have low capacity and therefore high demand for AESS services. **An Energy Agency should employ minimum 10 employees** and build and maintain a strong network of external specialists that can at any time complement the staff with their specific knowledge needed for a project.

List of interview partners and consulted documents

Interviews date(s): 13th October 2009

- Mr. Marcello Antinucci, the Director of AESS
- Ms. Lalla Reggiani, Municipality of Castelnuovo Rangone (Modena)
- Mr. Florio Cavani, President of GEOVEST srl, a consortium of municipalities (main AESS client and partner), contact: presidenza@geovest.it
- Mr. Roberto Gasparetto, director of HERA MODENA srl, (local utility, energy distributor, AESS client), contact: Roberto.gasparetto@gruppohera.it
- Mr. Raffaello Silvestri, a private consultant having used AESS skills to assist SMEs in energy projects, contact: silvestriraffaello@virgilio.it

Documents:

- AESS Modena, 2009: AESS Modena: una storia di 10 anni con tanta energia (pulita). A PR leaflet for the 10th anniversary of AESS Modena, Modena
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Websites:

- <http://www.aess-modena.it>,
- <http://www.famigliesalvaenergia.eu/it/>,
- <http://www.innovativethinking.eu>,
- <http://www.enableimpact.eu>.

6.5 Podkarparcka Agencja Energetyczna (PAE), Rzeszow, Poland

1.0 Background and context

PAE²⁷ was founded in June 2006, in the Podkarparcka region (South-East of Poland, close to Ukraine and Slovakia). It was established by the regional authorities of Podkarpackie Province²⁸, along with 2 municipalities (Rzeszow²⁹ & Solina), and a Regional development agency (emanating from the Province), altogether forming the Management Board.

The agency staff is now 8. According to the agency, this rapid growth was due to the growing number of solicitations from stakeholders (individuals and businesses) asking for advises in energy projects.

2.0 Objectives

According to many stakeholders, before 2003 regional authorities (as well as national) were unable to understand and address adequately the *local* needs in terms of energy policy.

Things were addressed mostly through regulation and administrative process. Notably, very little was done to promote or simply support projects in the field of Renewable Energy (RE). However, de-centralisation, and the general evolution of the national situation, have demanded to address better the growing number of demands regarding RE investments. RE was gaining interest among many stakeholders, in particular businesses (SME) as well as in the public (mainly schools). The Province, backed with European development funds, had the will and funds to help implement renewable energy projects (subsidies to photovoltaic and windmills). However, adequate competencies were missing to properly assist private stakeholders or to provide sufficient support to communities.

Additionally, the administrative procedures for stakeholders' applications to grants and authorisations are said, by several interviewees, very long and complicated, and require a rather high technical knowledge.

The context situation of the EA project can then be summarised in 2 points:

- The need to inform the public and to support local actions aiming at awareness-raising, which needs a specific operational organization.

²⁷ Podkarparcka Agencja Energetyczna. www.pae.org.pl

²⁸ 2,1 M habitants, rather rural. The establishing authority status is a decentralised community with its own budget and Parliament, devoted to all kind of missions, except State's sovereign duties, including financing regional infrastructures, development, etc.

²⁹ Capital of the Province, 173.000 habitants, pronounced "Jeshouu".

- The heavy administrative burden still imposed on that field, despite reforms, restraining initiatives from private stakeholders, and calling for specific advising support.

In addition to these initial objectives and tasks, the Energy Agency (EA) has been asked to deliver more and more expertise and advice to support the Province activities. Those activities include legislation consultation or expertise in support to regional, or even national, policy-making (example: panel expert to the VISEGARD group³⁰).

The target audience of PAE is then broad:

- Individuals and SMEs (advising private energy saving or RE projects)
- Schools and all educational institutions (education to RE and energy efficiency)
- Regional and local communities (expertise in local energy policy design).

3.0 Institutional set-up

3.1 Legal status

Type of legal status: private entity, equivalent to a company.

This legal status is seen, by the EA, as a difficulty. A **Polish law** was adopted little before the creation of the agency, to **preclude creation of non-profit bodies** and NGOs by the public organizations, and devolution of procurements to this kind of organizations, to prevent favouritism or corruption.

This means that the EA cannot receive funds other than (1) private financing from businesses or individuals, (2) public procurements after competition, and (3) initial capital endowments. However, a significant part of the EA's missions pertains more to public missions than to specific individualised projects which would be financed individually. It is the case for education and awareness raising, or assistance to the public and to the SMEs in applying to energy saving or RE grants...

Then, due to this status, PAE has to earn its own resources on the market, but simultaneously to deliver a public service.

Both conditions cause difficulties but bring advantages too:

- When finding resources on the market (private contracts and public procurements) PAE enters -- at least potentially -- in competition with consultancy businesses, however it is non-profit and public-sector owned. No claim has been recorded yet, but this might be due to the limited range of the PAE in the consultancy sector up to

³⁰ Group made of Poland, Czech republic, Slovakia, Hungary.

now. The issue might then come up in the future, if and when PAE's range of activity increases.

- For public funding, the solution has been a mix of capital endowment, and of public procurement, obtained after competition (out of 2 such competition, 1 was lost, 1 won). This is still seen as an ambiguous position: in these contexts the EA acts like an ordinary consultancy, however its perception by the public authorities is probably biased. On the other hand, having to work both in the public sphere *and* with private businesses and individuals provides many advantages. The public-kind of some activities gives to the agency a specific view, reputation, access to networks, and, above all, reliability in terms of neutrality as regards private interests. And the private side of activities brings, on its part, a concrete knowledge of the “real life conditions”, which are of great help for expertise and participation to decision-making.

According to the EA, the best alternative would be a *Foundation*. Reality would then match better with the institutional arrangement, allowing both public financing devoted to “public mission” specific projects, and private financing for project direct support and advising. But again this is now forbidden by law.

3.2 Internal governance

Critical minimum size: according to EA, the critical minimum size is 3.

Composition of management board: the Province, the cities of Rzeszow and Solina, the Rzeszow Regional Development Agency, and a series of private companies. However, the proportion of shares is different from that of voting. The Province's vote rights are double its shares, which gives to the Province the control over practically all kinds of governance situations.

3.3 Funding

Funding structure³¹:

The total budget for 2008 was 168,172.37 € Table 1 presents an overview of the budget composition.

Table 5: Overview of budget 2008

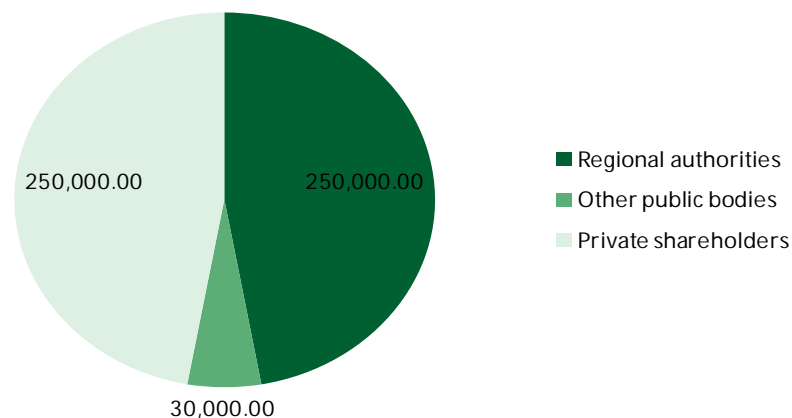
Expenditure	€	%
Sell of services	42,558.05 €	25%
Services for regional authorities	10,071.69 €	6%

³¹ Information on euro exchange rate: for the purpose of this calculation the exchange rate was taken 1 EUR = 4.18 PLN, but in fact the rate varies significantly through time from 3.4 PLN up to 4.5 PLN which means instability and problems with calculating values for international projects with budgets in euro.

Projects (including own funding)	115,542.63 €	69%
SUM	168,172.37 €	100%

The share capital amounts to € 126,794.26 (530,000.00 PLN). Its composition is presented in PLN below:

Figure 1: Composition of share capital



Approximately, up to now the funding structure of the EA has been 50% from services provision to private businesses, and 50% from public grants obtained from EU (different sources, incl. Human Capital Operational Programme from European Social Fund), or from Polish governmental bodies. Each of those 2 shares corresponds respectively to (1) advising SMEs in all kinds of energy projects (mostly RE projects) and (2) to educational projects, general expertise, and energy strategy design for municipalities.

Constraints from this funding structure:

Some projects or missions are not possibly undertaken due to this funding structure, such as information activities other than those specifically demanded by schools.

- *For instance, drafting a set of information for the potential small investors in wind energy (big investors are already well informed, and conversely there would be a need to inform better the SMEs so as to balance influences and improve access to capital). Those activities are not related to one specific stakeholder or one project leader. They should be then financed by the Province or other public authorities, on the basis of general interest. But this would either be in breach of procurement rules, or lead to tenders. However, tenders would mean that the initiative comes from the public authorities, with devoted time and qualifications, and with no guarantee of success for the EA. In these conditions, the initiative is not taken...*

Planned funded structure once IEE has expired:

Whatever the IEE funding evolution, the stakeholders (EA and establishing authority) are considering a change in the composition of the capital and of the management board very soon (beginning of 2010). It is foreseen that the Province will increase its participation up to nearly

100%, in lieu of other communities and of some of the private stakeholders (those who do not see their interest in EA board membership).

Besides, for further current resources, the EA will count on:

- At least maintaining, and if possible develop, private funding in exchange of service provisions (technical and administrative advising)
- In close co-operation with the other members of the EA consortium (Sweden, Czech Republic, Slovakia and Germany), a large scale project is proposed, *ICOSAW*, financed by IEE (other than EA funding).

4.0 Activities

4.1 Overview

The main challenges of the region include a lack of awareness rising on climate change, dependence to fossil fuels, energy efficiency, and administrative burdens. In Poland, at the turn of the century, carbon concerns were low in the public, the authorities and the businesses. Things are changing: the knowledge of energy is much greater, and the issue is now far higher on the priority list of many stakeholders. But this is due primarily to the raise of energy prices, and even more strikingly to the Russian cut in the gas delivery to Ukraine. Depending on fossil sources is seen as a problem mostly when it comes to foreign sources and strategic autonomy. The importance of coal in the Polish economy, and then in employment, is still very high in the national and regional concerns.

In terms of RE, the windmills implementation begun providing important tax revenues to the local communities, which was in itself a strong incentive to promote such projects (the region is second in terms of wind resources in the country).

The Province's leaders felt that they had to respond to this context, by offering support from a dedicated organisation to the local project-implementing organisations.

The agency sees the objective of “removing market barriers” as its overarching goal, and other objectives as means to achieve it: **education and action on regulations**, especially, are powerful means to remove market barriers. In the public sector and the corresponding missions (approximately half of the budget and, probably, of the activities), activities are:

- Providing support to **education** institutions for their classes, and for all kinds of educational activities. For instance, assisting a secondary school in organising a student competition on the topics of renewable energy and climate change, achieving broad participation and coverage by medias. It was cited as a successful example, thanks to the important participation from children who were, beforehand, not much concerned with applied science and techniques for climate change, and who enthusiastically attended the steps of the competition.

- A large impact on regional press coverage, a domain in which the EA is considered efficient, is also cited as a success criterion, by different interviewees.
- Providing expertise to municipalities in designing their energy policy and strategy. Here one example provided (including stakeholder interview) **involved the design of the energy and sustainable development policy of a local community** (city of Jasło, 60 km south of Rzeszów). Success was assessed here as derived from efficient technical and administrative support, which would have not been affordable by the community if not provided by the EA at cost-effective conditions.
- Assisting the Province for its activities, either by acting as an expert representing the Province, or by providing advices in policy-making consultations or projects.

In terms of support to the private sector, the main activities of the PAE are, by decreasing order of importance (up to now):

Renewable energy

In that field, the agency supports SMEs developing **windmills projects**. EA's action is there to provide information and advises on how to process administrative authorisations, apply to grants, and develop networks with local partners. Large businesses keep generally away from PAE, not wanting to tell much and not needing much information. Besides, PAE supports individual applications to solar thermal grants.

Energy efficiency

The agency helps individuals and SMEs to **design energy efficient projects, and to process the application to grants**. For instance, a couple of doctors building a new practice and applying to grants for energy efficiency construction and solar hot water installation. PAE assists in designing the project, but above all in applying to the EU or national grants managed by the regional authorities (the "Marshall", currently pointed out as imposing long and heavy procedures). One example of unsuccessful projects was provided here, with a private touristic company taking advantage from the EA in demanding intensive advising, and finally not paying anything. This situation is now averted by a drastic juridical reinforcement of contracts.

In parallel, the EA's experts are available to answer all types of questions from the public, regarding energy matters. Acting by phone consultation mostly, it delivers this service free, as long as the advice does not require going to the place, doing measurements, specific audits, etc. Those would be charged, but nevertheless are hardly ever asked for.

Transportation

The Province has transport competencies, thus PAE can effectively work on this domain in the future. PAE is already notably involved in a IEE-funded Compressed Natural Gas project.

The evolution of the context is a progressive *shift of needs*. The initial onus was put on *innovation* on RE, and on *implementation support* on EE. It appears now that IEE and the partner authorities should consider the reverse: support investments in RE, even casual and small, and **support more innovation in EE**. More generally, the rising awareness suggests to

increase efforts for EE, which is seen more available to all kinds of publics (not everyone can invest in RE, but everyone is concerned somehow with EE).

4.2 Assessment of the IEE programme

According to almost all interviewees, the IEE programme has recently generated great interest by stakeholders. Other regions are often asking questions and requiring advice; local communities turn more and more frequently to the agency for all kinds of energy issues.

Conversely, the EA notices that other IEE initiatives than funding for energy agencies are insufficiently known by the stakeholders. Many projects, which could have received support from IEE, were not presented and are abandoned.

According to the EA, the **IEE programme could be adapted further, in particular to allow small investments applications, and not necessarily involving highly innovative aspects.** Restricting to innovation and large projects is a problem for this region. There is a need to support more ordinary projects. In many cases, simply implementing a RE or an EE project, even with low innovation, is yet economically difficult and administratively adventurous for a municipality or a business. "If they apply to test something, they want to have it, once tested, as a reward to make it worthwhile" (EA).

5.0 Contribution and impacts

During many years, **the only significant example of renewable energy in the region was an important hydropower installation.** Yet this capacity was considered by the national authorities more as a reserve than as a resource for the current energy supply.

For the Province, the creation of the EA was an instrument to increase local energy sources by supporting concrete investments projects: windmills, small hydropower installations, solar energy, etc. All those actions derived from a fully different logic of action, from centralised and public based on technology and administration, to diffuse and private, based on information and funding. These changes are not attributed to the EA, but rather the EA was a condition for their existence.

At large scale, the **EA's value-added is its outstanding role in enabling communities to design and adopt local energy supply plans.** Without the EA, those plans (although mandatory) would probably be reduced quantitatively and qualitatively. And designing such plans is important to adjust locally the investments, for the region is very heterogeneous in terms of geography and economy.

Thus, according to the EA, the Region is now identified as "caring for" sustainable development, and the creation of the regional EA is taken as a benchmark or an **experience to replicate by other regions**, such as the Poznan region.

Another value-added, put forward by the agency, is a **slight improvement in the relations among private stakeholders on the RE market** (especially wind energy). Previously very conflictual, the general ambiance is seen as slightly better; some way of dialogue is now taking place, with the intermediation of PAE.

No specific indicators of impacts are monitored. Besides, the EA's final objectives have not been drafted with a quantitative target (*initial documents not yet read*). Interviewees (stakeholders as well as EA and authorities) consider that the role and impact of such an agency is too general and diffuse to be properly measured. Their assessment of the EA's relevance is generally high, and the criteria used are:

- Rapid and wide increase of fame and reputation of the EA in the regional media, and more generally in regional opinion. Intensive press coverage of EA's events and actions, frequent participation of its experts in broadcasts (TV relaying an educational movie more than 20 times; radio broadcasts inviting EA as the regional expert on energy and sustainable development, etc.) (2 stakeholders interviews)
- Availability of EA's experts to all kinds of demands and information requirements from the public, the communities and the SMEs. (3 stakeholders)
- Number of supported RE investments projects, (Establishing authority & 1 stakeholder)
- Awareness of energy concerns in adult and child population (1 stakeholder)
- Importance and quality of information transfer from general and EU expertise to local authorities (Establishing authority).
- According to one stakeholder, the performance of the EA in supporting investments, opening barriers, helping access to capital is limited by authorities' final decision making in terms of grants & subsidies, project support, etc. Having to deal with the regional administrations for the financial and technical decisions (authorisations), and being limited only to advising and helping process, is seen as a weakness of the EA. The system would be hindered by its too many intermediaries and its administrative burden.
- The number and ratio of supported project which succeed in being granted / subsidised.

On those criteria, the interviewees appear to rank high the EA's performance.

The EA declares to have implemented a monitoring of its achievements, including quantitative registration (such as number of attendees in events, etc.). Here is a sample of the monitored results:

A sample of monitored indicators in presented in

Activity field	Indicator	Value
Education	Students trained	1560
	Teachers trained	95
	Local authorities representatives trained	480
	General public trained	470
Information policy	Movie produced	1
	Brochures produced	2 (on regional renewable energy)

Activity field	Indicator	Value
		resources – 1000 issues; on solar energy – 13,000 issues, distributed for free)
	IEE regional information days organised	2
	IEE national information day organised	1
	Event organised within Sustainable Energy Week 2008 (conference, side events)	1
Dissemination of the IEE Programme	Participation in 6 conferences promoting idea of EA	1
	Assistance in creation of two new EA: in Poznan and in Olsztyn	
	Amount of money acquired for projects in RES and energy efficiency area	245200 EUR
Investment effects	Amount of money for investment acquired due to the EA assistance (only external sources, not entrepreneurs capital) – only private investors	5220000 PLN (1 248 804 EUR)
	Amount of money for investments acquired due to the EA assistance (only external sources, not own funding) – only public bodies	3400000 PLN (813397 EUR)
	CO ₂ emission avoided	114,683232 Mg/year
	Public buildings refurbished	1 hospital, 4 kindergartens, 3 schools, 2 sanatoria
Improvements for investors	RES database of the region (available on-line after free login: www.baza-oze.pl)	
	Plans of local energy supply (for municipalities)	3 (2 rural area, 1 town)
	Strategy of regional RES development	

Table 6: Sample of indicator

6.0 Conclusion and future of energy agencies

According to the EA, the SAVE/IEE programme appears as a convenient framework for EA's action, thanks to its recent update. This update is seen mostly as better adapted to local needs, in the way it better addresses the RE and EE investments for small units.

No specific “snowball effect” has been observed, except if one considers such the growing interest of other regions or cities for implementing an EA (Sestin, etc.).

Need for more IEE-funded agencies

Views on the need for more IEE-funded agencies are very **diverse**. Some would oppose the idea of multiplying the EAs at local level (with municipalities), on the ground that it would induce a kind of competition between the agencies, and that the identification of the European

legitimacy would be weakened by its dilution (2 stakeholders). Others claim that there is a large need for more local, detailed, concrete support, and that one regional EA will be soon limited in its capability for supporting all initiatives (2 interviewees).

Limitations on activities

The situation, status and range of the EA impose limits on its action as follows:

- Limitation of the number of small investors effectively assisted in their actions, due to the centralised nature of the EA (one agency for a 2.1 million inhabitants region) and its financial and staff limits.
- Limited role in financial action, by being a mere intermediate and technical support, as opposed to being able to directly grant small projects from individuals, and being able to actually assist in projects technical realisation.
- Limited counter-power to oppose to the energy lobbies (coal lobby, wind companies..).

Thus, the legal status is not identified by the stakeholders themselves as a limitation of the EA, but rather its limited expansion and power. Whereas the “insiders” (EA and authority) are more satisfied with the sharing of roles and powers, but would suggest easing the action of the EA, by strengthening its flexibility and range.

List of interview partners

Interviews dates: Oct. 26th and 27th, 2009

- Mr Piotr Pawelec, Director, PAE
- Mr Dariusz Surma, Director, Department Agriculture and Environment, Podkarpacka Province.
- Mr Ryszard Pabian, Mayor, city of Jasło.
- Mr Kalandyk, director, School of Niechobrz
- Mr Szczech, director, industrial bakery of Rzeszow

6.6 Gävle Dala Energikontor (GDE-Kontor), Gävle, Sweden

1.0 Background and context

Gävle Dala Energikontor (GDE) is a regional energy agency³² that covers the two counties Gävleborg and Dalarna with a total population of 552,000 inhabitants as well as three municipalities in two neighbouring counties³³. GDE was established by the County Councils Gävleborg and Dalarna in 1998.

The main stakeholders in the counties are the County Councils Gävleborg and Dalarna, the Regions Gävleborg³⁴ and Dalarna³⁵, which are advisory bodies of the counties' municipalities run by local politicians, the Chamber of Commerce as well as established energy companies, smaller renewable energy firms and the University of Dalarna.

Currently, the energy agency employs a total of **eight staff members**, i.e. one director, four project managers, two specialist and one support staff.

2.0 Objectives

Before 2003 when the IEE programme started, energy efficiency and renewable energies were not an important issue on the agenda of Sweden's counties and municipalities. In fact, the topic was perceived as important for policy makers on national level only with no direct implications for counties or local authorities. The energy market looked less diverse with only a few main utilities providing energy. Heating systems in industry and in public and private housing mainly operated on the basis of fossil fuels (oil). In particular, knowledge of RE technologies was very low among public authorities, the private sector and the public.

As a result of these concerns, the main rationale in the early years of the agency was to increase energy efficiency and the use of renewable energies in Gävleborg and Dalarna. This was seen as particularly relevant since the region Gävleborg and Dalarna has, with 100 MWh per capita, an energy consumption of almost double Sweden's average due to the presence of energy-intensive industry (steel, pulp, and paper). The aim was to use both surplus energy from the industry and resources from the large-scale forest industry for heating public and private buildings.

Two main changes to the agency's objectives were highlighted in case study interviews:

³² <http://www.gde-kontor.se/?action=SetLanguage&LanguageID=ENG>

³³ Älvkarleby kommun, www.alvkarleby.se; Norbergs kommun, www.norberg.se; Fagersta Kommun, www.fagersta.se

³⁴ <http://www.regiongavleborg.se/>

³⁵ <http://www.regiondalarna.se/>

1. With greater knowledge of biogas technology available in recent years, **biogas** also became a popular item on the RE agendas of public authorities in Gävleborg and Dalarna.
2. According to one representative of a public authority the focus of agency activities changed from the initial emphasis on identifying best practice examples of renewable energy policy, to **implementing these policies** by convincing the public and authorities to use RE technologies.
3. A public authority representative thought that GDE now also has the potential to **bridge the gap between the county and the municipality level and to reach out to local people.**

Despite these changes in objectives over time, the agency's **target audience can be clearly defined as the general public and local authorities** in Gävleborg and Dalarna. According to an interview partner from the County Council, changes in activities resulted more from changes in priorities within the public authorities than changed attitudes by the public since the local public in the region covered by GDE was reasonably aware of the need of EE at the time of creating the agency. For instance, although the agency was set up jointly by the County Councils of Gävleborg and Dalarna, Gävleborg started only in 2008 to concentrate its activities on energy-related issues because it saw a strong need to catch up with Dalarna which had visibly progressed in this field during recent years.³⁶

3.0 Institutional set-up

3.1 Legal status

GDE was established and is still operating as an independent, non-profit agency. According to a representative of the private sector, there were discussions to change GDE's status to that of a publicly-owned company. According to this interviewee this would have been a positive development which was however not implemented because officials in the public authority in Dalarna expressed worries regarding the agency's independence. It should also be noted that all other interviewees for this case study agreed that the status of non-profit public body providing impartial advice was more appropriate for the agency.

In addition, it should be pointed out that **the agency's legal status was not seen as the most important aspect of its operation and performance** by all interviewees. According to the agency's Managing Director for instance, the agency's office move from Hofors, a small and remote place, to Gävle was more important than its legal status in helping to increase the visibility of the agency and the effectiveness of its activities.

3.2 Internal governance

³⁶ The project Energy Intelligent Dalarna is cited as a European biomass success story under the Regbie+ project. Regbie+ stands for Regional Initiatives Increasing the Market for Biomass Heating in Europe and is funded under IEE.

The energy agency started with two staff initially but soon increased to three and later to four staff members. According to the first Managing Director of the agency, **three staff members is a critical minimum size** for an energy agency to operate effectively both in order to be able to cover relevant expertise and to be able to simultaneously manage several projects at any one time. For instance, essential staff expertise includes subject knowledge on energy-related issues, management skills, and communication and IT support.

At GDE, the Management Board consists of representatives of the public authorities and the private sector.³⁷ However, one of the interviewees from outside the agency stated that the composition of the management board did not reflect the actual distribution of influence over energy policy across the region. In particular, this interviewee noted that representatives of the large energy, steel and paper companies should be given the opportunity to form part of the management board. This is of even greater relevance, given that the agency does not have an advisory board due to its relatively small size.

3.3 Funding

GDE received a grant of about €170,000 under SAVE II for its 3-year establishment phase (1998-2001). This represented about one third of its total budget in this period and was perceived as sufficient by the agency.

In 2009, GDE's total budget was about € 559,050.³⁸ The agency received € 70,680 from the Swedish Energy Agency (SEA), € 25,000 from Region Gävleborg and € 20,000 from Region Dalarna. The sum of these grants represented about 21% of the total budget for the year.

The remaining 79 % of the agency's 2009 budget was project related funding from a number of other sources such as the European Commission, the County Councils of Gävleborg and Dalarna, the University Dalarna, the Swedish church and the Swedish Environmental Protection Agency (SNV). Table 1 presents an overview of the 2009 budget.

Table 7: Overview of budget 2009

Source	€	%
Swedish Energy Agency (SEA)	70,680 €	13%
Region Gävleborg	25,000 €	4%
Region Dalarna	20,000 €	4%
17 different donors with funding amounts of €1.500 and more	443,370 €	79%
SUM	559,050 €	100%

In other words, **the current funding structure is very fragmented** with 26 ongoing projects supported by 17 different donors and with 11 projects on a budget of € 10,000 and less.³⁹

³⁷ Members of the Management Board are Regions Dalarna and Gävleborg, university Högskolan Dalarna, and Ljusdal Energi AB

³⁸ 5,590,525 SEK. Exchange rate of 1 € = 10.95 SEK (January 2009)

Smaller grants are used by GDE mainly for organising conferences or workshops, for promoting EE and RE in brochures or for undertaking awareness raising activities in schools. However, it can be assumed that the large number of small projects limits the scope for achieving economies of scale and also requires that a large share of resources is dedicated to management tasks.

Private sector funding has been used for certain smaller projects such as several feasibility studies and for one large-scale biogas project which is partly funded by energy companies in the region.⁴⁰ At the same time, the agency emphasises the importance of maintaining its independence to ensure that public interests are not influenced by larger energy providers or other private industry interests.

The agency expressed that it was hard to secure sufficient funding after the SAVE II establishing grant had expired since a number of EU applications were not successful.⁴¹ However, some of the agency's partners emphasised that fundraising should have started in year 1 in order to ensure a smooth transfer from the initial SAVE II funding to other sources. Instead, the agency seems to have relied on follow-up funding without submitting tenders in this initial phase.

While the energy agency faced difficulties to secure funding after the SAVE II establishing grant had expired, the establishing authority interviewed as part of the case study stated that **a longer funding period would have only postponed the funding problem** but not resolved it. Instead, as mentioned above, it would have been desirable if the agency had felt responsible for securing its budget immediately from the time of establishment. This could be achieved if agencies start applying for projects in the year of creation to ensure sustainability once SAVE II funding expires. At the same time, the agency emphasised that the time-consuming nature of fundraising prevented it from major funding applications concurrently with the establishment process.

Future funding by the Swedish Energy Agency (SEA) for providing training to the obligatory energy advisors in the municipalities and for facilitating cooperation at county level has been approved by the government up to 2014 at the level of €70,680 annually and it is expected to be extended further. GDE is also a partner on a number of EU proposals (including a €620,000 proposal with DG REGIO). One of the County Councils emphasised its willingness to provide project-related funding but it is reluctant to support the sole running of the office and it is currently waiting for concrete proposals from the agency.

4.0 Activities

4.1 Overview

³⁹ 2009 GDE budget

⁴⁰ BiogasMitt which is described in section 4.

⁴¹ GDE does not know the reasons why the applications failed since it has not been their coordinator.

Energy efficiency, renewable energies and transport issues are high on the agenda of national authorities in Sweden and the **SAVE II programme is seen as a main catalyst** to push these issues from the national level to local counties and municipalities. As a result, public authorities interviewed as part of this case study confirmed that EE projects are designed in line with the SAVEII/IEE requirements.

GDE covers a wide range of activities in the fields of EE, RE and transport through different kinds of instruments. Generally, GDE's project contribution lies primarily in **awareness raising** aimed at changing behaviour and in the **dissemination of knowledge** (energy education at schools, training for municipalities' energy advisers and SMEs, and organising conferences). For instance, it collects data on energy consumption and breakdowns into sectors like transport, industry and public which are then reported to the County Councils on a regular basis⁴².

Over time the focus has changed from awareness raising in schools to EE measures such as heating systems in private houses (in particular heat pumps and pellets), to refurbishment of public buildings, and biogas cars which are high on the authorities' agenda at the moment. **Changes in the focus of the agency's activities are mainly driven by shifts in the political priorities of public authorities.**

In the field of energy efficiency, the agency promotes and advises on measures in public⁴³ and private buildings.⁴⁴ The project SMEEFEN was mentioned as particularly prominent. It is funded by SEA, Region Gävleborg and the County Council Dalarna with € 55,000 in total. It targets 21 SMEs in Gävleborg and Dalarna, offers an assessment of their energy consumption and recommendations to increase EE.

In the field of renewable energies, GDE promotes photovoltaics and micro-wind power in cities, and the usage of bio fuels in heating systems. Further RE projects include SWX-Energi, funded by DG REGIO with a geographical focus on North Mid Sweden and an INTERREG project in cooperation with Norway on cross-border cooperation on a RE platform (Förnybar Energi Miljö (FEM)).

Transport-related activities started more recently with a main focus on biogas for vehicles. GDE observed that other regions in Sweden⁴⁵ had advanced significantly in this field during the last years and the agency felt there was a need to catch up. As a result of these concerns, the agency became involved in the set up of a platform for developing biofuels for vehicles in Mid Sweden⁴⁶ and it supports a rail-taxi system in Gävleborg and Dalarna.⁴⁷

⁴² Energy statistics for the two counties: <http://www.gde-kontor.se/pages.asp?PageID=164&MenuID=1094>

⁴³ E.g. project Energy Services

⁴⁴ E.g. project SMEEFEN

⁴⁵ Uppsala and Västerås in the South, and Sundsvall, Östersund, Skellefteå, and Boden in the North

⁴⁶ Project BioDriv Mitt

⁴⁷ Project SkyCab

The most prominent transport related project however is BiogasMitt funded by DG REGIO and 19 Swedish funders⁴⁸ with a total budget of about € 600,000.⁴⁹ In this project GDE supports the cooperation of firms that are active in the RE sector for production and usage of biogas in Gävleborg and Dalarna and it promotes the usage of biogas cars (purchasing and rental) and the installation of charging stations. One representative of these biogas firms interviewed as part of this case study emphasised the benefits of networking with other companies as a result of this project and the potential for knowledge transfer on RE technologies from the agency to companies in the target region.

In terms of access to capital, GDE has expressed a reluctance to become associated with business interests. However, the agency does undertake smaller research tasks for the private sector on the basis of project-funding and it recently started the BiogasMitt project (outlined above).

Several stakeholders considered that transport, in particular biogas, had increased in importance in recent years. Expected benefits from additional transport initiatives are twofold:

1. Public and private stakeholders believed that this field provides **potential to work more closely together** than in the past. For instance vehicle companies can be contracted for delivering biogas cars to reduce the public sector's transport expenditure. **The agency could play a role in facilitating this cooperation.**
2. In addition, unlike awareness raising and information dissemination, biogas car production has a **direct impact on the local economy with more measurable and timely benefits.** **The agency's contribution in this regard could be to facilitate information collection and impact monitoring.**

4.2 Assessment of the IEE programme

The IEE programme was perceived by the EA as relevant catalyst to bring EE/RE higher on the regional agenda. Its size met the agency's need but after the IEE establishing grant had expired it was perceived as difficult to secure follow up funding. According to GDE's partners a requirement to start looking for follow-up funding early in the 3 years funding period would be useful to ensure sustainability.

5.0 Contribution and impacts

All stakeholders expressed a strong need for an energy agency in the two counties, in particular as a knowledge provider and as a network facilitator. As outlined above, GDE

⁴⁸ Public and private sector actors: Region Dalarna, Region Gävleborg, Landstinget Gävleborg, Länsstyrelsen Dalarna, Länsstyrelsen Gävleborg, LRF, Vägverket, Gävle kommun, Högskolan Gävle, X-Trafik, Dala Avfall (14 communities in Dalarna), Gästrikre Återvinnare (4 communities in Gästrikland + Älvkarleby), SITA, Dala Energi AB (Gagnef Leksand Rättvik), Borlänge Energi, Hofors Energi, Gävle Energi, Söderhamn Energi, Bollnäs Energi

⁴⁹ DG Regio provides about € 300,000.

indeed provides data on energy consumption and study results and it organises the dissemination of knowledge.

Public authorities see the main impacts of the energy agency on their daily work as twofold:

1. It **compiles relevant information on EE and RE**⁵⁰, and energy consumption data⁵¹ and for biogas-related projects.⁵²
2. It was **active in disseminating knowledge** at schools and at conferences.

This view was shared by the agency which also sees the main value of its current activities in information gathering, analysis and dissemination.

One of the biggest **impacts on local communities** was achieved through awareness projects in public schools and by promoting heat pumps and pellets as EE measures in public houses. According to figures provided by the agency's Managing Director, the use of fossil oil for heating in Gävleborg and Dalarna has decreased by 18.5% between 1998 (when the agency was set up) and 2005.⁵³

While there was a shared view of the agency's contribution and value added among agency and public authorities, the views of external stakeholders differed considerably. According to some interviewees, GDE's **visibility is relatively low** and **no major contributions to policy or legislative developments** are known, which may partly be due to the agency's leadership style and confinement of its activities to its public service mission. As one private sector representative noted, large and established companies benefit very little from the presence of the agency, whereas smaller and newer firms consider its service as beneficial to their business.

- Among larger industry stakeholders, "no major impact" was perceived and the lack of industry representation in GDE's Management Board was highlighted. However, the development of a curriculum for a study programme on energy and a feasibility study on RE promotion through "show and sell" are seen as a notable achievement though.
- At the same time, a small biogas company praised the networking effect that the agency's BiogasMitt project had on the company. Both, consulting with other companies in the region and gaining access to statistics, were seen as major benefits, and the company hopes GDE will provide more knowledge, in particular on cheaper production of biogas, in the future.

In terms of lessons for maximising impact, several interviewees pointed out that **the agency's networking role had great potential for improvement**. Interviews highlighted that public stakeholders at county and municipality level as well as commercial players are

⁵⁰ E.g. SMEEFEN

⁵¹ Energy statistics for Gävleborg and Dalarna, <http://www.gde-kontor.se/pages.asp?PageID=164&MenuID=1094> (in Swedish only)

⁵² E.g. BiogasMitt

⁵³ The consumption was 6.848 TWh in 1998 and 5.579 TWh in 2005.

very interested in engaging with one another to discuss regional matters. However they currently do not perceive GDE as a pro-active force in this effort and they wish it took more responsibilities in this regard.

While the agency believes that fundraising activities are very resource intensive, other stakeholders deplore **a lack of pro-activeness in leadership and a lack of ambition to engage in networking at a larger scale**. As a result of these concerns, Dalarna county council, one of the main stakeholders and establishing authorities of GDE, has set up a parallel network including municipalities, industry, business associations and transport providers, in its EnergiIntelligent Dalarna project.⁵⁴ Clearly, in the eyes of its main stakeholders the value of the agency in terms of networking is not fully exploited at present.

A second remark regarding the impact of the agency refers to the **fragmentation of its activities**. According to one commercial stakeholder, the large range of current activities prevents the agency from building up a recognisable profile as a central contact point with extensive expertise on a limited number of topics. This view was shared by public authorities, which would see value in consolidating activities to a smaller range of topics where the agency can take a leading role.

Finally, it is worth noting that the agency has **no overall performance monitoring system** in place. It reports to its funders on a project basis. However, it considers the number of meetings with different groups, the numbers of projects, articles, and advertisements as possible performance indicators though the agency acknowledges that there are significant difficulties in measuring actual “changes”.

6.0 Conclusion and future of energy agencies

Interviewees thought that there was **little value in additional energy agencies** in Sweden and that efforts should focus on strengthening existing agencies, including GDE. Particular emphasis was placed on the need for a **leadership style that promotes proactive networking across local stakeholders** with the agency at the centre.

In terms of activities, all stakeholders pointed out the **need to focus on a limited number of tasks where the agency can add most value**. Transport was singled out as a particular area of emphasis.

At the same time, one of the main challenges for the agency will be to combine in-depth expertise in a smaller range of topics with diversity of stakeholder preferences about which areas are most important. For instance, one interviewee saw potential in the further development of the biogas sector, in refurbishment measures in private houses and in SMEs. A representative of a private company thought the agency could provide useful consultancy service for SMEs and industry, e.g. in the printing sector. Additional potential was seen in

⁵⁴ http://www.dalarna.se/templates/dalarna/StartPageOther_____988.aspx?epslanguage=SV

promoting green tourism in Sweden. Public authorities pointed out that the agency could take an active role in the Counties' Regional Climate Strategy.

Irrespective of the topic, all stakeholders emphasised that the energy agency could improve its effectiveness and value added by playing a **more active role in networking, and facilitating exchange and transfer of knowledge between relevant stakeholders.**

In terms of internal organisation, the vast majority of interview partners believed that the status as an **independent and non-profit body was the optimal solution** at present. However, from the industry point of view, the **management board should - besides elected politicians – also include managers of the big companies in the region**, e.g. forest, steel, and energy companies. A representative of a small RE firm believes a wider steering committee (or advisory board) could add value though others thought the agency was too small for such an additional structure.

In terms of funding, one of the main lessons from GDE's experience was that **stable funding needs to be secured as early as possible after establishment** of the agency. While private sector sources proposed a combination of project-based funding and in-house resources, the agency itself places large **emphasis on its public service mission** which it sees as underwritten by financial independence from private funding sources.

List of interview partners and consulted documents

Interviews:

- Claes Rosengren, Managing Director GDE
- Ulla-Karin Enbom, Project Manager, GDE
- Anna Lindström, County Council Dalarna
- Mats Törnquist, Director Region Gävleborg
- Per Laurell, Director Gävle Energi AB
- Charlotta Ryd, County Council Gävleborg

Phone:

- Anders Goop, AB Borlänge Energi and former GDE Managing Director
- Leif Olsson, Neova bioenergy company

Documents:

- Regbie+ consortium and target GmbH, Regbie+ results, 2009
- Energikontor Sydost,, Regbie+ European Biomass Success Stories, 2009
- GDE, Gävle Dala Energy Agency, presentation, 2009.
- GDE, 2009 budget

- County Council Dalarna, EnergiIntelligent Dalarna, chart, 2009

6.7 Pomurje Energy Agency, Slovenia

1.0 Background and context

The Agency “Local Energy Agency Pomurje, Institution for Promotion of Sustainable Energy Development” (“LEA Pomurje”) is a regional organisation. It is located in Slovenia in the region of Pomurje in the Martjanci village. Activities of the Agency cover 27 municipalities and 130.000 inhabitants.

Agency was legally established on 30th March 2005 by five stakeholders (Institute for Research and Sustainable Development Martjanci - Smart House, SI.ENERGIJA – Association for the Sustainability of Resources, Chamber of Craft and Small Business of Slovenia – Murska Sobota unit, R-INK - a private entrepreneur and the Municipality of Moravske toplice as public authority and agency’s applicant (lead partner) for the IEE funds.

The agency is active since its establishment in 2005 on the basis of co-financing from European Commission - the Intelligent Energy Europe programme, co-financing from the Ministry of Environment and Spatial Planning as well as co-financing from regional sources.

At its establishment the agency employed 5 people, while today it employs 4 people. In March 2008 the 3-year IEE work programme funding expired.

2.0 Objectives

Before 2003, when IEE programme started, the importance of energy efficiency and the use of renewable energy sources in the region was already a recognized fact. The main reason was the proximity to Austria where the benefits of sustainable energy development were clearly visible. In 1991 ENSVET – a bilateral pilot project with Austria started; its long-term objectives were to create Advisory Network to help raise energy awareness, reduce environmental pollution, increase effective use of energy and to promote the use of renewable energy sources. In 1997 an Energy Office was established in Pomurje region but did not operate as efficiently as desired. The reason was that there were no organised activities; the provision of services was given in the office that was far from other cities, villages etc. The need to create an energy agency came from local energy experts in the region.

The current strategic objectives are to promote and facilitate continuous improvement of energy efficiency and accelerated deployment of renewable energy sources in the area by adhering local energy self-supply and enhancing well-being of people living in the region. Additional objective of the agency is implementation of renewable energy and energy efficiency and environmental protection at all levels.

Despite the fact that the agency mission did not change over time the focus of energy agency **activities changed from initial emphasis on renewable energy to energy efficiency**

activities. Target audience is clearly defined as the general public and local authorities, as shown by the interviewees.

3.0 Institutional set-up

3.1 Legal status

Since its establishment the agency has the status of a non-profit organization. No disadvantages of such legal status were recognized. The alternative type (status of profit organization) was considered but this status has the disadvantage that some of the funding sources are limited to non-profit organisations only. It was as well recognized by the interviewee from the public authority (Municipality Puconci) that the status of a non profit organization provides equal possibilities with regards to offering services for all on an equal basis since it is not focused on provision of services for profit. All interviewees agreed that the status of non profit public body providing impartial advice is the most appropriate status.

3.2 Internal governance

When established the agency employed 5 people and was funded by IEE work programme, while today it employs 4 people: managing director, two project managers and a secretary. According to the Managing Director and the Director of Sinergija Development Agency three staff members is a critical minimum size for an energy agency to operate effectively. All interviewees have agreed that the appropriate team structure has great impact on the success and sustainability of the agency. **The team structure should include experts in economics, energy and management experts.**

All interviewees agreed that the composition of Management Board was appropriate and as such stays the same even after expired IEE programme. The **structure of the Board is interdisciplinary** and consists of 12 competent members **that enable credibility and are representatives of different regional stakeholders (municipalities, companies, independent consultants)**. Thus, representatives are from private as well as public sector. It is important that the members of the management board are the people who have expertise and well established position in the region in order to bring success and sustainability of the agency.

No Advisory Body or Evaluation Committee was established during the LEA activity. The tasks of the supervision and evaluation were divided between The Assembly of Members and Management Board in compliance with the national regulation. Specific evaluation assessment of individual projects and preparation of proposals for further projects were implemented on the basis of individual consultations with experts from specific fields. The Assembly of Members and Management Board consist of different members; this is in accordance with the Institutes Act (Official Gazette of Republic Slovenia, No. 12/1991, 8/1996).

3.3 Funding

LEA Pomurje received an IEE grant of 174,137.66 € which represents 43% of the overall budget for the 3-year programme period 2005-2008. The total project budget (implemented and expected) for this period 2005-2008 was 407,395.41 €. The agency received other funding: 5% from Sinergija Development Agency, 32% from Ministry for Environment and Spatial Planning, 25% from Municipalities in Pomurje Region and 37% from the Regional Development Agency. Table 1 provides an overview.

Table 8: Overview of budget 2005-2008

Source	€	%
IEE grant	174,137.66 €	43%
Sinergija Development Agency	12,518.78 €	3%
Ministry for Environment and Spatial Planning	75,124.02 €	19%
Municipalities in Pomurje Region	58,484.25 €	14%
Regional Development Agency	87,130.70 €	21%
SUM	407,395.41 €	100%

Since March 2008 the agency is financed 100% from EU programmes or other related funding sources (IEE, ERDF, MED Programme, etc.) on the basis of projects. Due to the long waiting periods of payment for project costs the agency applied for a bank loan last month. It is possible that in the future private or public sector funding might be used through smaller projects (local energy programme, feasibility studies).

The managing director stated that without IEE funding the establishment of agency would not be possible. He believes that the 50 % share of co-financing is a low percentage share. The 50 % of co-financing share is on the other hand more suitable for taking care of own financing once IEE funding structure expires compared to 75 %. **It was suggested that 4-year IEE funding with progressive reduction of funding would be more suitable:** in the first year, during set-up of the agency the funding should be 100%, the second year 75%, the third year 50% and the fourth year 25 %. The aim of such funding would be easier adaptation to changes once the IEE funding expires.

There was no lack of funding up until now, so no activities were discontinued due to lack of funding.

4.0 Activities

4.1 Overview

It was recognized by all interviewees that the agency is specialised in energy efficiency and renewable energy issues. The managing director as well as the representative of public authorities (Municipality of Puconci, Murska Sobota) stated that the activities with regard to energy use in transport were not undertaken due to the heavy transit traffic in that region

(most of truck transport from central EU to Greece and Eastern Europe goes through the region).

LEA Pomurje project contribution lies primary in changing public/business behaviour, dissemination of knowledge and awareness rising followed by policy promotion. This can be recognized through the projects and activities, which they have completed or are still being implemented by the agency:

1. **Preparation of strategic documents in the field of energy in the Pomurje Region and local communities**, i.e. Local energy concepts in the Municipalities (strategic documents for 11 municipalities), Energy concept of Goričko Landscape Park, Energy Balance Calculation of Pomurje and Vision of Use of Energy in Pomurje 2007-2013, Study of Energy Efficiency in Buildings in Pomurje with the thermo diagnostic method and preparation of norms for technical characteristics of construction elements to prevent heat losses, Regional Development Plan for Pomurje region 2007-2013 (content related to RES and EE).
2. **Projects and activities for the implementation of strategic documents** i.e. energy management for the implementation of Local Energy Concepts, implementation of energy-related projects of different stakeholders (local communities, enterprises, individuals) into practice.
3. **Education and promotional projects on OVE and URE** i.e. COVE –The road of renewable sources (funding source: Interreg Slovenia-Austria), “Energy efficiency for better tomorrow” (preparation of the curriculum and trainings and qualifying for the housekeeping), “Energy efficiency regeneration and construction of buildings” (preparation of the curriculum and trainings for the enterprises), Biogas-challenge for agriculture and energy production, Green energy of Pomurje - promotion awareness activities and a brochure, NIMSEC – “Novel and Integrated Model of Sustainable Energy Communities”

The examples of particularly successful projects are:

- Collaboration at preparation of Regional Development Plan for Pomurje Region 2007-2013 for better incorporation of planning of energy use on regional level. The Regional Development Programme incorporates analytical, strategic, and implementation section of RES and EE.
- Project “Smart House”- Reconstruction of old public school to demonstrate energy efficiency and use of renewable energy. The agency participated in all activities from seeking of various funding sources, providing experts (e.g. construction, energy systems), coordination of all parties in the process etc. The agency activities were funded from IEE funding structure. The partners in the project were Sinergija Development Agency and the Municipality of Moravske toplice. The building represents a good example of efficient energy and renewable energy use, use of efficient technological equipment, preservation of cultural and historical heritage, the use of

traditional materials, etc. Since the building is available for all interested public through different cultural and educational activities taking place in it, it contributes to higher public awareness of inhabitants in the region. The building was owned by the municipality of Murska Sobota and is now owned by the Institute for Research and Sustainable Development Martjanci - Smart House.

- In the project "Young people create a sustainable future" Local Energy Agency Pomurje, was the contractor of the Ministry of Environment and Physical Planning, Department for Operations and Efficient Use of Renewable Energy. The main purpose of the project was to raise awareness among inhabitants with an emphasis on young people. Project target group were students in elementary schools / children in kindergarten. The main objectives were: primary education on the importance of renewable energy and energy efficiency, indirect effect on persons who are associated with young people - the transfer of knowledge and awareness, increase in energy savings - energy awareness, awareness of the use of renewable energy and energy efficiency. The percentage share of Ministry for environment and spatial planning was 25% or 2.500 EUR and the percentage share of LEA Pomurje 75% or 7.500 EUR. 46 primary schools were involved in the project and the following activities took place: development of more than 500 products on RES and EE, preparation of e – booklet, 1350 presentational brochures, and 3 publications on the website (initial and final publication and dissemination on www.pomurje.si), etc.

An example of an unsuccessful project is the workshop "Elimination of the Typical Errors in the Construction Procedure", where the objective was to educate constructors and eliminate construction errors to gain greater energy efficiency of buildings. The project was funded from IEE funding structure. The project consisted of a workshop that was prepared by the agency. The project was unsuccessful due to lack of workshop participants since the agency was at the beginning of its operation and not enough promotion was made. The partner in the project was an independent construction consultant.

The change over time is recognized in **greater emphasis on energy efficiency compared to renewable energy, strategic regional planning and implementation of activities** (from the general to the specific). The shift from RE to EE was made due to observation that promoting RE does not have sufficient effect if the EE remains poor. Therefore the Agency has shifted its activities from substantially promoting the RE (70% of activities targeted RE, 30% targeted EE) to promotion of EE (nowadays, 70% of activities target EE and 30% target RE). This tendency is supposed to last in the near future.

The activities also became more specific – i.e. from general awareness raising and promotion of RE and EE to activities **like energy checks of buildings, practical advice on selection of materials and technologies** for energy efficiency etc. Also this trend is expected to last in the near future.

4.2 Assessment of the IEE programme

As more appropriate **4-year IEE funding with progressive reduction of funding was suggested**. The first year when setting up the agency the funding should be 100%, the second

year 75% third year 50% and the fourth year 25 %. The aim of such funding is to adapt to change easier once funding structure of IEE expires.

5.0 Contribution and impacts

All interviewees recognised the relevance of the energy agency existence in the region as very high, in particular with regards to knowledge dissemination through awareness rising projects and provision of information on EE and RES for all interested individuals or parties in the region. Before IEE funding started there was a certain level of knowledge in the region but no serious interest in EE or RES. There were as well no provision of services or guided activities on EE and RES. The awareness on EE and RES was low and there was no local or regional legislation that incorporates EE and RES.

As stated by the managing director and the representative of private entrepreneur, the **demand for changes in the EE and RES sector appeared when increase in prices of fossil fuels occurred. Knowledge transfer from Austria and knowledge of local experts on RES potential in region also had significant influence.**

The resulting changes include the systematic approach and inclusion of EE and RES into strategic regional documents, establishment of energy cluster, higher percentage share of inhabitants implementing RES and EE systems as well as more frequent and easier access to target groups.

To local communities the agency brings added value with dissemination of information on EE and REA. Added value can be recognized as well in preparation of Local Energy Concepts and implementation of activities of the local energy manager within the municipalities. Higher usage of geothermal energy is recognized among the commercial market actors and there is an increase in number of companies in the region that are dealing with energy related issues.

The agency brings added value to public authorities with provision of support on EE and RES in projects that focus on EE or RES. The director of local energy agency and director of development agency Sinergija pointed out as well the agency's active role in policy making at national level as well as at regional level. Under agency initiative and organization the joint contract on establishment of the National Consortium of Energy Agencies was signed. The Consortium has been supported also by the Ministry of Environment and Spatial Planning and by the founding Municipalities. The contract partners have expressed a joint interest for collaboration and mutual support in energy related issues, including policy making. The agency representatives have met regularly within the Consortium with the representatives of the public authorities (Ministry of Environment and Spatial Planning). On these meetings concerns were discussed and guidelines for the regional level with regards to the energy sector were presented. The agency actively participates in preparation of national legislation by sending its suggestions and comments on draft documents. With its active role in preparation of the Regional Development Programme of Pomurje Region 2007-2013, the agency succeeded at promoting and implementation of RES and EE on regional level.

The agency director explained that the agency established a **system of self-assessment**, with the set of the following indicators: participation in national, regional or local projects, preparation of studies, leaflets PR booklets, organisation of local or regional workshops, seminars and conferences, participation in conference on EE and RES, preparation of international, EU, regional or national projects, participation in IEEA/EACI activities, number of web page visitors. The reduction in energy use or number of applied RES system at local level is not measured at the moment by the agency. As said by the director of Sinergija Development Agency the rise in public awareness is recognized in rise of interest among inhabitants of the region.

6.0 Conclusion and future of energy agencies

The Pomurje Local Energy Agency was the first energy agency in Slovenia. The members of Local energy agency actively participated in creation of new energy agencies in Slovenia and Croatia. There is no need for more IEE funded energy agencies in the region. The activity that is considered as relevant but is not implemented at the moment is management of a model of TPF projects (Third Party Financing – TPF) as director of agency pointed out. TPF projects cover the planning, financing and installation of new equipment, command and control operations, servicing and maintenance, eliminate interference but also motivate energy consumers. The idea is that TPF projects would take place wherever there is insufficiency of own funds to invest in new or improved energy systems, especially in the public sector and in small and medium-sized enterprises. This gives the opportunity for their recovery and thus increases energy security, reduction of costs and energy use, improves housing conditions and reduces adverse environmental impacts. The main types of contract to ensure a reduction in energy costs are: contracting of energy supply and energy performance contracting. LEA is not implementing and is not involved in any of TPD projects because they have no funding for it, as the director pointed out.

On the other hand, **long waiting periods for refunds for projects co-financed from various funding programmes were recognized as hindering factors**. The representative of Municipality of Murska Sobota pointed out that sometimes the tender conditions are too complex and therefore decrease for potential for successful application. The agency legal status of independent non-profit organisation is recognized as appropriate among all interviewees. The public authority should be more determined in implementation of EE and RES measures, as an example of good practice. In the future the structure of management board should stay the same; the agency's capabilities can be strengthened by additional employment of staff, so that the outsourcing would not be necessary.

List of interview partners and consulted documents

Interviews date(s): 20.10.2009

Mr. Vogrin•i•, director of Local energy agency LEA Pomurje

- Director of Local energy agency LEA Pomurje

Mr. Stanislav Sraka, director of Development agency Sinergija

- Supporting organization in establishment of local energy agency in Pomurje region.
- Co-financing of all necessary activities on behalf of Pomurje region municipalities and Regional Council
- Agency partner on projects

Mr. Stojan Habjani•, private entrepreneur Biogradnja s. p.

- External agency expert
- Member of management board

Mr. Anton Štihec, mayor of Municipality Murska Sobota

- Agency's notifier
- Agency's legal representative

Mr. Ludvik Novak, mayor of Municipality Puconci

- Consent to agency establishment
- Subscriber of agency services

Documents:

- Final technical report_ 17th of November 2008_39 pages
- Short presentation of the agency_ November 2008_5 pages
- Financial statement (Annex III)_1.december 2008_8 pages_ for period 16.5.2005 – 31.12.2006
- Financial statement (Annex III)_1.december 2008_8 pages_ for period 1.1.2007 – 16.10.2008 LEA Pomurje, Short presentation of agency, Martjanci, November 2008
- DA Sinergija, Declaration of co-founding, Grant agreement: EIE/O4/Type 2/222/S07.38882, Moravske Toplice, May 13th, 2005

6.8 ALIenergy, Argyll, UK

1.0 Background and context

ALIenergy⁵⁵ is a regional energy agency in Scotland. The acronym stands for “Argyll, Lomond and the Islands” and covers the Argyll County and the isles Bute and Arran with a total population of about 100,000 inhabitants on 6,930 sq km. This territory has a coastline longer than that of France and covers 25 inhabited islands. This geographical setting implies a very **low population density and long distances** between the towns and villages and presents a key feature of ALIenergy’s engagement. The County is rich in timber as a resource for biomass heating although difficulties in its supply need to be tackled.

ALIenergy was established as a company limited by guarantee with charitable status by the Council of Argyll and Bute in 1999. The agency started with 3 staff members and currently employs 10 persons.

2.0 Objectives

Before SAVE funding started to set up ALIenergy, there was little awareness by tenants about energy-efficient behaviour and neither was energy high on the agenda of the local authorities. According to a representative of the Council there was no unit or staff member dealing with energy-related issues in the Council when the application for SAVE funding was submitted. Additionally, the Argyll and Bute County faced a large stock of old houses with inefficient heating systems, mainly based on oil.

As a consequence, **refurbishment of buildings and awareness-raising** among the general public and the public authorities were the initial objectives of ALIenergy, and the agency focused on building insulation during its first five years of existence.

Due to the availability of large funding⁵⁶ through the *Scottish Biomass Support Scheme (SBSS)* ALIenergy shifted its focus to biomass energy mainly. The scheme provided grants to support both supply chain and heat installations. The follow up is the *Scottish Biomass Heat Scheme (SBHS)* which was launched in October 2008 and which is funded by the Scottish Government, Forestry Commission Scotland and the European Regional Development Fund. Total funding is £3.3 million and it aims to encourage the installation of biomass heating systems in business premises and district heating demonstrators, in particular for small-medium sized enterprises.

The agency’s target audience can be clearly defined as the general public. Representatives of the local authority, private business as well as a housing association

⁵⁵ ALIenergy website: <http://www.alienergy.org.uk/>

⁵⁶ £ 7.5 million over the financial years 2006/2007 and 2007/2008

emphasise the great benefit ALLenergy provides by reaching out to tenants and disseminating information on available grants for the refurbishment of buildings and technical advice on installations.

3.0 Institutional set-up

3.1 Legal status

ALLenergy was established and is still operating as a company limited by guarantee with charitable status. However, it is based in the building of the Council and is using its payroll, purchase and financial system. According to ALLenergy, the agency benefits from this commercial support; in particular as it helps to overcome temporary cash flow problems which occur due to the grant-funded nature of its activities. However, using the Council's financial system also implies time-consuming procedures of finance management activities. Due to access restrictions, ALLenergy does not use the Council's IT system.

None of the interview partners indicated that the non-profit element of the agency's legal statute was problematic. Instead, according to the agency staff, the main factor restricting ALLenergy from undertaking additional activities are capacity issues.

3.2 Internal governance

ALLenergy is led by a Board of Directors which consists of seven members from public authorities, the private sector, university and the non-governmental sector and meets once every 6 months. It is chaired by a representative of the private sector. Initially, the Board was dominated by Council staff but has opened up to other players due to expected benefits of securing more work by linking up with the business and the academic side. There is no separate Advisory Board but nominated advisors from the Council and the Forestry Commission Scotland attend the Board meetings. Additionally, there is an **Operation sub-group** which includes the Chair of the Board, the agency's Manager and a representative from the Council. This group meets as required and typically about once in between the Board meetings when quick decisions need to be taken and the Board is not able to get together in short notice.

All interview partners expressed satisfaction with the composition of the Board and its meeting schedule. It is seen as well balanced and stable over time. However, the Council mentioned **difficulties to recruit new Board members** since the engagement is on a voluntary basis and the expected benefits are relatively small. This view was confirmed by Scottish Power, the main utility in the region, which was invited to become a full Board member but decided to take an advisory role instead. It does not see additional benefits in full board membership and believes it already supports ALLenergy by providing a revenue stream in the context of an education project at schools and by advising on EE measure monitoring.

ALlenergy started with three staff initially and employs ten persons at present. According to its first Manager, **three staff is the critical minimum size** for operating effectively: a manager, and two experts who are undertake administrative tasks.

3.3 Funding

ALlenergy received initial funding under the SAVE programme of £105,000 in the period 2001 to 2004.

According to the agency's Manager, **ALlenergy did and still does experience difficulties following the end of SAVE funding**. ALlenergy is able to secure project funding but difficulties are faced due to

- the increasing competition with other charitable organisations for limited funding budgets;⁵⁷
- the fact that core funding, such as office overheads, management and administrative costs are ineligible costs in most funding schemes.

Between 2004 and 2006, ALlenergy delivered the community renewables grant scheme (SCHRI) in Argyll, funded by Highlands and islands Energy Company (now Community Energy Scotland, CES) and which represented a significant share of ALlenergy's budget. However, the previous ALlenergy Manager decided not to re-tender for the contract and CES now provides this service in-house. As a consequence of this cut in budget and other failed tenders, **staff temporarily had to be reduced from 7 to 3** for the period summer 2006 until May 2009.

ALlenergy has overcome this difficult period, in particular due to a large grant by the Scottish Climate Challenge Fund, **but according to the managing director, the funding situation remains fragile**. All funding in 2009 is secured from public sources with EU, national and local level authorities involved. Table 1 outlines ALlenergy's current funding structure.

Table 9: Overview of budget 2009

Source	£	%
EU LEADER programme	£18,000	7%
Climate Challenge Fund	£135,000	50%
Scottish Power Energy People Trust	£50,000	19%
Scottish Government's Third Sector fund	£24,000	9%
Forestry Commission Scotland	£12,500	5%
Argyll and Bute Council	£20,000	7%
Argyll Windfarm Trust	£8,000	3%

⁵⁷ Until about a year ago, ALlenergy was the only organisation involved in energy issues in Argyll but this market has rapidly expanded in the past months. Anecdotic evidence highlighted one case, where a large grant from the Energy Saving Trust was given to an Edinburgh-based agency to undertake activities in ALlenergy's defined coverage region.

SUM	£267,500	100%
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The Council also provides support in kind such as the office and commercial support facilities. Initially, ALLenergy staff was paid directly by the local council but the Energy Saving Fund and other grants schemes did not allow this arrangement to continue. The Forestry Commission Scotland acts as co-applicant for tenders for the ESF and the ERDF. For a national tender ALLenergy partnered with Orkney, Western isles and Highland Councils but this bid was not successful. The Forestry Commission Scotland has also signed a cooperation agreement with ALLenergy that provides for small payments for advisory service as indicated in **Error! Reference source not found..** Scottish Power Energy People Trust funds an education and awareness raising project.

Over the years, ALLenergy's income sources have changed from mainly EU grants, to a combination of local government and earned income (contracts), through to the current position of mainly Scottish Government and charitable trust grants.

Since **overhead costs** are not covered under most project funding schemes, ALLenergy has to generate incomes of around £ 20,000 per year to cover these costs. Therefore, the agency is seeking contract work from commercial players to fill this finance gap.

In the future, ALLenergy expects the composition of the budget to change considerably. On a positive note, it will receive more income from the **Wind farm Trust** which was established by Argyll and Bute Council for wind farm developers to make voluntary payments into a community benefit fund. 60% of these payments go to the local community affected by a wind farm development and 40% go to ALLenergy to spread the benefits of advice/support on energy saving across Argyll.

On a negative note, the funds that the agency receives from the Council and which cover core costs may be under threat due to the current cuts of local authorities' budgets.

ALLenergy has been investigating project funding in order **to generate additional income.** It has been collecting wind data for 18 months with the intention of developing its own wind turbine (approximately 500kW). However, this has met with various difficulties such as wind turbulence/wind share concerns at the site in question; grid connections; planning and various technical issues but ALLenergy is continuing to investigate this option.

4.0 Activities

4.1 Overview

ALLenergy's initial focus of activities was on building insulation and wind power. Due to new funding opportunities through the Scottish Biomass Support Scheme (SBSS) since 2006 and Scottish Biomass Heat Scheme (SBHS) since 2008 it shifted its focus to wood fuel boilers. **Currently, education and information dissemination and wood fuel boilers are the main**

focus. Since the Council has given its responsibilities on social housing to local housing associations these associations became partners for ALLenergy as they seek advice on technical solutions.

ALLenergy is mainly active in the field of EE information dissemination and education and in RE, in particular biomass-based heating system. It informs tenants about available grants and application procedures, and public bodies and housing associations about technical specifications of installations. Transport-related projects have not played a role up to now as this issue is not on the regional agenda. The agency is aware of the need to promote and advice on concrete investments but doe to problems in previous installations as outlined in Chapter 4.3 ALLenergy is not strongly involved on the implementing side yet.

According to ALLenergy, a particularly successful project is a Climate Change Fund (CCF)-funded 2-year project that raises awareness of energy issues among tenants, private companies and communities and provides them with information on grants of the *Scottish Energy Assistance Package*⁵⁸ and technical advice on installations. For this purpose ALLenergy **set up a network of associated information points at existing organisations to inform about EE and RE.** So far, seven of these information points have been set up and ALLenergy trained their staff and provided information material. This project was also highlighted by partners such as a housing association which confirmed that it raised ALLenergy's profile in the region and had positive networking effects.

Fyne Homes, a housing association, highlighted a Scottish and Southern Energy-funded awareness raising project which was undertaken with ALLenergy in 2007⁵⁹. A team of two advisors went for "**Energywise Roadshows**" in a mobile outreach vehicle to several towns in Argyll to inform and advice on EE. They promoted low-energy light bulbs, handed out energy feedback devices which monitor energy consumption in tenants' homes and informed on social tariffs for energy bills.⁶⁰

ALLenergy and all its stakeholders see a strong need to continue the agency's activities in information dissemination on grant opportunities and advice on technical issues of biomass heating installations. All players interviewed see a **potential in local timber as a resource for biomass heating.** Timber is also outlined as key issue in both the Scottish Forestry Strategy 2006 and the Climate Change Action Plan 2009 – 2011 by the Scottish Government. **However, a number of difficulties have to be overcome:**

- In the past, the **supply chain** for the usage of biomass heating was interrupted and caused a heating cut for a number of households connected to this biomass system.⁶¹ The Forestry Commission stated that most of Argyll's timber is shipped to other parts of

⁵⁸ Energy Assistance Package by the Scottish Government: <http://www.scotland.gov.uk/Topics/Built-Environment/Housing/access/FP/eap>

⁵⁹ Fyne Rural Outreach Resource and Information Service, Fyne Homes winter newsletter, 12/2007, p. 1 <http://www.fynehomes.org.uk/docs/WinterNewsletter.pdf>

⁶⁰ Energy Efficiency Road, Dunoon Observer, 15 February 2008, p. 24

⁶¹ Interview with Fyne Homes

the UK and the timber delivered for heating systems happened to be wet and thus of insufficient quality for the heating system. While the county is interested in retaining processing in Argyll and using local timber for heating, it is the market which determines where the wood is processed and this leads to concerns by tenants and local suppliers about the availability of heating material.⁶²

- In the past, **incorrect installation** caused leaks in the system, noise and smoke, and **inadequate advice** led to the installation of an oversized boiler and to its inefficient use.⁶³
- The Council pointed out that they decided against the use of RE for their new buildings for **cost** reasons. First, biomass heating is not sufficiently available or reliable as a single mean of heating and thus needs to be backed up, mainly by oil-based systems, which causes additional costs. Second the price per unit is still high due to the relatively low number of total units needed for one heating system.
- **Start-up businesses face economy-of-scale problems** which makes it difficult to test technology.

Due to these difficulties there is some scepticism among tenants and private businesses to continue with similar installations without positive testing results. A housing association highlighted the need to present positive examples and believe the **public sector could go forward with installing biomass heating systems in their buildings**. The council however initially discussed the installation of biomass heating systems in 10 of their buildings but is sceptical itself and at present considers this installation for 5 buildings only. It also emphasised that changing heating systems of council buildings is not its priority.

The Forestry Commission hopes ALLenergy will continue informing the public about grant opportunities, providing technical expertise on heating systems and informing other actors about current developments on the market.

The Council and Scottish Power see **potential for future activities in offshore wind farms**, in particular once the expected 2010 UK Clean Energy strategy will have been approved.

4.2 Assessment of the IEE (SAVE) programme

The funding received under the SAVE programme was perceived by the energy agency as effective to boost its activities 2 years after ALLenergy's creation. Since securing follow-up funding occurred difficult for the agency it was proposed to set incentives for early application for additional funding to ensure a smooth shift once IEE has expired.

5.0 Contribution and impacts

⁶² Interview with Forestry Commission Scotland, 11 November 2009

⁶³ Interview with Forestry Commission Scotland, 11 November 2009

All stakeholders interviewed for this case study expressed that ALLenergy's most significant impact is on the general public. According to a presentation by a Council official "[t]he agency has become a catalyst for energy activities in Argyll and Bute on a wide range of fronts and performs a critical role in increasing awareness and improving public opinion of renewable energy schemes."⁶⁴

In order to measure contributions and impact, ALLenergy has **monitoring systems in place for each project**. There are project-related indicators such as numbers of households receiving info/advice, estimated carbon savings; number of schools receiving education workshops etc. ALLenergy also gathers feedback following events/education or training workshops, in the form of questionnaires.

A number of examples of direct contributions are outlined below:

- The 200 kW automated **wood fuel boiler for a community-owned swimming pool** at Lochgilphead, Argyll – owned and run by ALLenergy – is a successful example using local timber for heating purposes. Additionally, three wood fuel boilers were installed by two housing associations at Whitegates, Lochgilphead and Campbeltown with advice by ALLenergy.⁶⁵
- The Council sees ALLenergy's main asset in its ten years experience in the field and in its advice on different technological options for heating systems. It stresses that ALLenergy is doing an excellent job in **reaching out** to private households which the Council would not be able to achieve.
- Similarly, Scottish Power, a leading provider of energy in the UK, emphasised ALLenergy's direct 1:1 communication with the public as a main benefit to its business. Outreach **to domestic customers, local SMEs and local communities** could not be performed by Scottish Power itself.
- Scottish Power additionally considers ALLenergy as an important strategic partner in Argyll where the agency acts as liaison between, **Council, communities and Scottish Power**.
- The Forestry Commission Scotland sees the biggest benefit of ALLenergy in its **technical expertise on RE**, in particular on wood fuel. Initially, technical advice was provided free of charge but recently a more formal relationship has been established between the FCS and ALLenergy. FCS benefits from more regular updates and ALLenergy receives a small payment.

⁶⁴ Presentation by Kevin Williams, Development Service, Argyll and Bute Council, All Energy Opportunities Conference, 25 – 27 May 2004

⁶⁵ Presentation by Kevin Williams, Development Service, Argyll and Bute Council, All Energy Opportunities Conference, 25 – 27 May 2004

- On the negative side, the Council admits a number of “**missed opportunities**” including seven new schools and one hospital built recently in Argyll without the use of RE. Decisions to go ahead with these buildings despite lack of RE credentials were taken due to cost considerations.

6.0 Conclusion and future of energy agencies

The Forestry Commission Scotland, Scottish Energy and Fyne Homes all emphasised **the need for an independent body that provides technical advice impartially** so as to avoid previous errors in installations due to biased advice by private consultants. Due to its independence from commercial consultancies, ALLenergy is seen as being in the best position for this role,

Fyne Homes specified its **need in options assessments of biomass, ground and air sources for heating systems**. It is interested in case studies undertaken in the Argyll region with its specific weather conditions. The Council sees a relevant activity in **creating a network** of private business, public authority and the public.

Although all interviewed stakeholders expressed their satisfaction with ALLenergy it appears that there is a lack of measurable impact of its activities.

1. Information dissemination and education are certainly useful instruments of policy promoting but there is a **lack of evidence that these activities result in changed behaviour**, one of the objectives of SAVE/IEE.
2. **No effects on the country’s regulatory or policy framework nor activities aiming to increase access capital** were mentioned by any interview partner which may raise questions about the long term impact of ALLenergy’s activities..
3. **ALLenergy’s position in the region might be threatened if it does not raise its profile more effectively**. Past experience shows that new agencies might increase their presence in the Argyll and Bute County. Recently, Changeworks, an Edinburgh-based company with charitable status, won a contract with the Energy Saving Trust to undertake activities in all Scotland. In the interviews ALLenergy rejected an increase in the number of energy agencies in Argyll and Bute. It argues that new starts ups should rather affiliate with ALLenergy to better coordinate actions instead of undertaking their own projects.

List of interview partners and consulted documents

Interviews:

- Dr Lynda Mitchell, Development and Support Officer, ALLenergy
- Andrew Hodge, New Business Development Manager, ALLenergy
- Jane Menzies, Administrator, ALLenergy

- Rebecca Lewis, Benefits and Energy Advisor, ALLenergy
- Keith Miller, Policy, Support and Development officer, Forestry Commission Scotland
- Elaine Elaine Jamieson, Policy, Support and Development officer, Forestry Commission Scotland
- Kevin Williams, Economic Development, Council of Argyll and Bute
- Bill Halliday, Housing Service, Council of Argyll and Bute
- Janet McAllister, Technical Services Director, Fyne Homes

Phone:

- Willie Kinnaird, New Business Development Manager, Energy Retail, Scottish Power

Email correspondence:

- Mandie Currie, Manager, ALLenergy

Documents:

- Presentation by Kevin Williams, Development Service, Argyll and Bute Council, All Energy Opportunities Conference, 25 – 27 May 2004
- Scottish Government, Climate change action plan 2009 – 2011
- Scottish Executive, The Scottish Forestry Strategy 2006
- Fyne Rural Outreach Resource and Information Service, Fyne Homes winter newsletter, 12/2007, p. 1 <http://www.fynehomes.org.uk/docs/WinterNewsletter.pdf>
- Energy Efficiency Road, Dunoon Observer, 15 February 2008, p. 24

Websites:

- ALLenergy website: <http://www.alienergy.org.uk/>
- Managenenergy site: <http://www.managenenergy.net/actors/A1350.htm>
- Energy Assistance Package by the Scottish Government: <http://www.scotland.gov.uk/Topics/Built-Environment/Housing/access/FP/eap>

6.9 Life Cycle Services of Buildings Unit (formerly: Helsinki Energy Management Agency), Finland

1.0 Background and context

The local energy agency in Helsinki, Finland was founded in 1996 under the name of *Helsinki Energy Management Agency*. **After the SAVE contract ended in 1999 the agency became an integral part of City's administration.** More precisely, the agency was integrated into the PWD Construction Management Division's Building Services Unit which established it in the first place. In 2001 it changed its name to Life Cycle Services of Buildings Unit (*HKR-Rakennuttaja, Talotekninen Toimisto, Energia Yksikkö*).

To date, the unit's team encompasses six experts, up from three in 1996, and serves the municipality of Helsinki which has a total of 576,000 inhabitants. **The unit focuses on supporting the City administration in improving the energy efficiency of its buildings.**

2.0 Objectives

The Helsinki City administration had started working on energy efficiency in buildings several years before it established the agency. The current Director of the unit, Ms. Soitinaho, was leading this work at the City administration back in the 1990s and was also instrumental in establishing the agency. According to her judgement, **the rationale for establishing the agency was the willingness to intensify the energy efficiency work and create a dedicated unit for it** rather than just having one or two civil servants working on it in addition to other tasks. This judgement is shared by Mr. Tikka who leads the Helsinki City Energy Saving Board. According to the interviewee representing the Ministry of Employment and the Economy, the need for a dedicated unit also arose because the first energy conservation agreement was concluded in 1993 between the national government's Ministry of Trade and Industry and the City administration.⁶⁶ **The awareness of the SAVE programme resulted from a general examination of EU funding opportunities after Finland had joined the EU in 1995.**

The unit's current focus is on increasing energy conservation in the City of Helsinki and, thereby, providing an example to the private sector and citizens. **Compared to the period of EU funding, the objectives have shifted to a very technical approach.** The objective of raising awareness for sustainable energy issues among the general public has lost in importance compared to the first years. However, many of the information activities originally spearheaded by the agency have now been taken up by other department such as the Motiva National Energy Agency or the City of Helsinki Environment Centre. For example, the agency

⁶⁶ For more detail on the agreements see: Energie-Cités (2003): Energy Management in Municipal Buildings, Helsinki Finland.

initiated an annual Energy Saving Week which is now run by Motiva Oy, the Finnish National Energy Agency.

3.0 Institutional set-up

3.1 Legal status

In 1996, the agency was created as an independent, not-for profit institution with its own budget-making powers, but from the start the agency was attached to its establishing authority, the Helsinki City Administration's Public Works Department. The agency was based in the same building and also used the Department's administrative support. Thus, the formal independency was only established to fulfil the SAVE programme's requirements. According to the Director, this represented an additional effort and created a configuration which was rather unusual in the context of the administration.

After the SAVE contract ended, the agency was fully integrated into the Public Works Department as a new unit. The unit still has its own budget, but the Director's decision-making powers are more limited compared to the SAVE contract period. According to the Director, this new arrangement has however not diminished the scope or impact of the agency's work. To the contrary, the number of staff increased from three to six.

The decision to fully integrate the agency into the administration reflected the strong ties between the establishing authority and the agency which have existed all along. The Helsinki City Administration always delivered the largest share of the budget, the agency's staff previously worked for the Administration and the agency's work also focuses on the Administration, aiming to improve the energy efficiency of its buildings. Thus, according to all interviewees, **the chosen institutional set-up is the most appropriate for the unit, owing to the type of activity it focuses on.** In this context, privatisation would not have added any value.

Even though the requirement of the SAVE programme regarding the independence of the agency was perceived as an additional constraint in the phase of setup, **the Director clearly considered Helsinki as a special case and did not in generally put into question the value of the independence requirement.**

3.2 Internal governance

The unit currently employs six experts. Administrative Support is delivered through the Public Works Department. The interviewees of the Ministry for Employment and the Economy and from the Energy Saving Board emphasized that **the enthusiasm and the professionalism of the staff members have been decisive for its success**, a judgement shared by the Director. By contrast, the institutional set-up was not seen to be relevant.

According to both interviewees, **the second most important factor is political support from the mayor and the funding that comes with it.** In Helsinki, efforts to increase energy efficiency have a long history. In 1974, the City government established the Energy Savings Board to monitor and coordinate energy savings work in the City's real estate and other energy-consuming activities and to monitor the energy savings policy. The board assembles representatives of various departments of the City, such as real estate, city planning, housing, public transport, schools, social services and health care, water works, the centre of environment, as well as energy production. The board is the main steering and oversight mechanism of the Life Cycle Services of Buildings Unit. It meets 5 to 7 times a year.

During the set-up phase, the Helsinki agency had an additional steering committee where the private sector was also represented in order to spread information on the agency's work more widely. After the shift in activities and the integration into the Administration, the unit's Director and the administration did not see any additional value-added in the committee anymore and pragmatically decided to concentrate resources on implementation (rather than on reporting to various bodies).

The interviewee of the Ministry for Employment and the Economy and the Director considered that – at the minimum – **a viable agency needs two expert staff member and the necessary administrative support.** If the agency is established as a completely independent unit, they considered three people as the minimum.

3.3 Funding

Helsinki's Life Cycle Services of Buildings Unit receives its core funding (i.e. personnel) from the City's Public Works Department. In 2009, the unit had personnel costs of app. 800,000 Euro. In addition, the unit receives project funding from various sources, i.e. app. 1.5m Euro to subcontract external providers of energy audits and other technical services as well as app. 2.5m from other departments or ministries to plan, commission and finance specific energy efficiency investments. The budget is renewed every year, but according to the Director the unit clearly has a long-term perspective due to the commitments of the City to further reduce energy consumption (see section 5). Table 1 provides an overview for 2009.

Table 10: Overview of budget 2009

Expenditure	€	%
Personnel	0.8m €	17%
External technical services, e.g. audits	1.5m €	31%
Energy efficiency investments	2.5m €	52%
SUM	4.8m €	100%

Payment from contracts with the **private sector and European project funding add occasionally to the unit's funding, but overall their share is lower than 5 %.**

4.0 Activities

4.1 Overview

The unit is specialized on reducing energy consumption of the City Administration, with a focus on buildings. Additional activities aim at improving the energy efficiency of the City's transport fleet, promoting renewable energies on the City's own premises and improving other environmental aspects of buildings such as indoor air quality. More generally speaking, the unit is responsible for implementing the activities defined in the energy conservation agreement and in the energy savings plan for the buildings owned by the City. Awareness-raising was a major focus of the agency after its establishment and still plays a role today, albeit a minor one.

In terms of its target group, **the unit clearly understands itself first and foremost as a service provider for the City Administration** that funds it. However, according to the Director, there is hope for wider impact by providing good example to businesses and citizens.

In detail, the unit offers the following services:

- energy management services, including energy savings plans, energy audits;
- and energy-monitoring, including a web-based service to provide monthly consumption reports and a notice if consumption rises suddenly;
- planning and implementation of energy-saving and renewable energy investments;
- information and training to building managers, including service manuals for buildings;
- moisture and mildew damage audits;
- indoor climate audits;
- thermal camera mapping.⁶⁷

For the Director, **the main success of the unit is the fact that it actually implemented energy efficiency solutions rather than just planning or promoting those measures.** Thereby, they deliver examples for other building managers from the public and from private sectors. Once a major project is finished, the unit publishes press releases to spread the word. They also contribute to exhibitions on a regular basis.

The interviewee from the Energy Saving Board equally pointed out that the agency's work was instrumental for achieving a technical knowledge and implementation of energy efficiency in public authorities in Helsinki which, according to his judgement, is at the highest European level. In addition to the reduced energy consumption of City buildings, the interviewee from the national energy agency also cited an earlier project that produced education materials on energy efficiency for school children as particularly important and successful project.

⁶⁷ Energie-Cités (2003): Energy Management in Municipal Buildings, Helsinki Finland.

None of the interviewees could mention any major failure, but the Director and the interviewee of the Energy Board stressed that **more awareness-raising measures for citizens would be desirable.**

4.2 Assessment of the IEE programme

For the Helsinki agency, improving energy efficiency has been the most relevant activity since the establishment of the agency. More, recently promotion of photovoltaics has gained prominence. It is not likely that activities on renewable energies will expand much more, however, since the large majority of buildings in Helsinki are served by the City's district heating network based on CHP. Introducing renewable energies to this system is considered to be the task of the City's utility.⁶⁸ Public transport is equally excluded and dealt with by the other units within the city administration.

All interviewees considered the 3-year working programme appropriate in the case of the Helsinki agency but, at the same time, stressed that it was a particular case since future funding was not a major issue. In case of other Finish energy agencies, assuring sustainable funding after the 3-year period had proven to be very challenging, according to the interviewee from the Ministry and the national energy agency expert. **The interviewee of the Energy Saving Board called for a prolonged work programme covering 5 years at the minimum.**

5.0 Contribution and impacts

All interviewees agreed that **awareness for the need to reduce greenhouse gas emissions had increased substantially over the last 2-3 years**, with the Stern Review being cited as one major cause of changing perceptions. When the agency started its work, energy efficiency was merely considered as a fiscal issue. That is the interest was in cost reductions only. More recently, climate mitigation has risen high on the agenda of many municipal governments. There is even a sort of competition among some municipalities developing on the question who delivers most reductions, according to the interviewee from the Ministry of Employment and Economy which manages the Energy Efficiency Agreements with municipalities. At the same time, he characterised the country as very heterogeneous. Many municipalities with very little interest in climate mitigation and sustainable energy still remain.

According to the Director, the Life Cycle Services of Buildings Unit delivers value added to the City of Helsinki by:

- Delivering the technical services mentioned above;
- Supporting the City in achieving its targets under the energy efficiency agreement and reducing energy costs in the long run;
- Supporting the City's comparably early involvement in the Covenant of Mayors⁶⁹;

⁶⁸ See also: City of Helsinki (2008): Energy efficiency of Helsinki's building stock is improving, State of the Environment in the City of Helsinki: Theme Report 1/2008.

⁶⁹ This point was added by Mr. Tikka of the Energy Saving Board.

- Building and maintaining a centralised data set of energy consumption in the buildings owned by the City;
- Creating and sharing specific expertise in the field, including information on new EU legislation and programmes in the energy field;
- Contributing to the network of Finish energy agency exchange organised by the national energy agency.

According to the interviewees from the national energy agency and the Energy Saving Board, the private sector mainly profits through:

- Extended public bids for energy auditing specialists and energy services companies (ESCOs) which have helped this industry to grow and to develop high quality standards (especially with regard to energy audits). Public contracts also provided viable revenue in the time of recession during the 1990s.

According to the Director, **performance of the unit is measured by assessing the City's progress towards its energy efficiency target.** In the most recent energy efficiency target, Helsinki committed itself to achieve a 9% saving in energy during the period 2008 to 2016.⁷⁰ A detailed energy saving plan sets out measures to reach the target and, at the same time, defines the work programme of the Life Cycle Services of Buildings Unit.

The activities and achievements of the agency are documented annually in a detailed report (only available in Finish). To cite an example, one of the progress indicators is the share of public building equipped with monthly energy monitoring systems. It has now reached 80%.

For the achievement of other energy targets such as Helsinki's RE target the work of the unit is less relevant since renewable energy is mostly dealt with by the Helsinki energy utility.

6.0 Conclusion and future of energy agencies

Interviewees' were split **in opinion regarding the existence of a "snowball effect" for agency creation.** The answer seems to depend on the timeframe under consideration. While interest in establishing new energy agencies was high in the 90s, the interviewee from the national energy agency emphasised that the number of application was substantially since 2000. By contrast, the unit's Director saw the recent establishments of new IEE-funded agencies in Finland, for example in Lapua, as a sign that the institutional model remains attractive.

Regarding the need for more IEE funded agencies, opinions equally differed. Both the interviewee from the national energy agency and the expert from the Ministry of Employment and the Economy stated that **full regional coverage with energy agencies will be needed in Finland** to achieve long-term goals of reduced energy use. From 9 agencies today the number should go up to app. 20 stated the interviewee of the Ministry. The Director, by contrast, was less certain if the necessary expenditures would be justified, particularly in the sparsely populated northern part of Finland. As all interviewees, Mr Tikka from the Energy Saving Board

⁷⁰ See also: City of Helsinki (2008): Energy efficiency of Helsinki's building stock is improving, State of the Environment in the City of Helsinki: Theme Report 1/2008.

also perceived a massive need to support small municipalities in controlling their energy consumption. Yet, he did not consider energy agencies as the only possible answer to this need.

All interviewees did, however, agree that **EU start-up funding was crucial for agency establishment**. They did not see that either municipal government or the national level would be willing to commit to providing continuous funding for energy agencies in the near-term. At the same time, all interviewees insisted that **agencies need continuous public funding to be able to fulfil their special role as an economically disinterested information and service provider with a clear public mission**. According to the interviewee of the Ministry, the share of from private-sector sources (as payment for particular services) could not cover more than 10-20% of total funding of an agency. Otherwise, the agency would simply work as a consultancy without a public mission. This creates a paradox situation: On the one hand, EU start-up funding is welcome because municipalities are not willing or able to invest in agencies on their own, on the other hand long-term sustainability of agencies is threatened for the exact same reason since private-sector funding sources are not considered to be a viable alternative to public funding.

There is the hope that new agencies can use the EU funding to prove to their establishing authorities how valuable their work is and, thus, secure knock-on support. This has been the case in Helsinki, even though with caveat that the unit now almost exclusively works on technical questions with direct interest to the Administration.

All interviewees confirmed that **information and awareness-raising activities were the most difficult to finance** even though there is an increasing need for them. Instead, many of the agencies in northern Finland focus on developing RE projects and selling them – an activity that is economically viable (but could on the other hand be delivered by private companies as well). The interviewee of the Ministry suggested that **one way out of this dilemma could be a change to the IEE funding that would spread financial support over a much longer period**. The bulk of the financial support should still flow in the first three years, but a support of at least 5% of basic funding should be provided for a longer period, at least 5 years. This would increase the willingness of municipal governments to contribute their share of the funding. This solution would, however, require much lighter EU reporting requirement to be attractive to the agencies. More generally, **all interviewees insisted that bureaucratic requirements of the IEE programme should be significantly trimmed**.

In terms of EU funding in addition to agency establishing grants, the Director saw the highest relevance in **projects that allow agencies or other partners to pool capacities on specific problems which none of them could tackle on its own**. As an example she cited an EU project which aims to improve the way energy information is displayed in schools. Equally useful were **best practice exchange and peer review processes**. For example, the Helsinki unit is involved in an EU-funded Central Baltic energy agency network with Stockholm, Tallinn and Riga. One of the activities is reviewing each others' energy action plans. These types of projects could not be accomplished without EU funding according to the Director.

List of interview partners and consulted documents

Interviews date(s):

- Ulla Soitinaho, Founding Director of Helsinki Energy Management Agency and current Director of HKR-Rakennuttaja/Talotekninen toimisto – Interview on 21 January 2010
- Heikki Väisänen, Ministry for Employment and Economy – Interview on 21 January 2010
- Sippo Silvonen, Motiva Oy, National Energy Agency, Member of the Helsinki Agency's original Steering Committee – Phone Interview on 26 January 2010
- Olavi Tikka, Head of the Helsinki Energy Saving Board, Helsinki City Administration – Email Interview on 2 February 2010

Documents:

- City of Helsinki (2008): Energy efficiency of Helsinki's building stock is improving, State of the Environment in the City of Helsinki: Theme Report 1/2008, available online at: http://www.hel2.fi/ymk/julkaisut/oppaat/esitteet/teemakatsaus_engl.pdf [accessed January 2010].
- Energie-Cités (2003): Energy Management in Municipal Buildings, Helsinki Finland, available online at: http://www.energie-cites.eu/db/helsinki_564_en.pdf [accessed January 2010].
- Motiva Oy and Ministry of Employment and the Economy (2008): Finland Energy Efficiency Agreement 2008–2016, Helsinki.

6.10 REGEA North-west Croatia Regional Energy Agency, Croatia

1.0 Background and context

REGEA, the North-west Croatia Regional Energy Agency (Regionalna energetska agencija sjeverozapadne Hrvatske) **is a regional energy agency** that has been established by Zagreb County, Karlovac County, Krapina-Zagorje County and City of Zagreb in early 2008 under the framework of the Intelligent Energy Europe programme.

REGEA is located in Zagreb, the Capital City of Croatia with two branch offices in Krapina (Krapina-Zagorje County) and Karlovac (Karlovac County). It works mainly in the 4 founding Counties, an area with approx. 1.4 million of inhabitants (almost a third of Croatian population). Since its establishment REGEA has grown considerably – from 4 people in 2008 to 12 people in 2010 (10 in Zagreb and 2 in the branch offices).

2.0 Objectives

The 4 founding Counties saw a need to increase awareness of importance of energy issues and sustainable development and decided to create REGEA on the basis of examples from abroad. The IEE application was also politically supported by the Environmental Protection and Energy Efficiency Fund. The fact that REGEA was established jointly by 4 counties enables it greater independence not only from the Counties as clients, but also from any political turmoil; moreover, it supports balance of issues between large cities and rural communities and transfer of knowledge among more communities. Other energy agencies in Croatia have been established by just one County and mostly show high rigidity, dependence on founding County decisions and exposure to political pressure and involvement.

Current objective of REGEA is promoting and encouraging of regional sustainable development in the fields of energy and environmental protection through renewable energy sources (RES) utilization and energy efficiency measures implementation. REGEA's scope of work includes:

- Promotion and implementation of “best practices” and “case-studies” in regional energy management,
- Promotion and implementation of sustainable development concept,
- Public awareness activities in the fields of energy and environmental protection,
- Up-to-date information and advices regarding regional energy issues,
- Advisory support for the implementation of regional energy plans and programs.

REGEA was aiming from the beginning to build trust and reputation among regional stakeholders and to provide strategic support to the Counties and systematic energy management as well as good-practice examples. With this approach REGEA has become highly visible and is already attracting invitations for presentations on various conferences (e.g. in Wales) and meetings (e.g. Managenergy).

3.0 Institutional set-up

3.1 Legal status

REGEA is an independent, non-profit public body, which is ideal status in the view of EU requirements and Croatian legislation. Only one interviewee favoured the for-profit option as the person believes that there would always be enough means available for reinvestment and its services could further improve due to market and competition pressure.

No other type was considered as in the eyes of the stakeholders, this status ensures its objectivity, transparency, neutrality and independence both from large market players and from the politics. REGEA benefits from its reputation of working for the public, not for partial interests of a certain group of stakeholders. As currently the trust in politics and market players is relatively low in Croatia, this could be seen as an important aspect of REGEA “brand”.

The interviewees pointed out that independence and non-profit status ensure trust in REGEA and enables it to work as a highly reliable networking switchboard and project generator. In particular its highly specialised knowledge is appreciated by the public sector. Zagreb City Office for Energy, Environment and Sustainable Development, for example, engaged REGEA for basic assessment of the situation in the field of energy in Zagreb, Croatian Capital; the study was done faster and with greater expertise than if it was done by the City Office itself. Moreover, the fact that it was provided by REGEA ensured that the results were independent in the view of other City Offices and the City Council, therefore it was easier to obtain support for follow-up actions and preparation of Strategic Energy Action Plan of the City of Zagreb.

3.2 Internal governance

The critical minimum size of a sustainable energy agency is thought to be 3-4 people: in this way it is possible to provide the necessary technical/engineering expertise as well as high quality promotional activities, project management and search for new funding. REGEA has started with 4 people in 2008 and has now 12 employees; accounting services and website management are outsourced. In the opinion of the Managing Director, the ideal size is 20 people; the number and size of the projects should also increase at the same time.

Most (10) of the employees of REGEA are engineers in various fields (electrical, mechanical, civil engineering, architecture), while the others have expertise in economics. This enables

REGEA to combine highly technical knowledge and skills with economic and market analyses and promotional activities. The result is high feasibility and applicability of the projects as well as high number of projects REGEA is involved in; high success can also be observed in high growth of the Agency, both in terms of the staff and of the budget.

The Management Board consists of representatives of 11 members: 2 from each the 4 founding Counties (one from the relevant County office and one county-nominated representative of a company active in the field of energy, 8 in total) and 3 energy experts nominated by consensus by all 4 Counties. There is no separate Advisory Board.

3.3 Funding

REGEA is partially relying on IEE grant: in the year of its establishment, it represented slightly more than one quarter of all of its funds, while in 2009 the IEE funds were not used and are now saved as a backup funding. The funding structure is shown in Table 1.

Table 11: Overview of the budget in 2008 and 2009

Source	2008		2009	
	€	%	€	%
IEE grant	88,943	29%	0	0%
Regional - establishment (grant)	147,060	48%	69,601	8%
National (Government)	0	0%	8,700	1%
Regional (counties, cities, municipalities)	49,072	16%	591,612	68%
Private companies	12,268	4%	43,501	5%
Other EU	0	0%	60,901	7%
Other international (UN, IEA,...)	3,067	1%	87,002	10%
Others (private companies)	9,201	3%	8,700	1%
SUM	309,611	100%	870,018	100%

Initially, most of the funding came from the IEE grant and the establishment grant of the 4 founding Counties. **In 2009, by far the largest funding share was received from** Counties, Cities and Municipalities for services provided. The share of other EU sources has increased from 0 to 7.29 % and the share of other international sources (UN, GEF, GTZ) has increased tenfold from less than 1 % to 9.71%. This almost tripled the budget from 2008 to 2009. Payments from private companies are a small share of the budget.

So far REGEA did not take any loans for financing its operations and funding was found for all project ideas. **At the moment, the bottleneck for potential projects is the co-financing of larger investments**, such as biomass boilers (the funds available from the IPA Programme are not sufficient). REGEA plans to work on developing new financial instruments: **the idea is to form a revolving fund** that will be used for promotion of energy-related projects. There are several options that are being considered and REGEA already had some discussions with KfW, the German agency for financial cooperation.

4.0 Activities

4.1 Overview

At the moment, REGEA is focusing on energy efficiency as this is currently more recognised field. These range from energy efficiency and sustainable management of public buildings, to improvement of public lighting. However, clear connection with renewable energy is always sought and promoted alongside. Lately, **district heating has become popular at the Municipalities**; REGEA has assisted some of the rural municipalities (e.g. Pokupsko, Žakanje) with project development, preparation of project documentation and project management for installation of biomass district heating system. In some Municipalities, REGEA provided technical assistance for installation of heat pumps in public buildings. In the **field of transport** REGEA has been active only in the City of Zagreb in relation to ZET (Zagreb Electric Tram) and its development; based on the findings of Transport Study (2004) the City of Zagreb is **planning** to do improve sustainability of transport in the city, e.g. through different timetables, biodiesel and gas fuelled busses, emission filters for old buses, changes in parking regime etc.

In terms of instruments used, REGEA currently focuses on policy promotion and training. **Policy promotion** is done through:

- policy level: promotion of sustainable energy management by Sustainable Energy Action Plans (SEAPs) for all the founding Counties and several Cities and Municipalities,
- project level: energy audits, preparation of registers of energy sinks (buildings, public lighting etc.) and their energy consumption, investment studies, feasibility studies and similar, followed by technical assistance for funding applications and project management,
- educational activities: for schools (e.g. comic book “Tell me about renewable energy sources”), establishment of EE Offices in several towns, surveys (e.g. attitude survey “Inhabitants of City of Zagreb on Energy: Knowledge, Attitudes and Behaviour”), conferences (e.g. conference “Systematic energy management in cities and counties in the Republic of Croatia - Sustainable development of cities”, co-funded by UNDP and City of Zagreb) and seminars (workshops and manual for the Municipalities planned for 2010).

Other instruments are applied as well individually or as part of various projects. Changing public/business behaviour is stimulated through **dissemination of all project results**, as well as through facilitation of networking. **Networking** is strongly supported not only among companies/businesses, but also among regional and local authorities (Counties and Municipalities) as well as between local authorities and businesses; it can be said that **REGEA has become the main “port of call” in the EE and RES field and a mediator between the stakeholders’** needs and ideas. For improvement of regulations and removal of market barriers, REGEA supports companies with explanatory notes and useful comments. Currently, the hot topic is the administrative burden and monopoly of HEP

(Croatian national electricity company) over permits for use of geothermal energy, which has high potential in some parts of REGEA geographic area of activity. Access to capital is ensured indirectly, for example through support to public authorities and private companies for project applications or through organisational support to the interested individuals in the project “I can have solar panels!”

The key stakeholder group of REGEA are regional and local authorities. However, most of the projects address also the general public. In addition, REGEA works actively with commercial players, not only through implementation of some of the project tasks (e.g. providers of solar panels, providers of installations for public lighting, usage monitoring, district heating...) but also through provision of information and networking. REGEA cooperates not only with local businesses, but also with branches of larger international companies such as PHILIPS Croatia.

In terms of promotion of sustainable energy use and REGEA itself, the projects involving modernisation of public lighting in numerous and “I can have solar panels!” (support for installation of solar systems in individual households for heating and water heating, co financing approx. 50 - 60 households by the Counties and the Fund for Environmental Protection and Energy Efficiency, where REGEA gives operative support) were among the projects with highest visibility and effect. In a Municipality, **modernisation of public lighting** involves audit of existing public lighting, action plan and technical assistance at application for co-financing from Environmental Protection and Energy Efficiency Fund and at implementation of proposed activities. So far, modernisation of public lighting was implemented in 11 municipalities in 3 counties (City of Zagreb being an exception); the degree of co-financing varies.

4.2 Assessment of the IEE programme

According to the interview partners, the 3-year IEE work programme provides appropriate support, although the degree of its relevance depends on local circumstances. REGEA has managed to ensure sufficient funding from other sources relatively rapidly, probably also through strong focus on key target group, but IEE support is nevertheless important. It seems that IEE is providing strong feeling of security, thus enabling REGEA to explore bolder opportunities for projects and funding opportunities.

5.0 Contribution and impacts

Before IEE started, the Croatian energy market was little developed and the awareness of EE was low. In 2002, the Strategy of Energy Development of Republic of Croatia was passed in the Parliament; a draft Green Paper for the adjustment and upgrade of the Strategy was drafted in 2008. Also in 2002 HEP (Croatian national electricity company) drafted the Master Plan for the Development of District Heating. In a UNDP-funded project, The Energy Efficiency Master Plan for Croatia 2008-2016 was drafted in 2007. The Environmental Protection and Energy Efficiency Fund started working in 2004 and achieved considerable success. The combination of Energy

Law, strategies, programmes and master plans improved the understanding of energy efficiency and renewable energy concepts and gradually their market has developed. According to the interviewees, there has been significant expansion of market in the 2 years since REGEA's establishment, the most visible in the field of public lighting, followed by solar panels. Market players vary from branches of international companies to importers of EE/RES technology and local producers. Local producers of EE/RES technology are relatively small companies that base their production mainly on foreign technology, but a share of them has been developing their own technology or improving foreign products.

According to public authorities, the added value derived from REGEA's services is the advice on potential projects that would bring most benefit to the community and at the same time show creativity and EU approach. Moreover, the **technical assistance** it provides complements the local authorities' own resources with expertise that they lack, helps them to find additional resources and ensures objectivity. In addition, through the **network of REGEA's foreign partners and international projects** the County and Municipality officials get in touch with similar local authorities abroad and fresh project ideas.

In addition, REGEA provides support for the activities of Zagreb City Council related to Covenant of Mayors. According to the national Environmental Protection and Energy Efficiency Fund, REGEA supports the work of the Fund on the regional and local level by establishing the missing link to the local and regional level with the effect of higher efficiency of use of Fund's services. The Intelligent Energy Cluster pointed out that the market players can rely on REGEA for information on recent developments in policy, technology and projects as well as on contacts of potential partners.

Commercial market players mainly benefit from REGEA's networking service. Furthermore, REGEA acts as information and idea mediator between the companies and the local authorities, thus stimulating joint projects. For example, producers and installers of solar panels have gained considerably from the project "I can have solar panels!"; another example is the support given to a company dealing with photovoltaic modules. Mr. Perkov from the Intelligent Energy Cluster has stressed that REGEA's information and advice is given equally to all the market players and it **ensures objectivity and neutrality**, i.e. independence from any political interests. As a result, REGEA has gained strong trust from the businesses. The number of jobs in the EE/RES sector has increased over the last 2 years, but there is no clear evidence to what extent this is the result of REGEA's activities and not purely the growth/maturity of the market.

Certain change in public awareness and attitude can be observed even in such short period of time since REGEA establishment: visibility and understanding of EE and RES issues have increased considerably, as well as the number and activities of commercial market players that are active in this field.

REGEA has an **internal system for self-assessment** through weekly team meetings and reports to its founding Counties. As it is run essentially as a business, the self-assessment

system is based on performance and achievement of the set objectives. REGEA staff monitors the number of projects, number of end users of results, financial aspects, number of participants at trainings and events and similar. For most of the projects, it also assesses related CO2 emissions as sought by EC and Covenant of Mayors. At the moment REGEA is introducing the ISO 9001 standard. The indicators are set on the project level, but there are no impact indicators with which the performance of REGEA's activities as a whole could be measured.

6.0 Conclusion and future of energy agencies

REGEA is clearly a role model for the rest of Croatia, transferring its knowledge and skills to other Counties and local authorities. Other Counties are approaching REGEA for its services and some cooperation for exchange of experience has been established in the Western Balkan region with the Capital cities such as Sarajevo, Podgorica, Skopje (the project "Capacity Building for Energy Management in the Cities").

According to all of the interviewees, more energy agencies should be established to geographically cover entire Croatia, but it is necessary that they are established by several public bodies to ensure independence from local/regional politics and sufficient geographic area for activities that would be viable in the long term.

In the future, REGEA is planning to expand its activities for businesses (especially engineering design companies) and households. In order to work more closely with the SMEs it will have to **work on removal of administrative barriers** (e.g. petitioning for rationalisation of the current bureaucratic procedures for obtaining certain RES permits, e.g. for use of geothermal energy). One of potential future developments is have its own revolving fund and to work in the form of ESCO; this is seen to be a good approach in terms of funding, publicity and competition. If possible, REGEA would expand its educational activities, also by targeting the teachers more.

The most hindering factors for REGEA's work are inconsistent regulations and processes of public procurement. Some of the regulations are missing (e.g. for district heating) while many of the existing ones are outdated or inconsistent. Public procurement in general in Croatia is mostly done on the basis of lowest price, so sometimes the winning bids are very low, but not of sufficient quality. In this way, REGEA sometimes is not competitive; in addition, poorly implemented projects cause negative reputation of all the players in the energy field.

The enabling factor for REGEA is good cooperation with the Environmental Protection and Energy Efficiency Fund (EPEEF) and favourable geographical area of work, including Zagreb which as a large city and national capital contains huge potential and opportunities for challenging projects on urban sustainability. For example, cooperation with Public Utility that manages 180.000 housing units is leading towards a joint project for improvement of energy efficiency and energy management.

REGEA's capabilities could be further strengthened by providing support and expertise in legal aspects, contracting, accounting and similar topics relevant in particular for ESCO-type services and more complex projects.

List of interview partners and consulted documents

Interviews date(s):

- Julije Domac, Managing Director of REGEA, jdomac@regea.org, phone: + 385 1 3098 315, interviewed on 14th January 2010
- Marijan Maras, Head of Zagreb City Office for Energy, Environment and Sustainable Development, marijan.maras@zagreb.hr, phone: +385 1 6101003, interviewed on 14th January 2010
- Mladen Perkov, CEO of Pro Integris d.o.o., member of the Intelligent Energy Cluster, mladen.perkov@prointegris.hr, phone: +385 1 6170022, interviewed on 14th January 2010
- Marija Šulac, assistant to the Director of Environmental Protection and Energy Efficiency Fund, marija.sculac@fzoeu.hr, phone: +385 1 539191, interviewed on 14th January 2010
- Božidar Škrinjari, Mayor of the Municipality of Pokupsko, opcina.pokupsko@zg.t-com.hr, phone: +385 1 6266250, interviewed on 14th January 2010

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- ManagEnergy network: <http://www.managenergy.net>

6.11 Energy Agency Plovdiv, Bulgaria

1.0 Background and context

The Energy Agency of Plovdiv (EAP), Bulgaria is a regional Energy Agency that is active in the Plovdiv region, an area with approx. 700.000 inhabitants in central Southern Bulgaria. EAP is located in Plovdiv; some of its activities and its network expand well beyond the borders of Plovdiv region, e.g. to Burgas on the Black Sea coast. It was established in 1999 with the support of the SAVE II programme, the Municipality of Plovdiv, the Common Good Project Foundation and 10 other stakeholders (mainly from industry) and started its activities in 2000.

It was the **first** energy agency in Bulgaria and it is **considered to be a role model for other Bulgarian energy agencies**; its success can be shown by the fact that EAP is frequently sought as a partner in numerous EU projects. At the time of its establishment it had 2 employees while now it employs 6 staff full time and 3 part time. There is some staff fluctuation but it must be noted that the EAP is nurturing an ever-growing network of external experts that cooperate with EAP on specific issues and when there is a demand for their specialised knowledge.

2.0 Objectives

EAP was established on the basis of vision and opportunity that was recognised by some of the EU-oriented politicians on the local and regional level: The establishment of EAP and its participation in SAVE II programme was seen as an **early opportunity for participation and integration in EU processes and as a vehicle for becoming part of the EU community.** Availability of funding simply supported this decision.

The objectives of EAP are:

- to promote energy efficiency at the local and regional level;
- to provide energy efficiency and RES comprehensive information, education, advocacy and lobbying;
- to raise public awareness of the connection between energy efficiency and climate protection;
- to promote programmes, institutions and investments favouring sustainable energy development, including renewable energy sources;
- to identify and realize bankable demonstration energy efficiency and RES projects;
- to encourage international cooperation, with a focus on financing and market penetration;
- to enhance Bulgarian participation in the European integration process.

The objectives remained essentially the same since the establishment of EAP, the overall strategic objective being to accelerate local development in a sustainable way. However, there has been a **significant shift in the focus of EAP work – from EU accession to active**

implementation of EU policy. Now, priority is given to **use of local renewables and assistance to local communities to develop policies** and plans in a sustainable way, based on the concept of sustainable energy community that is now being further developed within the Covenant of Mayors.

3.0 Institutional set-up

3.1 Legal status

Currently, EAP is registered as an NGO and is a **non-profit organisation**. At the moment, this is the most suitable form of an organisation within the Bulgarian legal system. NGOs are widely acknowledged in the general public as non-profit organisations that work for community (not private) benefit. However, one interviewee pointed out the possibility to become a for-profit organisation since RE/EE is highly profitable field and EAP could reinvest its profits into further work on energy issues. However, the key question is whether such an organisation would and could take sufficient resources for less profitable activities such as awareness raising and good practice dissemination.

In the opinion of all the interviewees, this is the most suitable status as it ensures objectivity, non-profit approach, objective awareness raising, dissemination and research, work for the common good and trust among the stakeholders and the general public. Moreover, as an NGO EAP can apply to more funding sources, as many of them are focused on NGOs and public bodies (companies are thus ineligible) and probably their distribution is fairer (especially in the light of corruption). As a result, no alternative type of legal status was considered so far.

3.2 Internal governance

In the opinion of EAP, the critical minimum size of the agency is 2 staff. In such case the 2 employees can combine their activities to perform basic tasks and strive for funding at the same time.

In the opinion of EAP the number of staff should not increase further as it is better to keep the **core team (5-10 people) and have a vast network of external experts that can be engaged for specific tasks of the projects**. In this way high-quality coordination and management of the project is ensured on one hand and high quality of services on the other hand, and it allows for flexibility.

In the view of the stakeholders, the highly “technical” background of the staff (nuclear physics and various engineering degrees) gives the team credibility in energy field. It is recognised that EE and RES are very interdisciplinary fields requiring a mix of skills, including data processing and analysis and visualisation of the results.

EAP has a management board of 8 people responsible for strategic planning. The members comprise experts and representatives of the municipalities and at the beginning there were also representatives of the National Executive Energy Efficiency Agency (EEA) and business associations; the Executive Director of EAP does not participate in the management board. It is rather inefficient as some of the members are rather passive and see their role as a merit reward. EAP does not have a formal advisory board, but performs regular consultations with certain management board members and some other external experts.

According to regional energy agencies, national institutions such as EEA could be more supportive to the potential success of regional agencies if they collaborated more efficiently and worked more decentralised within their organisation.

3.3 Funding

In 1999, 150.000 € have been awarded (the annual contribution for Bulgaria) from SAVE II programme for the first 3 years of EAP, but later decreased to 52.000; the difference was shifted to projects on national level. This was sufficient just for covering the running costs of EAP, while the rest of activities was mostly financed by USAID funding.

In 2009, EAP obtained approx. 45% funding from other sources than the IEE grant and it is expected that in 2010 this share will increase, thus further reducing their dependence on IEE funds. Most of this non-IEE grant funding comes from FP6 and an FP7 (11%) and international (e.g. GEF, USAID, Earth Day Network, PeaceCorps) sources (14%). **At the moment EAP is implementing 8 IEE-funded projects.**

Source	Budget			
	2008		2009	
	€	%	€	%
IEE	70,041	75%	137,727	55%
FP6, FP7	6,493	7%	28,560	11%
Other EU funds	4,908	5%	1,040	1%
International organisations (funds, donors)			35,971	14%
Regional funding and local funding			20,400	8%
Other (e.g. private clients)	11,759	13%	26,260	11%
SUM	93,201	100.00	249,957	100.00

EAP virtually does not receive any national funding. However, in the current phase of implementation of the Regional Development Plans, first projects funded on regional level were won to be implemented in 2010. A small share of funding is derived from projects on local level where Municipalities are the clients (there is no annual lump sum contribution, just projects won on tenders – e.g. energy action plans, energy audits, feasibility studies); however, the Municipalities have very limited resources, so most of the projects on local level are actually implemented through partnerships in internationally funded projects. A minimum amount of money is earned through services for private clients, mostly in energy efficiency.

In the future, EAP would like to ensure part of its funding through shareholding in certain investments that it facilitates through its knowledge support, but not in the form of ESCO. This would ensure the cashflow stability necessary for continuous work with strong focus on activities. EAP already has potential partners in UK and USA.

So far, EAP managed to find funding for all the activities. It is a project oriented organisation and it tends to prepare a pipeline of projects for which funding is then sought. In case of cashflow problems, the core project activities are still implemented and the costs are cut by avoiding travel abroad. Money can also be borrowed from similar organisations or private sponsors.

4.0 Activities

4.1 Overview

EAP works mainly in the field of energy efficiency and promotion of renewable energy use. Its key activities are:

- performing energy-conservation audits for factories and buildings;
- developing local/regional sustainable energy plans;
- identifying and developing energy-saving and renewable energies projects;
- providing education and training on energy conservation;
- conducting public information campaigns on energy conservation and clean energies (including exhibitions, publicity activities);
- acting as a source of information on energy conservation, including creation and maintenance of databases.

In the field of energy efficiency, EAP works mainly on **energy audits of public buildings** and to a certain extent on sustainable energy communities and with SMEs. In the field of renewable energy **EAP mainly promotes use of biomass**. Within the activities for EE and RES promotion, EAP prepares also pre-feasibility and feasibility studies and other investment documentation for EE and RES implementation, but due to lack of understanding of the entire project cycle management and related documentation this aspect of its work seems not to be appreciated enough. In the last 2-3 years, EAP got involved also in sustainable transport through several projects, mostly international and involving several partners. There are plans for further cooperation in the field of sustainable transport with Municipality of Plovdiv, However, EAP is going to stay focused primarily on EE and RES, but in reality these fields should be integrated in the sense of sustainable community and should be mainstreamed, e.g. like at the Covenant of mayors that is stimulating local Action Plans to go beyond the EU Energy Policy (20:20:20) and help to achieve national targets.

Most of EAP's work is based on **policy promotion, changing public/business behaviour** (through information and education) and **providing training** (e.g. training of the trainers in January 2010). Especially the training of energy specialists was seen as highly successful,

triggering a sort of chain reaction for EE and RES where EAP has acted as a catalyst. However, through various initiatives, organisation of events and participation in networks (e.g. Association of Bulgarian Energy Agencies) it also presses for improvement of regulations and removal of market barriers, but this is a tricky field; e.g. at promotion of biomass accusations of distorting the market are common. An interviewee sees EAP's role as the conscience of the municipal and regional authorities, independent of daily politics. In the future, EAP is planning to work on ensuring access to capital, too, mainly by helping the investors to find some funding and possibly become co-investors by investing knowledge into new business ideas.

Examples of EAP's projects are:

- Cooperation with Bulgarian Eco-schools Network in a classroom energy manager project in the project Active Learning - "Integration of Active Learning and Energy Monitoring with School Curriculum"
- promotion of the Covenant of Mayors in Bulgaria,
- INTEREB - Integrated Energy Retrofitting in Buildings Section (funded by SAVE II)
- E-Check in Craft SMEs (funded by IEE)
- CASES – Cost Assessment for Sustainable Energy Systems (funded by FP7)
- SEC-Tools (funded by IEE)
- e-TREAM - e-learning for training Energy Agencies in mobility management and alternative fuels (funded by IEE),
- MOVE - International Cluster for Mobility Management Development and Research Dissemination (funded by IEE).

The **key stakeholders and target groups of EAP are the public authorities**, followed by commercial players and general public. The awareness of the importance of energy efficiency is increasing, therefore the activities of the stakeholders tend to be ahead of the legislative requirements. EAP got more involved with commercial players through its activities in biomass promotion such as "Biomasa Liga" (Biomass League) competition and other activities promoting entrepreneurship; moreover, EAP works as a sort of **helpdesk and networking agent for companies interested in EE and RES**, putting them in touch with relevant contacts and giving them opportunity to participate at some events. General public was addressed through several projects and activities, such as Energy Neighbourhood Project and activities implemented through **eco-schools**. Moreover, EAP has worked with the residential credit line of EBRD for bank loans for installation of new boilers, gas boilers and solar panels. The NGOs and scientific institutions are mostly their project partners, not the target group. EAP has well established and very good cooperation with the Bulgarian Academy of Science; not only it is renting the office space in their building in Plovdiv, but they have also implemented FP6 and FP7 projects together and the Academy is planning to establish an Institute of Energy that will be another bridge to EAP. The Association for Plovdiv is an NGO that cooperates with EAP in the field of energy science for businesses; the coordinator of the Association has pointed out that EAP is essential for bridging the gap between the businesses and scientists and for promotion of applicative science.

An example of a successful **promoting activity** is the Covenant of Mayors; Plovdiv, Karlovo and 2 municipalities from other regions have already joined. EAP will help with the internal monitoring process. EAP also intensively promotes the 20:20:20 policy on the local level through sustainable energy community planning. According to the participants' feedback, study tours are also a valuable activity of EAP (e.g. study visit to Bansko 10 MW biomass plant during the Biomass League contest). Thus even greater effect could be achieved with more study tours to different countries, especially Scandinavia (Denmark) to deepen and expand contacts; accordingly EAP plans that every conference will have a study tour (e.g. to France for biomass, to Germany for PV).

According to EAP, energy efficiency is a horizontal measure of virtually all the Regional Development Plan in Bulgaria, but there is no monitoring of its implementation or of results of the policy. This could be an **opportunity for further activities** of EAP, not only for policy implementation, but also **data evaluation and monitoring set-up**.

4.2 Assessment of the IEE programme

EAP was established and funded by SAVE II which was in its opinion a very useful fund and essential for support of EU policy and approach in the accession countries; IEE as the follow-up programme is viewed in the same way. The **3-year work programme is just long enough** to get well established and find enough resources and projects for future work after the funding has expired.

There has been a significant change in the markets for EE and RES as well in the public awareness on the energy-related issues. In this respect, EAP played an important role as a promoter of EU policy and a driving force for changes in attitude and understanding of energy issues and related greenhouse gas emissions.

5.0 Contribution and impacts

The situation in the energy efficiency/renewable energy market in Bulgaria has changed dramatically since EAP was established in 2000, not only due to EU accession process, but also due to global change in awareness and in change of technology. In 2005, Energy Efficiency Act was passed, followed by a Renewable Energy Law in 2007. Additionally, the market has changed and the business interest has increased as a result of promotion and legal requirements. New technologies such as biomass boilers and solar panels, are being introduced and now more affordable to private consumers.

EAP has assessed the potential of biomass use for numerous municipalities, providing data to municipalities, businesses and potential investors. EAP also helps local authorities with the **preparation of local energy action plans, energy audits** of public buildings, search for best options for improvement of energy efficiency of public buildings and **dissemination of information on energy efficiency**. One of the most appreciated activities of EAP is involvement of the Municipalities, local associations etc. in various EU-funded projects where

they could **meet local authorities from across Europe, learn on different approaches on the spot** - on the site visits to project partners etc. In this way, further project ideas and suggestions for better organisation and management of the municipal assets are generated. Moreover, EAP's activities make the people feel that they can act and change the situation, e.g. at achieving the objectives of CO2 reductions, energy conservation and quality of life. Through accumulation of experience and systematic work changes has gradually happened in the administration of the Municipalities – proactive, EU oriented employees have come to the fore. EAP also supports the Municipalities at joining the Covenant of Mayors and helps to implement related activities. Recently Plovdiv has joined the Covenant and based on advice from FEDARENE stated EAP as its supporter.

EAP has assisted the energy market actors by organising conferences, informing on the new environmental and energy requirements, promoting the technology, assessment of needs for energy efficiency investments in public buildings etc. An example has been the training for energy managers for energy checks in 2008 that resulted in Energy Action Plans in wood processing sector and a series of site visits, with the final result of application to GEF small grants programme for a pellet factory jointly used by 10 companies which in this way process their wood waste. Now EAP is establishing a biomass cluster through an IEE-funded project. One of the interviewees also pointed out that **EAP's activities have influenced a change in construction technology, installing solar panels and biomass heating systems** to much larger extent than before.

In 2004 the regional agencies have founded the Association of Bulgarian Energy Agencies; today it has 13 member agencies and Liyana Adjarova, the Executive Director of EAP, is the Chairman of the Association. Recently the Association has **published a Joint Declaration “A Sustainable Energy Future for Bulgaria” to appeal to the relevant Ministries to integrate the new EU Energy Strategy into Bulgarian national energy strategy** and other policy papers.

Public awareness on EE/RE remains low although information is shared regularly with the media and stakeholders in the form of emails, information briefs about the projects and project materials (e.g. video advertisements for promotion of sustainable transport, brochures), events celebrating key milestones of the projects, press conferences at major events (e.g. biomass league) and similar. Special care is taken of promotion in schools. EAP tries to use TV as much as possible as the key communication channel with the general public due to the fact that 80% of the population receives most information from TV. EAP has its own website, but it is not the primary means of communication, also because of the fact that especially elderly population does not use internet. On the policy level, the decision-makers are targeted through irradiation by asking them for their opinion and through meetings, discussions, workshops and roundtables. Some of the statistics on the **dissemination events** is shown in the table below.

Activity	2008	Plan 2010
Workshops and seminars	17	7
Conference	/	1
Events	5	5 (incl. 10 th anniversary)

Study tours	3	4
Internships (15 days)	23	n.a.
Videoclips	3	extensive media coverage
average	3 events per month	

The information materials are simple but effective. EAP is assisted by a retired former PeaceCorps volunteer for communication efficiency. The impression is that EAP keeps the production of promotional and information material to minimum and prefers to focus its resources on actual practical activities; this is a positive example compared to quite common practice of production of costly glossy information material and less focus on practical work.

EAP has an internal system of self-assessment and quality control in place, but no formal measurements of the performance or reporting, e.g. to the Management Board or to stakeholder municipalities. The outputs and impacts can be most clearly seen on the project level.

Systematic performance measuring is seen by EAP as an important area of potential improvement, especially as it recognises that monitoring and evaluation are critical for EU funds.

6.0 Conclusion and future of energy agencies

According to stakeholder interviewees there is no need for new energy agencies, attention should be given to effectiveness, management and improved relationship with local authorities. EAP however would prefer more agencies, ideally 26 – 27 in total (one per each region of Bulgaria) with the North-West of Bulgaria being priority. In addition, the existing ones should be strengthened.⁷¹

According to EAP **ideal duration of funding to energy agency to reach maturity is 3 years**. From the perspective of the situation in Bulgaria, the appropriate legal structure for energy agencies is independent non-profit status, working closely with public authorities, but promoting also businesses in the EE and RES field.

EAP advocates a relatively small core team with a strong and large network of experts that can be engaged according to the needs; this also ensures cross-pollination of ideas and knowledge as well as higher expertise for specific tasks.

The “**snowball effect**” of the EAP can be seen also through involvement of numerous other people, e.g. local volunteers (often ex-interns), foreign volunteers and partnership networks across Europe. Additional impact could be reached by establishing the office in a passive house, acting as a showroom to demonstrate on the spot the potential of different technologies (EE, RES).

⁷¹ For example, when Sofia Energy Agency won a project on industrial EE, EAP invited them to cooperate with the Municipality of Plovdiv.

EAP is planning to **reduce the number of Management Board members** in 2010 from 8 to 3 members - the Director of EAP and 2 external members (one researcher and one from the energy related associations, agencies) that would be able to quickly and efficiently resolve all management issues.

To further improve EE/RE, **small grants for training in energy management** and related issues for municipalities would be especially useful. In addition, partnership projects in energy planning and energy management on local and regional level would bring substantial benefit both to local authorities and energy agencies. In the opinion of the energy agency, further efforts should be put into improvement of national statistics and databases (to be able to monitor success) and to stimulate better cooperation between EEA and regional and local energy agencies.

List of interview partners and consulted documents

Interviews date(s):

- Ms. Liyana Adjarova, Executive Director, Energy Agency Plovdiv, liyana.adjarova@eap.save.dir.bg; interviewed on 19th and 21st January 2010
- Mr. Gancho Kolaksazov, Deputy Mayor, Municipality of Plovdiv, g.kolaksazov@plovdiv.bg; interviewed on 18th January 2010
- Mr. Yuli Slavov, Coordinator, Association for Plovdiv (an association acting as a catalyst between the Municipality and the businesses), yuslavov85@gmail.com; interviewed on 19th January 2010
- Mr. Plamen Tsvetanov, Head of the Energy Systems Analysis Laboratory, Bulgarian Academy of Sciences – Institute for Nuclear Research and Nuclear Energy, ptzvetanov@irne.bas.bg; interviewed on 19th January 2010
- Ms. Petya Jordanova, General Coordinator of Eco-Schools – Bulgaria; interviewed on 19th January 2010

Documents:

- Energy Agency of Plovdiv website: <http://www.eap-save.dir.bg/>
- Municipality of Plovdiv website: <http://www.plovdiv.bg/>
- Region of Plovdiv website: <http://www.pd.government.bg/en/index.php>
- ManagEnergy network: <http://www.managenergy.net>
- FEDARENE: <http://www.fedarene.org/>
- Bulgarian Academy of Science, 2009, Elektroenergetikata na Bolgarija. Razvitie i obshtestvena cena (Electric power industry in Bulgaria. Developments and social cost), Sofia.

- Liyana Adjarova, 2008, The Municipality and the Energy Agency: Natural Allies in Reducing CO2 Emissions. Working with municipalities in the framework of the Covenant of Mayors session,
- Open Days Brussels, October 8th, 2008.

6.12 Agência de Energia do Porto (AdEPorto), Portugal

1.0 Background and context

The *Agência de Energia do Porto* (AdEPorto) is a **local energy agency** in Porto that covers a total population of 222,000 registered inhabitants. This **agency was established in March 2007 by the municipality of Porto** (CMP). Porto has a relatively small territorial area (42 km²) but 450,000 workers and students⁷² live and commute daily to Porto. Today the agency employs five people but started with three in 2007.

2.0 Objectives

In 2006 several members of the CMP (municipality of Porto) were concerned with the **lack of political orientation regarding the energy sector saw the AdEPorto as a good institutional opportunity to fill this gap**⁷³. The lack of coordination of cross-cutting issues (environment and energy) and **the forces of change in other European regions** in terms of renewable energies (RE) and energy efficiency (EE) were the main drivers.

CMP perceived a need for a body responsible and able to study, understand and coordinate the energy sector in Porto. Thus the **IEE programme was a financial motivator to create the agency**. The **specific objectives of the Agency have not changed over the last three years**. They are:

- Promote and cooperate with the municipality of Porto (CMP) to define, create and coordinate the implementation of an sustainable energy strategy and a strategy for the mobility within the city;
- Guarantee joint and co-ordinated efforts of the various public organisations and private entities involved in the implementation of the rational use of energy and promotion of renewable energies;
- Support and advice business regarding energy and environment issues, in order to promote the use of methodologies, systems and technologies compatible with sustainable development;
- Promote the dissemination of concepts and appropriate technologies to use energy efficiently;
- Foster the development and production of indigenous renewable energy technologies;
- Promote and disseminate technical, economical, and financial information to energy users;
- Promote the training needed at the domains developed by the Agency,

⁷² Agência de Energia do Porto, Edifícios Saudáveis Consultores e Trenmo - Engenharia. 2008. Matriz Energética do Porto. Câmara Municipal do Porto and Agência de Energia do Porto. Porto.

⁷³ Personal communication CMP *Municipal Director of the Presidency of Porto Municipality*

3.0 Institutional set-up

3.1 Legal status

The chosen **legal status, a private, not-for-profit association was the most obvious option and has proven to be the most appropriate over time**. The model allows for an independent and impartial position, which is seen as an important characteristic given that the energy sector is extremely complex and traditionally in the hands of a few powerful players. Another advantage is that the **AdEPorto can provide businesses services but benefit at the same time from a special tax reduction**⁷⁴ for private organisations of public interest. Although the agency is legally independent it is nonetheless financially dependent on funding from the municipality (membership fees and in service fees)⁷⁵.

3.2 Internal governance

According to all interviewees the **critical minimum size** depends on the scope of activities and the number of inhabitants covered by the agency. The current number of staff of five is ideal given the geographic scope of the agency, however as the **agency will soon expand to incorporate neighbouring municipalities and become a regional agency** it will most likely require additional staff. The team includes an executive director, two to three experts (energy and environmental issues) and one person responsible for external and internal communication. Right at the beginning the agency opted for a small and flexible team functioning mainly as broker between the policy side and the private sector.

Regarding the **composition of the Management board**, it includes four members: the president who is linked to the academia, the vice-president linked to the CMP and two representatives of AdEPorto members linked to the private sector. The Board's responsibility is to define the objectives, to elaborate the annual planning, the annual report and financial statement to be approved in the General assembly. The management board meets at least once per month. The **Fiscal board** includes three members for internal audit and financial control (two of these are also representatives of member organisations and a third is an external accountant). The **Advisory board** consists of eight public personalities who are external to the Agency and give their opinion about strategic documents, such as the plan of annual activities and the annual report. The opinion of the advisory board is not binding. The **General Assembly** is composed of 25 members gathers twice per year with representatives of all the member organisations (four Portuguese utilities, important energy users, public companies, research institutes, universities and CMP). The General Assembly discusses and votes on the annual report and financial statement, also votes on the annual plan of activities and available budget for the following year.

⁷⁴ The request is still waiting for approval.

⁷⁵ See section 3.3 for more details.

This structure is considered to be comfortable as facilitates participation of many stakeholders of the energy sector. The structure contributes to the Agency's objectives as the interests of the energy sector can be better represented.

3.3 Funding

The AdEPorto has **three main sources of funding**

- 20% IEE grants
- 40% membership fees
- 40% services provided

The composition of the budget is presented in Table 1.

Table 12: Overview of the budget in 2008 and 2009

Source	2008		2009	
	€	%	€	%
IEE Grant	56,500	20%	50,000	18%
Services Provision	50,000	17%	109,000	39%
Membership fees	108,500	38%	108,500	39%
Others	72,500	25%	12,500	4%
SUM	287,600	100%	280,000	100%

Source: Energy Agency, 2010

The members' share in the agency is differentiated per organisation type, e.g. the research institutes and associations have 5 participation units, while companies have from 20 to 100 participation units depending on their sales volume. The 25 members also contribute to the financial sustainability of the agency through the payment of annual membership fees proportional to their participation. The municipality of Porto holds 52% of the participation units (voting power in the General Assembly) in the association and thus contributes every year with € 56,500 of membership fees. **The membership fees pay to 50-60% of the fixed costs (rent and wages) and provision of services through projects with members pay the remaining costs.** The President of the Management Board and the representative of CMP stated that since the beginning of the process, the agency aimed to be financially independent from grants, so the choice of objectives, legal and financial structure was such that the agency could persist without grants.

Porto Agency will receive a grant of about € 200,000 from IEE for its 3-year establishment phase (2007-2010). This grant was an important motivator for action but the management board aimed at independence from grants since the first year. This represented 20% of the agency total budget in 2008 and 18% in 2009. **The IEE contribution was perceived as sufficient** by the interviewees. In 2009, AdEPorto's total revenue was about € 287,600 (18% IEE grant, 39% services provision and 39% membership fees).

The current funding structure is very dependent of the provision of services to the Municipality of Porto (CMP). The CMP bought 100% of the services provided by AdEPorto in 2008 and 65% of the services provided in 2009. The IEE funding is used mainly for cross-cutting activities as these are more difficult to be self-funded. These include for example funding activities that aim to raise awareness of general public to RE and EE issues (activities in schools, workshops, seminars, brochures). These activities tend to be limited due to the lack of funding.

4.0 Activities

4.1 Overview

The AdEPorto is highly specialised in terms of the instruments it applies, its primary focus is support to political decision, especially involving important private, public companies and research institutes in the political discussion. The agency does not implement any technical component of RE or EE projects and it does not provide any type of financial assistance. Instead it acts as an interface between private sector and local governance promoting policy development and supporting implementation of actions such as:

- **A study to support decision with regard to the strategy of the Energy sector (“Matriz energetica do Porto”).** In this first activity the AdEPorto identified the main users and suppliers of energy, and provided recommendations for the development of an action plan.
- As a result of Porto joining the **Covenant of Mayors**, the AdEPorto developed an energy **strategy for Porto** and an **action plan for this strategy** involving the relevant stakeholders.
- **Promotion of natural gas.** This project aims to develop and support the implementation of a strategy to substitute electrical heaters and use natural gas in households and businesses. AdEPorto is responsible for the development of an action plan, the coordination and facilitation of the communication among EDP-Gas (The Natural Gas Company part of the Energy of Portugal Corporation), public research institutes and public governance.
- **Promotion of renewable energies.** The AdEPorto has a focus on solar thermal energy for domestic hot water. The AdEPorto is planning a pilot project to set up 5000 m² of solar panels in several social neighbourhoods in Porto. This project is financed by the CMP and the EU cohesion funds.
- **Old buildings restoration in the historical centre of Porto.** AdEPorto networked to include “increase energy efficiency in old buildings” in the objectives of the restoration activities performed by **Porto Vivo** (Urban Rehabilitation Society). AdEPorto is preparing a **guidance document for technicians with a roadmap of best practices in EE** for rehabilitation in the city centres and architectonic protected areas. This roadmap is unique as it is adapted so to keep the historical authenticity of the historical city centre. This project was mentioned, by CMP director, Porto Vivo

Director and AdEP Executive Director, as a **case of success** because collaboration resulted in several interesting outputs. For example:

- Currently constructors have lower costs erecting new buildings and outside of the city than restoring old buildings inside the city. AdEPorto proposed the inclusion of an article in the **regulation for restoration to incentive constructors to build or restore buildings with lower energetic needs in the city centre**. Constructors investing in the restoration works with lower energetic needs in the city centre receive a loan from the CMP that they can use to reduce costs in constructions outside of Porto.
- Dialogue moderation between Porto Vivo, CMP and IGESPAR (Portuguese Public Institute of Heritage). This moderation process allowed the **installation of solar panels embedded in the roof, so that they do not affect the aesthetic characteristics of old buildings**.
- **The project: Observatory for the Energetic Sustainability of Buildings was also cited as an example of success**. This project identifies and analyses indicators related to the EE of new and restored buildings to monitor how the quality performance of the buildings is evolving.

Most interviewees consider that the general public **is not aware of or sensitive to RE and EE issues** (Executive Director, Director of Porto Vivo, President of advisory board). Disseminating brochures and holding events such as conferences and thematic weeks to reach the general public is expensive, and the impact of these activities is often limited (Executive Director). One of the projects, the implementation of **solar panels in social housing** was not carried out although it is planned since 2008. The transmission of unclear information and bureaucratic constraints linked to the QREN (National strategic reference framework that operationalises the EU cohesion fund) are the main reasons for the delay in implementing this project.

4.2 Assessment of the IEE programme

The IEE contribution was perceived as sufficient by the interviewees.

There is **awareness that IEE funded** the AdEPorto, but the IEE programme is not widely known and possibly there are stakeholders that could but do not take advantage of IEE programme due to lack of knowledge.

Especially in the initial phases of the programme, increased operational support from IEE to Energy Agencies would be a relevant action. Some activities would be highly appreciated: providing examples of good practice and supporting with ideas of what could work given IEE's previous experience. **Other EACI programmes could also be tailored so that Energy Agencies could benefit on the long-run**. The activities promoted by the IEE are sometimes

not very clear to AdEPorto, **the information available in the IEE website could be better structured and digested.**

5.0 Contribution and impacts

In 1990 the **rules for construction of EE buildings** (RCCTE) were published in the *Decreto-Lei No 40/90*. Before 2003, Porto as well as Portuguese inhabitants and businesses had very little awareness of renewable energies. Hydropower was the only available renewable energy. In 2006, the EU Directive 2002/91/EC (EPDB) responsible for the Energy Performance of buildings was transposed into national law. One year later, in 2007, the CMP created the AdEPorto to increase the use of renewable energies and to contribute to EE objectives created by EPDB. The Energetic Matrix for Porto, a study carried out by AdEPorto, recommends a shift from electricity heating to natural gas to reduce CO₂ emissions.

The added value of the energy agency to **public authorities:**

- Supports CMP in the conception of background studies such as the Energy Matrix of Porto and in the design of a sustainability strategy for Porto.
- Studies and provides information to decision-makers in politics and large corporations in the field of energy.
- Creates platforms of dialogue with the relevant stakeholders about regulations/licensing processes that must be improved to work effectively.

The added value of the energy agency to **commercial market actors:**

- Raises awareness about economic and environmental opportunities to invest in RE and EE (mainly dealing with the construction sector applying EPDB and investments in natural gas by main commercial actors).
- Provides information about the context of energy sector in Porto (e.g. database with information about EE of buildings).
- Creates platforms of dialogue with the relevant stakeholders about regulations/licensing processes that must be improved.

The added value of the energy agency to **local communities**

- Raises awareness about EE issues.
- Promotes pilot projects related to RE in social housing.
- Promotes public transport.

The interviewees classified **the information exchange** as of **high quality and intensity including important stakeholders and media**. Less able is the AdEPorto with regard to communication with the general public. In the opinion of all interviewees, one of the most important activities of the AdEPorto is the creation of a platform of dialogue (not necessarily physical) between energy sector stakeholders.

Although there is **no formal procedure to evaluate** the AdEPorto with regard to reaching its objectives or implementation of activities, there is some informal self-evaluation. One of the

indicators cited to show the success of AdEPorto was the **participation of important stakeholders in the management board and the presence of all members in the General Assembly meetings**. In this respect, it is important to mention the influence of the President of the agency who has established himself as a renowned expert and a political leader at national level in the energy sector. Representatives of member organisations reported to be interested in and satisfied with the work of the AdEPorto. **At least one important report and 2-3 dissemination projects** (conferences, seminars, brochures) **are published per year**.

6.0 Conclusion and future of energy agencies

All stakeholders expressed a strong need for an energy agency in Porto. They see the AdEPorto as an important stakeholder ensuring coordination of energy policy at municipal level, ensuring that information flows and providing for a neutral platform of negotiation between energy providers and suppliers. As outlined above, the AdEPorto developed the first study about energy consumption and production in the municipality of Porto and developed a strategy for sustainability for the city. Although the AdEPorto has achieved a lot, it still needs to prove its relevance to several private and public stakeholders, so that consulting AdEPorto becomes a common practice and the AdEPorto's positive judgment becomes a felt necessity (Manuel Cabral, CMP).

According to the Executive Director, President of Advisory board and President of management board there is the **need for a better distribution of IEE agencies in Portugal**, it would be ideal to have a homogeneous and regional distribution of Energy Agencies throughout Portugal. All interviewees agreed that the AdEPorto would better serve society if it would cover a larger geographic area i.e. the metropolitan area of Porto or the areas corresponding to the NUT III.

The **legal structure** of an independent, private, non-for-profit is ideal for AdEPorto. The requirement to apply for IEE funding in a partnership of five energy agencies was seen as useless and created restrictions to individual action. With regard to **institutional set-up**, the AdEPorto collaborates closely with local public authorities (CMP), private sector and research. The main barriers to AdEPorto action are: the **geographic limits** imposed to the agency action (the agency is in process of expanding its activities to the regional level), the **lack of transparency** in political processes, installed **bureaucracy** of some institutions and existing **territorial planning policy** (as it incentives horizontal use of the territory rather than filling the empty houses existent in Porto city centre and contributing to greater mobility costs and energy distribution costs).

The **management and administration** of the AdEPorto works well and attracted relevant stakeholders to become members of the association. Given the current objectives and geographic position, a team of five staff members works fine. Given the geographic expansion of the agency and the objective of reaching general public via awareness raising projects, the AdEPorto will probably need to recruit more staff. This might be a limitation as **public awareness is not a self-paying activity**. Regarding **funding**, the AdEPorto is financially

independent of grants but it is dependent on services and membership fees provided by the CMP and private stakeholders, the model seems to work well.

List of interview partners and consulted documents

Interviews date(s):

- Maria Joao Samúdio, Executive Director, Energy Agency (Interviewed on 18/01/10, 4PM and 22/01/10, 11AM)
- Eduardo de Oliveira Fernandes, Professor at faculty of engineering of Porto and President of the Administrative Council, Energy Agency (Interviewed on 18/01/10, 2PM)
- Manuel de Novaes Cabral, *Municipal Director of the Presidency of Porto Municipality (CMP)* and Vice-president of the Administrative Board, Energy Agency (Interviewed on 18/01/10, 18PM and 10/01/10, 3PM)
- Ana Paula Delgado, Director of Porto Vivo public company and member of the Energy Agency (Interviewed on 21/01/10, 10AM)
- Joaquim Pocas Martins, Professor at Faculty of Engineering Porto, President of Structural Committee at “Empresa Portuguesa das Aguas livres” and also the President of the Energy Agency Advisory board (Interviewed on 20/01/10, 6PM)

Documents:

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