



local Energy Sustainability

S.energia | SEA | ALEEM | MIEMA
Energy Agencies Consortium

Activities Summary Brochure **2007-2010**

Energy Agencies co-financed by
Intelligent Energy Europe Program



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I. Foreword

This booklet has the purpose to be a record of the key activities undertaken by each member of this European Consortium of Energy Agencies in its first three years of existence.

The consortium was settled up by S.energia, SEA, ALEEM and MIEMA, and it emerged from the proposal idea led by the municipalities jointly with local partnerships between public and private institutions for the creation of each energy agency. To accomplish this proposal idea it was essential the possibility of this project development and submission to the "Intelligent Energy in Europe Programme (IEE)", opened at that time for the creation of energy agencies in IEE 2006 call.

S.energia was responsible for the consortium leadership and always received support from our Project Officer – Mrs. Vassilia Argyraki and Financial Officer – Mrs. Melanie Cino from the Executive Agency for Competitiveness and Innovation (EACI) on behalf of the European Commission, which had kindly supported our work and continuously reply to our worries, problems and doubts during more than three years.

The European Consortium believes that the establishment of partnerships like this one is the best way to have a dynamic and a consistent activity on the European strategy, since the consortium co-operation aims are: know-how transfer, technical and experiences exchange, discussion about each member reality and consecutive wide approaches to new solutions regarding the energy issues.

Initially, the energy agencies focused their action on installing and setting up their work guidelines. During that first period the approach was related with actions that contributed to the affirmation of the agencies in their local communities, either with direct actions for citizens, planned initiatives for the municipal administration, or supporting existent activities of local authorities.

Once the agencies had their physical installation, the consortium started to develop activities accordingly with the objectives of the Grant Agreement signed with the Executive Agency for Competitiveness and Innovation (EACI) on behalf of the European Commission. Further in this document it is described each Energy Agency evaluation of this three years period. Now at the end of the IEE funding final step, the European Consortium is finishing until November 2010 all the goals established and also plan the way for the future strategy.

Never has before, it has been justified to have a great effort in order to actively work on energy issues. The fields of study are vast, sometimes complex and linked with all the sectors of economy and the different areas of society.

The European policy on climate change fight, commonly known as the strategy of the three 20's, clearly show the local authorities as key partners in the implementation of concrete measures, that should be organized by local action plans, this is the suitable way to reach the targets predicted for the reduction of greenhouse gases emissions. It is really need to increase Energy Efficiency and to include renewable energy in the Energy Mix of the regions and municipalities involved in this common strategy.

The Consortium Coordinator
S.energia

2. The Intelligent Energy Europe Programme 2007-2013

The Intelligent Energy – Europe programme is run by the Executive Agency for Competitiveness and Innovation (EACI) on behalf of the European Commission, and seeks to bridge the gap between EU policies and how they impact on the ground.

The IEE programme forms part of the EU's Competitiveness and Innovation Framework Programme (CIP). Its global budget of €730 million is used to support European projects under annual calls for project proposals. Funding covers up to 75% of the eligible project costs. The projects funded by the IEE programme cover a wide variety of fields such as energy efficiency in buildings and products, sustainable mobility, renewable energies and local integrated initiatives.

During the period 2007-2013, the EACI manages more than 400 IEE projects and has established 21 new local or regional energy agencies which have been supported by the programme. IEE-funded initiatives include the ELENA Facility (European Local Energy Assistance), ManagEnergy Initiative and the Sustainable Energy Europe Campaign.

Investing into increased energy efficiency and uptake of renewable energy technologies through IEE are a sustainable way of increasing a region's competitiveness, enhance the economic development and help Europe achieve its 20-20-20 energy and climate policy goals.

The implementation of sustainable energy policies must engage all EU citizens. That's why the IEE Programme addresses all, the local decision makers, the young, the professionals, the engineers and the planners through awareness campaigns, trainings, transfer of know-how and expertise at local level. Local action, through the creation of Energy Agencies has been one of the key actions of IEE Programme.

Energy Agencies contribute in keeping local policies up to date and in line with the agreed European policy objectives, removing the barriers from local markets, strengthening the local skills, creating local stable jobs and attract local investments. They help local authorities by giving them technical advice and information in order to become leading actors in Europe's new sustainable energy situation and they empower them through their specific knowledge and expertise to take action in order to improve the quality of life of their citizens.

For further information, please see <http://ec.europa.eu/intelligentenergy>

Vassilia Argyraki, EACI Project Officer



local Energy Sustainability



Activities Summary

3.1 S.energia

Regional Energy Agency for Barreiro, Moita,
Montijo and Alcochete

3.1.1

The creation of S.energia is a local contribution to global sustainability!

Now that we arrived to the end of the first period of S.energia's life, we are required to do the essential evaluation and prepare the way to go on! Our analysis for these more than three years of this Energy Agency activity, include firstly the commitment and dedication of four municipalities – Barreiro, Moita, Montijo and Alcochete – that connected by land and with the Tagus river as the common denominator, embraced the challenge of sustainability seriously, starting this common work! But they did it not alone! A significant number of other society institutions, including public and private, had decided to join S.energia and throughout this time have been supporting the strategy followed by the Agency, materializing many actions that enable the good results already achieved in these years.

S.energia started the way, making some interventions in some priority sectors for municipal administration, such as Public Lighting, Energy Certification in Public Buildings or Urban Mobility, while at the same time gave attention to the concerns of common citizens in their everyday life, promoting good practices for energy savings and thus making a positive contribution in the family budget management.

Involving different sectors of the civil society, S.energia produced a reference document for the municipal administration – the Energy Matrix for the municipalities of Barreiro, Moita, Montijo and Alcochete – which will allow sustainable and oriented decisions in order to achieve the energy sustainability of the involved area. With this document, it will surely be more consistent the assessment of the contribution of each municipalities, to what is known as the "Covenant of Mayors" – a commitment that the European Union has made to the European municipalities, as part of the European Strategy "20 - 20 - 20", on the pathway to fight climate change!

In these troubled times of economical and financial constraints, as never as before it makes sense to guide the reduced municipal investment capacity for the efficient management of resources. We know that the reduction of energy consumption have a direct and positive effect on climate change fight, and this is, in the limit, our most noble goal. But it will surely be the commitment that these four municipalities assume every day trying to improve the quality of life of the citizens of their territory that supports and gives strength to this job!

The members of S.energia Management Board:

Nuno Miguel S. Banza
Carlos Alberto P. Santos
Maria Amélia M. Antunes
José Luis Alféula
Luis Silva
João C. Araújo
Carlos Batalha
Pedro Dominginhos
Susana Camacho

3.1.2

S.energia composition

S.energia – Regional Energy Agency for Barreiro, Moita, Montijo and Alcochete municipalities is an independent organization “not-for-profit” basis to provide a public service, created by the municipalities of Barreiro and Moita through European Commission programme “Intelligent Energy Europe”, with the clear commitment and support of local authorities of Barreiro, Moita, Montijo and Alcochete municipalities. Mayors and Deputy Mayors of the local authorities are directed involved in the agency Management Board, as well some other local stakeholders.

The energy agency was initially composed by the Municipalities of Barreiro and Moita and was established on May 10th of 2007 and started its activity on June 1st of that year. The municipalities of Montijo and Alcochete joined S.energia in early 2008, coming up to increase the energy agency performance geographical area, from 87 Km² to 563 Km².

The place chosen to be the headquarters of S.energia was a secular wind mill located on the city center, so that its location allows easy communication and marketing functions towards the public and entities. It not only represents a traditional use of a renewable energy resource, but also is have a strong heritage importance. It's believed that this place strength the relation between the local population and the Agency. Actually the agency office is settled up, at Stinville Street, Nº 14, in Barreiro.

The associate members of S.energia are the Municipalities of Barreiro, Moita, Montijo and Alcochete, SIMARSUL – Sistema Integrado Multimunicipal de Águas Residuais da Península de Setúbal, MARTINSA-FADESA Portugal, AMARSUL – Valorização e Tratamento de Resíduos Sólidos, Transportes Sul do Tejo, Instituto Politécnico de Setúbal, ADENE – Agência para a Energia, Baía do Tejo S.A./Quimiparque – Parque Empresarial do Barreiro, PLURICOOP – Cooperativa de Consumo, Comimba/Riberalves – Comércio e Indústria de Bacalhau, TST – Transportes Sul do Tejo, Transtejo S.A./Soflusa S.A., EDP Distribuição, and Freeport Outlet.

S.energia technical staff is constituted by 1 Administrator, 2 technicians on engineering, 1 technician on architecture and 1 administrative and marketing/publicity technician.



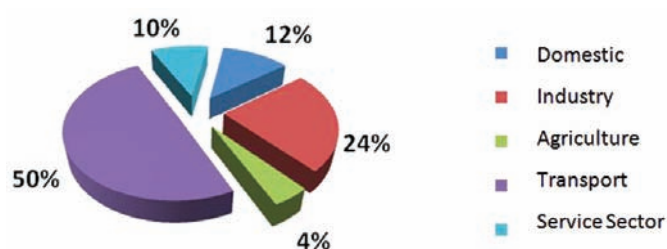
FIG. 1 | S.ENERGIA HEADQUARTERS AND OFFICE

3.1.3

S.energia description of the local scenario

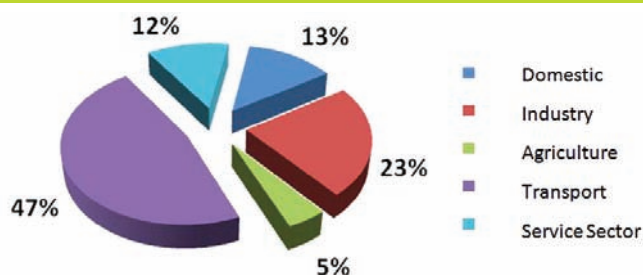
The main purposes of S.energia are to promote the energy efficiency at the local level, the renewable energies use and the creation and implementation of actions on the integrated resource planning perspective. A further goal is to protect the environment by introducing good practices and efficient technologies with meaning of decreasing environmental impacts which are consequence of natural resources utilization and waste production. Quality of life is also another concern, so the intention has been to carry out energy policies fairly adjusted with environmental, transport and urban components, contributing for essential aspects of quality of life such as local economy, mobility, education or health.

FIG. 2 | S.ENERGIA TERRITORY ENERGY DEMAND



The energy demand on S.energia's activity area is dominated by the transport sector, responsible for approximately 50% of the primary energy consumption; the industrial sector is the second responsible for 24% of primary energy consumption. The share of households in energy balance represents 12% of primary energy consumption followed by the sector services and other with 10%.

FIG. 3 | CO₂ EMISSIONS BY SECTOR ON S.ENERGIA TERRITORY



The transport sector accounts for the largest share of CO₂ emissions (47%). It should be noted that this study could not account for any consumption of public transport operators in S.energia area, because the indicators were measured from fuel sales by the local companies.

3.1.4

Most Important Actions / Projects & Experiences

The main areas of S.energia activity, are the energy planning on the area settled by the municipalities of Barreiro, Moita, Montijo and Alcochete, the increment of energy efficiency on public buildings, public lighting energy improving and visual townscape requalification, energy audits and consulting in energy and urban mobility, support the installation of renewable energy production systems, develop education and environmental awareness to different audiences.

From the activities undertaken by S.energia we assign a particular focus on the energy matrix, on the energy audits regarding municipal buildings within the SCE (National System on Building Energy Certification and Indoor Air quality), the pilot-project for the national implementation of a LED street in each municipality, the successive editions of training the National Energy Certification System, so as well the environmental education activities which we describe below.

Energy Matrix and Energy Action Plan



FIG. 4 | ENERGY MATRIX PUBLIC PRESENTATION

The Energy Matrix was designed to enable the quantitative analysis of energy consumption in the four municipalities, in order to permit the identification of priority sectors in terms of measures implementation that will result in savings and energy conservation.

It consisted on a diagnosis of the energy consumption of those municipalities, and it allowed the determination of the evolution of vectors socioeconomic, environmental, energy, and the quantification of emissions of greenhouse gases, related to energy consumption. S.energia desires that this diagnostic analysis will boost investment and innovation in energy efficient technologies, which will translate into benefits associated with the economic competitiveness of various sectors in the four municipalities.

Just as this analysis may serve to support public and private decision makers in the implementation of concrete measures and investments, with the aim of achieving greater energy efficiency and reduce costs associated with this component, it will also provide an awareness of population problems resulting energy consumption.

This first stage of the energy expenditure monitoring led to the development of a comprehensive Action Plan for Energy, in which there are presented the major guidelines for the priority intervention action of S.energia and the Municipalities Barreiro, Moita, Montijo and Alcochete considering the results obtained previously by the Energy Matrix.

With the development of the Energy Action Plan of municipalities Barreiro, Moita, Montijo and Alcochete, S.energia started a process that aims to provide a new reference tool for the integrated sustainable development of these municipalities, with regard to energy consumption. S.energia is doing an action plan where launch the vectors to the future intervention in order to achieve a best energy performance.

Energy Efficiency on Public Lighting

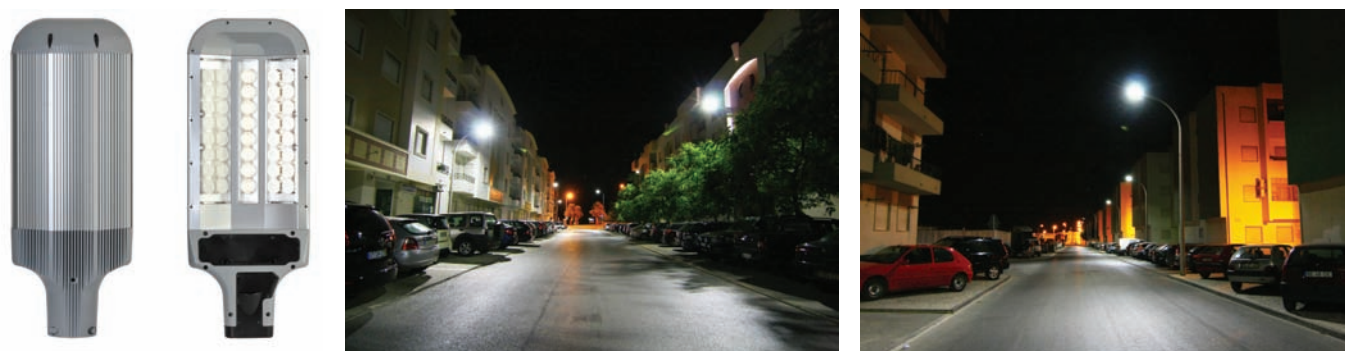


FIG. 5 | LED STREET LIGHTNING – PILOT PROJECT

Considering that the expenditure on Public Lighting include a major share of municipal energy costs, S.energia developed an action strategy in this area in order to reduce the energy bill and to enrich urban townscape to a better visual environment.

Thus, besides conducting a review of Public Lighting billing, the energy agency promoted the installation of LED lamps in the cities of Barreiro, Moita and Alcochete as a pilot project of a new lighting technology in the Public Space in the arteries chosen in each municipality for the effect. This solution aims to achieve levels of efficiency and quality luminance higher than those currently existing, reducing operating costs associated with the entire infrastructure.

The installed equipment was the “UrbanLED” brand which have been developed and produced in Portugal by the company Exporlux (Energia Viva shareholder) and the result of an international partnership of this Portuguese company with Philips Lumileds and Fraena Corporate.

Energy Audits on Public Buildings

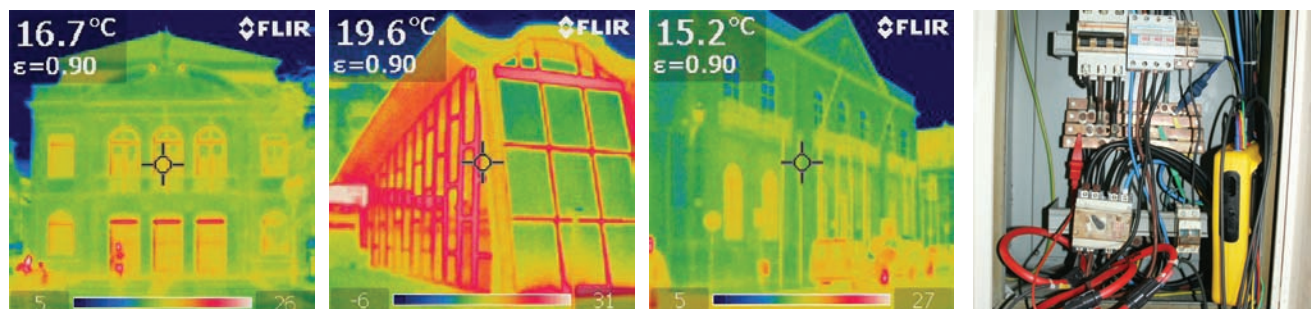


FIG. 6 | THERMOGRAPHICAL CAMERA IMAGES AND ENERGY ANALYSIS OF PUBLIC BUILDINGS

S.energia held in partnership with the Setúbal Superior School of Technology, from the Polytechnic Institute of Setúbal, for the studies for energy certification of eight municipal buildings under the National System of Energy Certification for buildings and Indoor Air Quality.

The energy audit featured the conditions of energy use in buildings, in order to find out opportunities for consumption reduction and recommend an Energy Efficiency Plan which indicates among other suggestions for improving the thermal performance of the building, taking in consideration environmental concerns and economical savings, bearing in mind the comfort and health of its users.

The Energy Agency coordinate the work needed for these studies, in this period for the energy certification of the City Hall of Barreiro, Montijo and Alcochete, the Municipal Swimming Pools of Montijo and Alcochete, as well as the Municipal Libraries of Barreiro and Moita.

SCE - National System of Energy Certification for buildings and Indoor Air Quality

Qualified Experts Training



FIG. 7 | SCE TRAINING SESSIONS AND THE EXAMPLE OF THE FIRST NEW BUILDING IN BARREIRO WITH ENERGY A CLASS

Recognizing the importance of the national regulations on thermal behavior and energy consumption on buildings, when their application was still very fragmentary and only dedicated to some buildings, S.energia was one of the first's promoting the SCE training in a partnership with a recognized and responsible institution for these training activities in Portugal.

The Energy Agency has been organizing successive editions of training sessions about the Energy Certification System and Indoor Air Quality, in partnership with the Setúbal Superior School of Technology from the Polytechnic Institute of Setubal, which had attendance of municipal technicians from Barreiro, Moita, Montijo and Alcochete Municipalities and also from S.energia.

The main key of its success was to invite local architects, engineers and municipality policies to make this training, in order to aware them, of their potential impact in the reduction of the energy consumption at buildings, when the energy efficiency is taken in account during the buildings drawing phase. The principal goal of this training was to enable local architects, engineers and municipality technicians with the necessary knowledge, in order to develop suitable buildings in terms of thermal behavior and HVAC drawings. This training also was the first level for technicians who would like to become experts in SCE system.

S.energia had in the training sessions 29 technicians in 2007 and 19 in 2009, so that they can now give better support to the evaluation and development of projects for buildings thermal behavior, as also for its acclimatization and energy systems. This training also allows that technicians go for the next level of training with ADENE in order to become SCE qualified experts. Two of the technicians who attended the training were responsible for the first architectural project that was certified with the energy efficiency A Class, in the municipalities of Barreiro and Moita. This result had an important significance for these municipalities, since it was the beginning of a process where we can see more awareness to the needs of buildings design with efficient and low power energy consumption.

Conferences and Seminars

On the 29th November of 2007, S.energia organized a Public Session about “The need of Energy Agencies at the European Strategy for Climate Change”, in the Auditorium of Bento de Jesus Caraça Municipal Library, in Moita.

The EACI presented “A Strategy for the Creation of Energy Agencies” and the european agencies consortium – S.energia Portugal, SEA Oristano Italy, ALEEM Vaslui Romania and MIEMA Malta – introduced themselves and their business plans. The National Energy Agency – ADENE presented the Implementation of EU Directive of Energy Performance of Buildings and the National Energy Certification.

This session was included in the meeting to launch the European Consortium of local energy agencies led by S.energia and was attended by approximately 40 people.



FIG. 8 | ENERGY AGENCIES PUBLIC SESSION



At the 2008 European Car Free Day (September 22nd) S.energia held the seminar “Sustainable Mobility – Facing the Challenge” in the Auditorium of Barreiro’s Municipal Library within the Celebration of the Mobility Week, which was broadcasted via Web through the online newspaper www.rostos.pt.



FIG. 9 | SUSTAINABLE MOBILITY - FACING THE CHALLENGE” CONFERENCE



In 2009 S.energia held in Alcochete’s Cultural Forum, a conference about the Nuclear Power: “Learn about this form of energy!” with the support of the Portuguese Physics Society, in the National Energy Day (May 29nd).



FIG. 10 | NUCLEAR: “LEARN ABOUT THIS FORM OF ENERGY!” CONFERENCE

The Public Session was a contribution to the public debate about the different energy resources, and counted with the participation of distinguished experts on the subject, notably Professor Luís Coelho, from the Polytechnic Institute of Setubal, Professor Augusto Barroso President of the Portuguese Society of Physics and Professor Fernando Carvalho Rodrigues, Director of NATO Science Programme. The themes discussed in this session show the importance of this matter, clearly showing the need for the national level is getting back to discussing nuclear power as an alternative to coal and natural gas.

On the 18th September of 2009, S.energia supported a seminar on “Climate Change Fight” which was organized by the Division of Environmental Sustainability (DSA) of the Municipality of Barreiro, in the Auditorium of the Barreiro’s Municipal Library. On this seminar it was presented the “Center for Climate Change in Barreiro”, an initiative supported by the DSA and S.energia, which should be regarded as a strategic tool for the municipality, supporting the decisions on urban planning, urban regeneration, industrial development and road and traffic planning.



FIG. 11 | “CLIMATE CHANGE FIGHT” SEMINAR

For this initiative it was invited the PhD. Professor Filipe Duarte Santos, a member of the National Commission for Climate Change and the Coordinator SIAM II Project – “Climate Change in Portugal: Scenarios, Impacts and Adaptation Measures.”

In October of 2009, S.energia held in partnership with ADENE and the Association “Cooperativa Cultural Popular Barreirense”, a public session about the Solar Thermal programme launched by ADENE in 2009, targeting potential beneficiaries such as the Private Institutions of Social Solidarity and the Sport Associations with Declared Public Utility at Barreiro, Moita, Montijo and Alcochete. This measure forms part of the National Action Plan for Energy Efficiency (PNAEE), providing for measures for boosting solar thermal energy in Portugal through the creation of favorable conditions for the purchase of equipment to progress beyond the barrier of the initial investment.



FIG. 12 | "SOLAR THERMAL PROGRAMME" PUBLIC SESSION

The measure allowed funding until a 65% grant, as well as in the case of large dimensions solar systems, a supplementary loan from the bank at a reduced rate for the fitting of solar thermal heating hot water.

In 2010, S.energia finished its celebrations of the European Mobility Week, with the conference "Public Transport Quality – Sustainable Future" at Barreiro's Technology School Auditorium (ESTBarreiro/IPS). This conference addressed the Public Transport by an integrated approach, combining public service and social cohesion, financial sustainability and energy efficiency, as well as their socio-economic impacts at local/regional. Keynote speakers from CCDR-LVT, Metropolitan Transportation Authority of Lisbon (AMTL), ESTSetúbal/IPS, the Municipality of Barreiro, Transportes Colectivos do Barreiro (BBT), Transtejo S.A./Soflusa S.A., Transportes Sul do Tejo (TST), Fertagus and Metro Sul do Tejo (MTS).



FIG. 13 | "PUBLIC TRANSPORT QUALITY – SUSTAINABLE FUTURE" CONFERENCE

Environmental Awareness and Education Actions

S.energia understands that school communities are the space of excellence for the transmission of knowledge and to train people more environmentally aware and responsible. In the context of education initiatives and environmental awareness, the S.energia has been providing technical support to students of various levels of education, making some presentations in the classrooms, assisting in the preparation of school competitions and project work in the energy and participating in some thematic workshops related rational use of energy and climate in many technical schools and secondary schools.



FIG. 14 | ENVIRONMENTAL AWARENESS AND EDUCATION ACTIONS

Examples of such collaborations are the presence of S.energia on Municipal Festivities or at some special events like the Educational Projects Fair in Moita, Educational Fair in Barreiro and the Project School “Eco-Fair” in Montijo. The energy agency also made an “Energy House” to exhibit at the educational fairs, where it shows and demonstrate the errors and the good practices regarding energy use at home, trying to aware the children to energy savings that could be carried out through the energy efficiency.

S.energia also collaborates with other local actors, performing several actions to raise the energy efficiency awareness, in collaboration with various groups, giving special attention to efficiency in households.

European Mobility Week Activities:

The streamlines of S.energia are also on the awareness rising of energy efficiency in the urban mobility and transports since more than 50% of the energy consumptions of S.energia territory corresponds to this sector. In this way, S.energia give a special attention to the European Mobility Week commemorations, organizing conferences and seminars, awareness campaigns for the use of public transport, promoting cycling as a sustainable means of individual transportation, among others.

S.energia organize annually in partnership with municipalities of Barreiro, Moita, Montijo and Alcochete, with support from several associations of cycling in these four counties, bicycle tours through the streets and roads of the four cities and aims to promote bicycle use to achieve a sustainable mobility.



FIG. 15 | "PEDALADA DA MOBILIDADE" TOUR



The energy agency, organized also in the aim of the celebrations of European Mobility Week, the campaign "Eco-Exchanges: Public Transports trips in return for Garbage".



FIG. 16 | "ECO-EXCHANGES" CAMPAIGN



The "Eco-Exchanges" campaign created awareness for the population of the municipalities of Barreiro, Moita, Montijo and Alcochete, for the need of separation of municipal solid waste through the exchange of an amount of recyclable waste by public transport tickets. We distributed each year about 600 tickets, kindly provided by the regional transportation operators such as Transtejo S.A./Soflusa S.A., Transportes Sul do Tejo (TST) and Transportes Colectivos do Barreiro (TCB). This campaign is an idea launched by AGENEAL – Municipal Energy Agency of Almada which S.energia embrace and intends to further develop, as now, part of the commemoration of the European Mobility Week.

In a variety of types of collected urban solid waste, we give a particular emphasis to the importance of the high volume of batteries cells that were delivered to the "Eco-Exchanges" points.

S.energia also gave the opportunity for people to try some kinds of new Environmental Friendly Individual Transports, in the areas where this agency conducted the "Eco-Exchanges" campaign, and in some of the busiest areas of Barreiro, Vale da Amoreira, Montijo and Alcochete. There was a number of available segways for people to experience this type of electric vehicle available, which may be filed as an option for individual transportation for reduced travel distance circuits.



FIG. 17 | SEGWAY'S VEHICLES DEMONSTRATION



3.1.5 Future Strategy of the Agency

S.energia will continue to develop the energy planning of Barreiro, Moita, Montijo and Alcochete municipalities. It will also continue to help its associate members and all the citizens, regarding the energy issues, giving information support, promoting good practices at energy and environmental levels, giving technical support, preparing new projects in energy efficiency, renewable energy, sustainable mobility and transports areas and also looking for funding to execute the projects ideas. The energy agency will proceed the work started before related to the energy audits and energy certification accordingly to the National System (SCE) for the municipal buildings, giving support to the local authorities in all steps of this process.

The energy agency will continue to promote conferences, seminars and public sessions about energy and environmental issues in order to provide citizens with the best knowledge about new legislation and technology evolution in the energy field.

The agency will also keep the promotion of energy efficiency and environmental awareness to the scholar communities, developing specific activities and presentations, and also support the municipalities on the annual commemorations of thematic days and European Mobility Week.

3.1.6 EU Added Value & Cooperation

S.energia led the European Consortium that also includes the Energy Agencies: SEA, ALEEM and MIEMA.

During these three years there has been a very close sharing of knowledge and experience between European partners involved in this project. This continuous connection has been led by S.energia and implemented primarily through meetings of the Transnational Consortium in different countries for the exchange of technical issues. Also the existence of a "Virtual Project Office" allowed a detailed monitoring of work undertaken by each agency and sharing of experiences, ideas and perspectives on Energy and Environment issues.



FIG. 18 | VPO – VIRTUAL PROJECT OFFICE AREA

The consortium partnership also helped to identify the diversity of local institutional, socio-economic and energy contexts in Europe and to look to the common strategies and solutions to the existing problems, thereby contributing to the process of the European unity. The consortium also developed new partnerships in order to apply for further EU funding for jointly new projects.

It is also important to make a reference to our Project Officer – Mrs. Vassilia Argyraki and Financial Officer – Mrs. Melanie Cino from the Executive Agency for Competitiveness and Innovation (EACI) on behalf of the European Commission, they always had kindly supported our work and constantly reply to our worries, problems, doubts and requests of clarification, we are really grateful, it was a very important help during this more than three years work.

Articulation between the partners

We maintained through the S.energia website, a specific area (in English language) consider a working place for the consortium of agencies, which we defined as Virtual Project Office (VPO), with documents and presentations made by all partners at Transnational Group Meetings, as well as reports and other important files for the consortium management, knowledge sharing and European cooperation. The VPO was divided in four areas: Stay-Working, Stay-Connected, Stay-Learning and Networking.

Each agency made some actions in the common project for Public Building related to the EPBD adaptation to each National Legislation. The consortium also made some staff exchanges and technical meetings for exchanging knowledge and good practices between the consortium partners, gathering representatives of every agency. The first staff exchange was held in Malta between 8th and 12th June 2009, and a second staff exchange in Oristano between June 16th and 19th of 2010.

Consortium latest proposals to Intelligent Energy Europe Call's:

S.energia led the consortium application "Mayors Fight CO2" for the 2009 IEE Call. This consortium had as partners IrRADIARE, ALEEM, SEA, Università degli Studi di Cagliari (UNICA), MIEMA, FTZ, Kinno and the University of Gdansk. The application "Mayors Fight CO2" refers to the support that the municipalities needed to be involved in the challenge of Covenant of Mayors. The project aims to support the mayors with a specific methodology that would allow the municipality to be prepared for the implementation of actions. This project should culminate in the signing of this voluntary agreement as proof of the straight commitment to achieve the ambitious EU 20-20-20 in 2020.

This Agency also led the consortium "EnSavers" to IEE 2009 Call, having as partners ESTSetúbal/IPS, Quercus, SEA, Università degli Studi di Cagliari (UNICA), ALEEM, MIEMA, FTZ, University of Gdansk, Riga Technical University. The application "EnSavers" aimed to establish teams of energy audits for households, with the aim of influence owners in the reduction household waste and energy consumption, thus contributing to the adoption of best practices in energy efficiency. The intention was to implement a service in which citizen's request to energy agencies, a home visit by a member of its technical staff to undertake a problem-solving identification in energy housing. The aim would be to inform owners about the monetary values that could be save, if they choose to follow the best practices and solutions recommended in the report.

Final Conference of IEE Project (2007-2010)

Energy agencies creation in Portugal, Italy, Romania and Malta

"Local Energy Sustainability" – October 21st and 22nd – Barreiro, Portugal

On the final period of European Commission support to the establishment of these four energy agencies (2007-2010), S.energia, as coordinator of this consortium and Barreiro Municipality, organized a Final Conference with the subject "Local Sustainable Energy" on October 21st and 22nd at the Municipal Auditorium Augusto Cabrita, in Barreiro, Portugal.

The Final Conference program included three thematic panels: I – Contribution of Energy Agencies in the European Climate Change Strategy; II – Energy Efficiency and Renewable Energy; III – Sustainable Mobility and Transport. During the two days Conference it was also shown in a gallery of the auditorium the show-room on "Good Practices in Energy and Environment" by our associates.

This conference was attended by our European partners (SEA, ALEEM and MIEMA) and it was possible to have an intervention from our Project Officer, Mrs. Vassilia Argyraki, from EACI by European Commission. This event was an important moment to share all the work done by the four energy agencies during the last three years and discuss the energy agencies future strategy, also for sharing knowledge and experiences, to find partners for new projects, and also to discuss ideas and perspectives on future European and National Energy Policy.

The target audience was: Professionals of the Energy Sector, Environmental Professionals, Managers and Technicians of the Central Public Administration, Regional and Local Managers, Technicians from Energy Agencies, Teachers, Researchers, Students and other public with interest in these thematic areas.





Activities Summary

3.2 SEA

Sustainable Energy Agency
of Oristano Province

3.2.1

SEA is supporting the sustainable energy local policy in Oristano Province

The Local Energy Agency SEA was created by the Province of Oristano in order to implement the local energy policy in the area covered by the Province.

From the beginning, in 2007, the implementation of the Agency action has been taken as a challenge by the board of SEA and the Province of Oristano. Since its first steps SEA tried to identify and understand the real needs of local authorities, citizens and private organization concluding it was necessary to involve the stakeholders in the Agency project through precise information.

During these three years we established an info energy point in order to give a clear and precise information on energy efficiency and RES, we elaborated the energy balance of Oristano Province, the RES action Plan, the energy certification of Oristano Province's Buildings, we trained professionals and installers, we started the inspection of boilers, organized different events promoting the use of RES and RUE and we gave technical support to local authorities.

While carrying out the Agency work, it was also important to find the way to maintain the Agency after the funding period. SEA received mandate from the Province for the inspections of boilers for the territory of Oristano. This service is very important because it allows the Agency to focus its attention on other future activities mostly referred to the energy management service provided to the municipalities of the Province.

From the experience gained since our creation we can affirm that the energy management service for the municipalities is of the utmost importance in order to implement the energy policy that will bring the province towards a sustainable future and reach the targets set at European and national level of Co2 reduction. This is the reason why SEA will keep supporting the 88 municipalities of the province for the implementation of their local energy policy. The implementation of a local energy strategy represents the base for the sustainable development of the territory of Oristano province.

The Province of Oristano

Mr. Massimiliano De Seneen – President
Mr. Emanuele Cera – Director of Environment Department

The management board of SEA

Mr. Francesco Pinna (President)
Mr. Sergio Locci
Mr. Pioto Caria

3.2.2 composition

The Sustainable Energy Agency of Oristano Province (SEA) was created by the Administration of Oristano Province and the Chamber of Commerce of Oristano under the Intelligent Energy Europe Programme. The Agency established in 2007 is part of an international consortium with three other Agencies which are S. ENERGIA, MIEMA and ALEEM.

The capital of SEA is held 33% by the Chamber of Commerce and 66% by the Province both public bodies.



FIG. 19 | SEA HEADQUARTERS



The establishment of the Agency shows the commitment of Oristano for a clean environment and a development based on the rational use of energy. The main actions are: developing the provincial energy balance and identifying the priority strategic sectors in the field of renewable energy sources, increasing the use of renewable energy source and energy efficiency in Oristano Province, communication and dissemination activities for energy saving and energy efficiency and awareness campaign for the rational use of energy. The main objective of the Agency is to become a reference point in the province of Oristano acting as a structure supporting the decisions to be taken about energy by private and public institution and citizens, providing energy services and facilitating sustainable development.

Agency Staff

The staff of the Agency is composed as follows:

Director

- 1 expert in renewable energy;
- 1 expert in energy planning and energy certification;
- 1 expert in heating systems (HVAC);
- 3 inspectors of boilers.

3.2.3

SEA description of the local scenario

The area covered by SEA is the province of Oristano. The Province is a local authority which operates between Sardinian Region and the municipalities of the area. Within its territory the Province has administrative and government functions and promotes the economic development of the community it represents. The Province has specific tasks and functions in environmental and energy field: valorisation and protection of the environment, local energy planning, contributing to the regional energy planning policies, controls in the field of energy saving and rational use of energy, authorization for installation of energy production plant, dissemination and promotion of RES and RUE.



FIG. 20 | INTERNATIONAL CONFERENCE FOR THE PRESENTATION OF THE COVENANT OF MAYORS

The territory covered by the SEA has an area of 3040 km² with 168.582 inhabitants distributed in 88 municipalities. 65 municipalities have from 95 to 2.000 inhabitants, 19 municipalities from 2.000 to 5.000 inhabitants, 4 municipalities from 5.001 to 31.169 inhabitants

The 73% of the municipalities has a population of less than 5.000 inhabitants.

The biggest city is the city of Oristano which has 31.169 inhabitants.

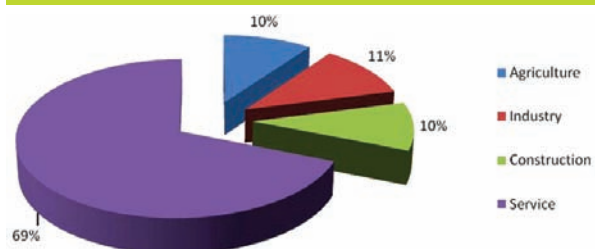
Regarding the economy of the area, Oristano Province vocation has been in the past very contradictory based on rural activities and heavy industry. At present it is aiming to become as a whole a "Sustainable Province" enhancing its Mediterranean vocation for sustainable coastal and rural development, sustainable tourism/industrial activities based on energy management, renewable energy, environmental forestry, networking, competitive sustainable services and local skills.

Agriculture 10% of the GDP

Industry 11% of the GDP

Services 69% of the GDP

Buildings 10% of the GDP

FIG. 21 | ECONOMY OF ORISTANO PROVINCE

The Province of Oristano is still based on a farming and pastoral economy that characterizes the local production.

In fact it occupies the second place in Sardinia in the farming sector which amounts to 10% of GDP against a national average of 2%. In this rural and natural context the tourism is becoming more and more important for the local economy.

The Province of Oristano is oriented to develop a sustainable tourism system based on historic and cultural identity, on an uncontaminated nature and on traditional farm and fishing food products. The tourism system of the Province is based more on small integrated facilities distributed over the territory instead of big structures. Examples of these are B&B and farm holiday structures.

In this context the environmental protection of the territory represents a duty and an opportunity for the province.

**FIG. 22 | IMAGES OF THE TERRITORY**

3.2.4

Most important actions / Projects & Experiences

Main actions:

- Provincial Energy Balance;
- Renewable energy sources action plan;
- Energy audit of Oristano province public Buildings;
- Increase the use of RES and promote energy saving;
- Communication and dissemination actions;
- Energy management services for local authorities;
- Inspection of Boilers.

Environment Energy Balance of Oristano Province and RES action plan

SEA elaborated the Environment energy Balance of the Oristano Province. The territory of Oristano Province consumes 149 Kilotep of primary equivalent energy divided among gasoil, gasoline, gas, oil, electricity. This energy is distributed among agriculture 7,6%, industry 8,5%, transport 60,2 %, tertiary 10,6% and residential sector 13,2%.



FIG. 23 | COVER OF THE PAPERS

On the basis of the energy balance SEA experts elaborated the RES action plan of Oristano province which represents a study on the potentialities of renewable energy production in Oristano province. The main aim of this document is to show the different scenarios (evaluated by the technical and economical point of view) in order to reach the European target of 20-20-20 in Oristano Province.

The study has been carried out analyzing PV and solar thermal/thermodynamic wind production, several types of biomass and the main actions on energy saving in buildings and public lightning. For each renewable energy source SEA elaborated 3 different scenarios (low, medium and high diffusion) evaluating the amount of energy potentially produced, CO2 saved and the investments needed for each scenario. This analysis is based on the potential of the territory and on the strict regional rules of Sardinian Environmental Act. Each scenario can be combined with the others in order to find the most convenient configuration. Synthesis of the emissions related to the different scenarios:

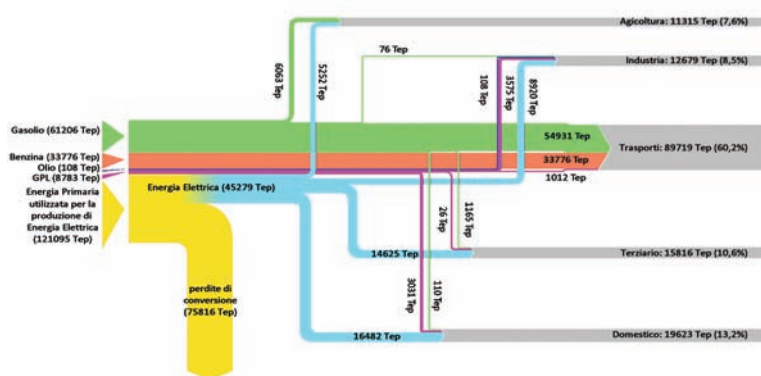


FIG. 24 | SANKEY DIAGRAM ILLUSTRATES THE FINAL USES OF EACH ENERGY VECTOR



FIG. 25 | PRESENTATION OF THE PAPERS TO THE PROVINCIAL COUNCIL

STUDY ON BIOMASS POTENTIAL IN ORISTANO PROVINCE

	A Low Diffusion (kt/anno)	B Medium Diffusion (kt/anno)	C High Diffusion (kt/anno)
CO2 emissions in 2005	304,3	304,3	304,3
CO2 emissions in 2007	280,5	280,5	280,5
CO2 emissions foreseen in 2020	313,2	299,0	270,5
Variation 2007-2020	+32,7 (+11,7%)	+18,5 (+6,6%)	-10,0 (-3,6%)
Variation 2005-2020	+8,9 (+2,9%)	-5,3 (-1,7%)	-33,8 (-11,1%)

SEA elaborates a paper with the main aim of evaluating the potential of energy production from forestry biomass in Oristano Province. This document is very important because it allows having a clear situation of the areas in which it is possible to exploit biomass for energy production.

The outcome of this document is that in the territory of Oristano Province could be installed 3-5 ORC 1MW plants, each capable of producing at least 8 GWh/year, that is enough to pay the amortization of the financing, the staff costs, the biomass extraction costs with a large economic margin for the investors. This evaluation doesn't take in account the thermal energy that can be used for industrial processes or thermo piping, representing a further added value.

Energy certification of Oristano province Buildings



FIG. 26 | F.BRUNELLESCHI DESIGNER HIGH SCHOOL



FIG. 27 | L.MOSSA COMMERCIAL HIGH SCHOOL



FIG. 28 | PROVINCIAL ADMINISTRATION HEADQUARTERS

SEA elaborated the Energy Certification and Energy Audit of 3 buildings owned by the Provincial Administration. The papers were published and presented to the students of designers' high school during a seminar in December 2009.

Inspection of Boilers

The activity of inspection of boilers is foreseen by the national law implementing the Energy Performance Building Directive (EPBD). The competent authority for the territory is Oristano Province. The Province has given mandate to SEA for the inspections of boilers in the territory as well as of the setting up and management of the heating plants data base (27th of October 2009).

The inspection of heating installations allows to:

- assure greater safety of the boilers for the users.
- reduce energy consumption.
- reduce CO2 emissions



FIG. 29 | SEMINAR ON ENERGY CERTIFICATION TO THE STUDENTS OF DESIGNER HIGH SCHOOL



FIG. 30 | SEA INSPECTORS

SEA inspectors visited 600 boilers over 35 kW and the Agency received documentation of 4745 self-certifications for boilers under 35 kW.

An awareness campaign about the inspection of boilers was carried out through by a letter, announcements on local TV and radio and billboards. The campaign was addressed to all the 65.000 families of the territory.



FIG. 31 | POSTER AND BILLBOARD OF THE AWARENESS CAMPAIGN



FIG. 32 | INFO ENERGY POINT

INFO ENERGY POINT

The Info Energy Point provides information to:

- Local authorities;
- Citizens;
- Private organizations;

The Info Energy Point provides information on:

- RES, energy saving and business opportunities;
- Energy certification of buildings;
- Fiscal incentives on the installation of RES and energy;
- Energy saving technologies;
- Good behaviors for energy saving;



FIG. 33 | INFO ENERGY POINT

Elaboration of 4 guides downloadable from our web site www.agenziaenergia.it

The info energy point is well known in Oristano and is increasing the number of daily contacts.

Website

From December 2007 is online the SEA website at: www.agenziaenergia.it

The web site is constantly updated with news regarding RES, energy saving measures, fiscal incentives, financial opportunities, calls for tender, calls for proposal at local, regional, national and European level. From its online publication the website has received 40.823 visits (at 13/05/09), more than 2000 visits per month.



FIG. 34 | SEA WEBSITE HOMEPAGE

Awareness Campaign ECOBUS 2009 "Energy and Water"

The objective of this campaign was to raise awareness on RES and the importance of energy and water saving. We set up an old bus with boards and video illustrating all the most important aspects on RES and good behavior. During the visit two brochures, dedicated to energy and water, saving was distributed to the students. The students were informed on the importance of water and energy and their use through the centuries by human beings.



FIG. 35 | STUDENT NEAR THE ECOBUS



FIG. 36 | LESSON TO SCOUTS DURING AN EVENT



FIG. 37 | MODEL OF PV LIGHTNING IN A TUNNEL



FIG. 38 | BROCHURE ON ENERGY AND WATER SAVING

International Conference for the presentation of the Covenant of Mayors

SEA organized the conference for the presentation of the Covenant of Mayors, where it was given a presentation of energy activities to support the territory in reaching the targets 20-20-20 set at European level.



FIG. 39 | INTERNATIONAL CONFERENCE FOR THE PRESENTATION OF THE COVENANT OF MAYORS 2008

Solar Days

SEA organized the SOLAR DAYS event in 2008. During the three days different seminars were organized on: Energy saving, geothermal energy, wind energy, cogeneration systems, PV, condensing boilers and solar thermal.



FIG. 40 | BILLBOARD OF THE EVENT



FIG. 41 | SEVERAL STANDS ILLUSTRATES DIFFERENT TECHNOLOGIES IN RES AND RUE



FIG. 42 | 3 DAYS OF SEMINARS



FIG. 43 | DISCUSSION UNDER A LARGE PV PLANT DURING A BREAK

Training and dissemination Activities

SEA organized several training events in the territory and participates to meetings in the entire province.



FIG. 44 | TRAINING COURSE FOR BOILERS INSPECTORS 2009



FIG. 45 | TRAINING SEMINAR FOR FARMERS 2010



FIG. 46 | TRAINING SEMINAR FOR HANDCRAFT BUSINESS 2009



FIG. 47 | LOCAL MEETING ON NUCLEAR ENERGY AND RES 2010



FIG. 48 | RENOVATION PROJECT OF PUBLIC LIGHTNING FOR ORISTANO

Technical Support to local administrations

SEA provides support to the local authorities in the field of RES and RUE.

The staff of the Agency visited all 88 municipalities and elaborated projects regarding the installation of PV plants in the buildings and in the areas owned by the municipalities and on Energy Saving in public lightning.

The project of renovation of public lightning that SEA made for the Oristano Province Administration was financed within a Regional Call in 2009 and will allow to save up to the 40 % of electric energy with a payback time of 20 months.



FIG. 49 | ROLE OF THE LOCAL ENERGY AGENCIES FOR THE SUSTAINABLE DEVELOPMENT OF THE TERRITORY

Conference "Role of the local energy agencies for the sustainable

development of the territory". This conference has been the occasion to present the Agency of Oristano at regional level and discuss the importance of the energy agencies. The conference was attended by the responsible for environment of Sardinian Region, directors the other energy agencies of Sardinia, local authorities and the Agency of Barreiro and Moita. During the conference it was presented the new web site of SEA.

3.2.5

Future strategy of the Agency

During the EU funding period SEA carried out the activities that would permit the Agency to continue its activity at the end of the contract with EACI. One of them is the inspection of boilers according to the EPBD directive national implementation Law. Another important activity of SEA will be the technical support in energy field to the local authorities located in Oristano Province. To this regard SEA in 2009 has taken action to contact all the 88 mayors of the municipalities of Oristano Province showing them the importance to take action against climate change and the economic advantage of RES and energy saving. At the moment 30 municipalities have request the adhesion to SEA.

Future activities of SEA:

- Energy management services to be provided to the Province of Oristano and the municipalities of the territory in the framework of an overall agreement between the Province and the Municipalities;
- Energy certification of buildings following the experience gained with the energy certification of the three buildings owned by the Province;
- Training activities related to the new professional figures resulting from the implementation in Italy of the EPBD directive;
- Provide information on RES and RUE through the Info Energy Point;
- Implementation of the Provincial Energy plan;
- Projects on RES and RUE at Regional, National and European level.

3.2.6

EU added Value & Cooperation

SEA is in touch with several European Energy agencies and it's a member of RENAEL, the Italian network of Energy agencies.



FIG. 50 | KICKOFF MEETING BARREIRO 2007



FIG. 51 | CONTRACTORS MEETING IN BRUSSELS 2008



FIG. 52 | CONSORTIUM MEETING ORISTANO 2008



FIG. 53 | CONSORTIUM MEETING VASLUI 2009



FIG. 54 | STAFF EXCHANGE IN MALTA 2009



FIG. 55 | STAFF EXCHANGE IN ORISTANO 2010



FIG. 56 | ENERGY WEEK 2008 AND 2010 EDITION (PICTURE: 2010)



FIG. 57 | CONSORTIUM MEETING MALTA 2010



FIG. 58 | PARTNERSHIP WITH THE ENERGY AGENCY OF TERAMO AGENA



FIG. 59 | SIGNATURE OF THE AGREEMENT WITH AGENA ENERGY AGENCY





Activities Summary

3.3 ALEEM

Local Agency for Energy Efficiency
and Environment Vaslui

3.3.1

ALEEM Vaslui is a useful instrument for local energy policy and European cooperation!

Energy occupies a central point in our lives. We depend on it for travelling, heating our houses in winter or cooling them in summer, to assure an appropriate functioning of industry sites, farms or offices.

Along mankind history natural resources in general and energy resources in particular had permanently great influences on society evolution and its development, on local economies, national economies and recently on global economy.

Energy became a strategic factor in global policy, a vital component for economic development, society progress and future of next generation which are to come. The term of "energy security" raised its popularity recently, turning out to be appreciated as the key of regional security.

Every failure of critical energy infrastructure has the potential of a political, military or social impact.

Greater energy security means first of all greater diversity of resources and renewable is continuously gaining an important part of this policy. Not at last, energy security and fighting climate change can be assured by the resource existing at our fingertips: the efficient use of energy.

Obviously, using energy efficiently has a positive influence locally on the budget of family or business and globally on community and national budget.

Therefore it is imperative to elaborate an integrated policy in the fields of energy and environment, both at European, national levels but also at local level, establishing clear objectives and certain dates to reach an economy based on sustainable development which leads at efficient use of energy resources and improvement of energy performance in buildings and equipments.

In this context, it was proved to be a correct decision establishing an energy management agency in Vaslui. After 3 years of functioning, it may be declared with certainty that Local Agency for Energy Efficiency and Environment Vaslui (ALEEM Vaslui) constitutes an important and useful instrument both in establishing local energy policies but also implementing them.

Attracting funding resources for modernizing thermal energy supplying system in Vaslui, for growing energy performance of blocks of flats, coordination of the activities which concluded to these investments, monitoring of energy consumptions in public buildings, elaboration of energy balance for some important sectors which forms social and economical infrastructure of Vaslui are some of the activities developed by ALEEM in the field of enhancing energy efficiency in Vaslui.

Also, the European partnership established with the similar agencies from Portugal, Italy and Malta concluded at identification of common preoccupations of involved local authorities which to contribute at enhancing European cohesion and friendship relations, at a common approach regarding the good governing in energy sector, at promotion the concept of European unity and solidarity based on local autonomy, multicultural diversity and democracy.

Adhering of Vaslui Municipality at Covenant of Mayors, the initiative of European Commission in which ALEEM is covenant coordinator for Vaslui city, demonstrates the utility of work done by ALEEM team, the continuity of activities started 3 years ago becoming more necessary than ever.

**President of Management Board,
Mayor of Vaslui Municipality,
Eng. Vasile Pavál**

3.3.2

ALEEM composition

Local Agency for Energy Efficiency and Environment Vaslui (ALEEM Vaslui) was established in accordance with the project “Establishment of 4 energy management agencies in Barreiro (PT), Vaslui (RO), Province of Oristano (IT) and Malta Polesine (MT)”, submitted within Intelligent Energy Europe Programme 2005.

It is an energy management agency, constituted according to Government Organisation no.26/2000 (regarding the establishment and organization of associations and foundations) as a non-profit association, without patrimonial scope, of general interest, non-governmental, autonomous, independent, constituted with the free will of founding members: 2 public authorities (Vaslui & Barlad Municipalities), 3 public services suppliers from the city of Vaslui, 2 household owners associations, 2 private companies that act in the field of energy and constructions, 3 branches of governmental authorities in the field of education, environment protection and consumer's protection.

Activities of the agency for the first 3 years were financed by European Commission (49,5%), expected funding from 3rd parties (1,72%) and own funding – Vaslui Municipality (47,58%) and others founding members (1,2%).

Establishment of ALEEM Vaslui constituted the public expression of local authorities to be actively involved in matters regarding energy saving and environment protection.

Thus, a specialized body was created, which works to elaborate a single, coherent plan to use more efficiently energy resources, with no effects on citizens personal comfort but to support their and local authorities decisions to reduce consumptions and therefore to protect the environment.

ALEEM Vaslui also constitutes the link between Vaslui Municipality and European Commission activities, policies and financial instruments in the fields of energy use and environment protection, transforming Vaslui Municipality into a member of “Intelligent Energy Europe” network.

ALEEM structure is as following:

- Management Board of the associates – is formed by representatives of all the founding members of the agency; the chairman of the Management Board is the Mayor of Vaslui Municipality: Eng. Vasile Pavál;
- Staff – is formed by 8 persons who own professional background and experience to successfully carry out all the activities specified in Grant Agreement, of which 3 full time persons and 5 part-time persons (secondments) detached from Vaslui City Hall;



FIG. 60 | ALEEM'S OFFICE

3.3.3

ALEEM description of the local scenario

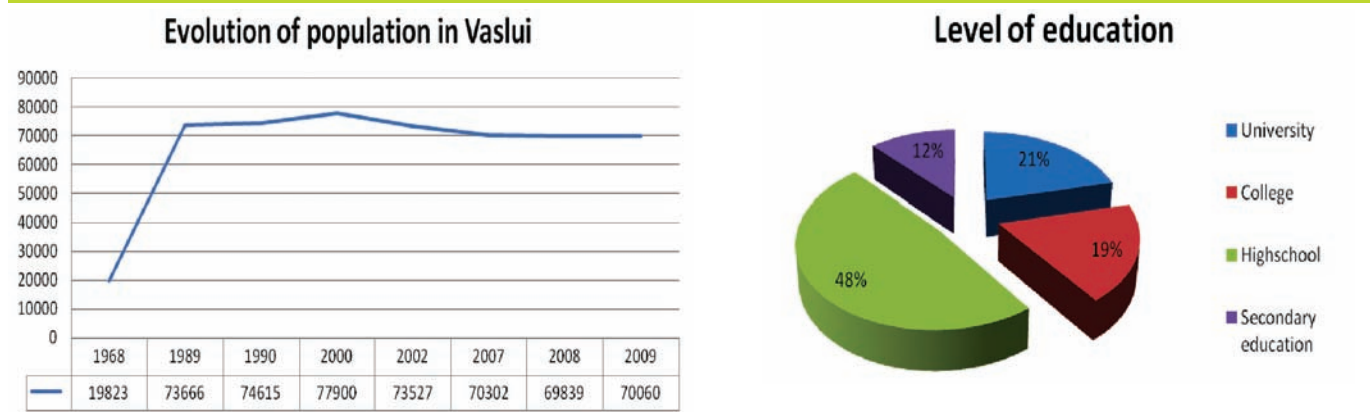
ALEEM Vaslui covers Vaslui city and Bârlad city areas. The two municipalities are situated in North-East Romania, having a total number of 140.000 inhabitants and represent the main cities within Vaslui County.

The County is bounded by Moldavia Republic and since the integration to EU, it represents a part of Eastern boundary of EU, which confers it a higher responsibility, but it makes it at same time more attractive as contact point with the countries from the former Soviet Union.

Vaslui city, the capital of the county, covers an area of 6844 ha and lies in the Eastern part of Moldavia, in the centre of Bârlad Plateau, at an altitude that varies between 90 metres (in the industrial area) and 170 metres (in the public garden area).

Bârlad city is situated in the Central Moldavian Plateau, between two hills: Dealul Crângului (311 m) and Dealul Mare (264 m). The river Bârlad passes through the city. Bârlad lies on important road and rail routes, between the North and the South of Romania, as well as between Prut and Siret valleys. It is also on the main access road which connects Romania to the Republic of Moldavia, via Albita bounda crossing point.

FIG. 61 | SOURCE ENERGY BALANCE OF VASLUI MUNICIPALITY



3.3.4

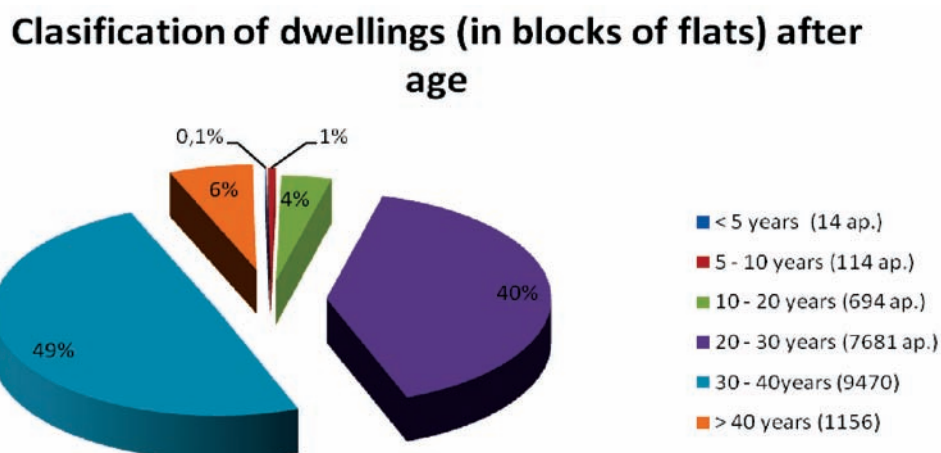
Most Important Actions / Projects & Experiences

Energy Balance for Vaslui Municipality

ALEEM elaborated the energy balance had immediate effects both on Vaslui' energy supplying system and buildings (housing) sector.

Some extracts from the energy balance reveals that in Vaslui city there are 18,200 flats situated in 337 blocks; most of these blocks of flats were built between 1972 and 1990, when Vaslui was designated capital city and its industrialization policy started by building several industrial premises and by attracting people from the neighborhood rural environment to the city.

FIG. 62 | CLASSIFICATION OF DWELLINGS AFTER AGE



At national level, energy consumption for the housing sector is placed second after industry, as the heating consumption represents 22% of the total energy consumption of the country (9 million toe of 40.5 million toe in 2005). National energy-saving potential is estimated to reach 27-35% of the primary energy resources (10 million toe), 3.6 million toe representing the saving potential of buildings. Consumption of thermal energy used for heating is currently between 250 – 400 KWh/year/m² of useful dwelling area. Comparing to the “passive house” whose consumption is maximum 15KWh/m² annually for heating may be noticed that is an enormous energy-saving potential.

Rehabilitation of Vaslui thermal energy supplying system

ALEEM used data collecting for elaboration of the energy balance to identify the necessity of immediate actions for rehabilitation of the thermal energy supplying system. Thus, activities in getting of financial resources for rehabilitation of two city districts thermal plants were performed, as:

- within “13 Decembrie” district plant there were replaced two old boilers with new, highly efficient ones, each having an installed power of 3,5Mwt; it was also replaced all the pipes forming the distribution network;
- within “Confecții” district plant there were replaced the old boilers with two new, highly efficient ones, each having an installed power of 1,75 Mwt and all the auxiliary equipments; new refurbishment of the plant’s building was done;



FIG. 63 | “13 DECEMBRIE” PLANT

ALEEM Vaslui conceived the project proposals for financing (for both investments objectives) and also conceived the technical and economical documentation – feasibility study, acquisition documentation of equipments and works and monitoring of works execution (for “Confecții” plant).



FIG. 64 | "CONFECTII" PLANT

Results of these activities:

- 2000 families enjoy the comfort offered by the new supplying sources of heat and hot water;
- 20% lower production price;
- 600 toe annually energy savings;
- 2.380.000 euro total contribution attracted through national programmes;

Thermal rehabilitation of buildings

There were realized:

- an inventory of the blocks of flats from Vaslui, in order to get them into the financing Programme managed by national authorities;
- dissemination campaigns about the Programme legal provisions through press articles, meetings with the citizens etc.;



FIG. 65 | THERMAL REHABILITATION WORKS AT BLOCKS

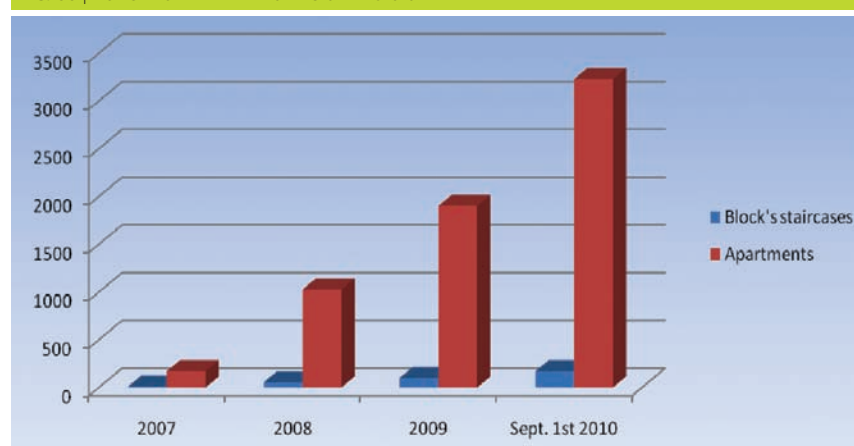
- counseling actions for finding financing solutions, complementary to citizens' own funds, especially about the National programme regarding the thermal rehabilitation of blocks of flats, by agency website;
- quantification of energy losses through buildings' envelopes, before and after the thermal rehabilitation process – this is done thanks to the infrared thermal-camera held by the Agency;
- quality control for the execution of the thermal rehabilitation process of buildings in Vaslui, done due to the director's authorization in controlling of thermal networks works quality;
- offered its technical support for choosing the most appropriate solutions for thermal rehabilitation, activity that is developed due to the certification of the director of the agency as energy auditor in building installations;

- an information and consulting centre opened at the agency office/participation of agency's staff at the meetings of Owners associations;

Following the intense dissemination among the owners associations, resulted in a huge growth of the rehabilitation works:

- 9 block's staircases with 171 flats in 2007
- 54 block's staircases, gathering 1026 apartments in 2008
- 90 block's staircases, 1710 apartments in 2009
- 170 block's staircases, 3230 apartments between January – August 2010

FIG. 66 | NUMBER OF APARTMENTS AND STAIR-CASES



Implementation in Vaslui of National programme regarding the thermal rehabilitation of blocks of flats, managed by the Ministry of Regional Developing and Housing

ALEEM coordinated the implementation of the National Programme that finance thermal rehabilitation of blocks in Vaslui city, having various tasks as:

- Quantification of energy losses through buildings' envelopes for all the blocks of flats existing in Vaslui;
- Dissemination about the Programme legal provisions through press articles, meetings with the citizens etc.;
- Inventory of the blocks of flats from Vaslui eligible for the Programme and establishing the priority;
- Elaboration and submission to the National Programmes of the project proposal and annexed documentation for financing;
- Elaboration of the tender book as part of the public procurement procedure for rehabilitation works;
- Monitoring the quality and quantity of the executed works and approval of expenses allowances;
- Elaboration of all the documents and reports necessary for the coordination of the three parties involved (Owner's Association, National Management Authority of the Programme, Local Council of Vaslui);



FIG. 67 | BLOCK N.º 89 BEFORE REHABILITATION



FIG. 68 | BLOCK N.º 89 AFTER REHABILITATION

After rehabilitation of the two blocks there were obtained following indicators:

- 40% less energy consumed for heating and hot water;
- 78 toe energy savings annually;
- 164 tones CO₂ reduction annually;
- 163 apartments rehabilitated;
- 650 persons who benefit of co-financing for the rehabilitation of their own houses;
- 2 pilot rehabilitated buildings which may constitute a model for people who wants to rehabilitate their houses;
- 265.000 euro brought in Vaslui by ALEEM from other financing sources than those existing locally;

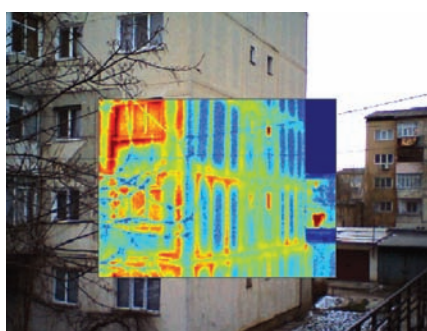


FIG. 69 | BLOCK N.º 321 BEFORE REHABILITATION



FIG. 70 | BLOCK N.º 321 AFTER REHABILITATION

Elaboration of Energy Performance Certificates on Buildings

Whereas energy performance certificates represent an important tool to raise awareness on public regarding the energy losses of their buildings, several certificates were realized for following school buildings:

- kindergarten no.13/A;
- kindergarten no.19;
- primary-secondary school no.5 “Stefan cel Mare”;
- high-school “Mihail Kogalniceanu”;

These scholar units were chosen because they offer very good visibility of the certificates, being situated on the main streets in Vaslui. The Certificates were posted on the units’ buildings, so everybody may observe them.

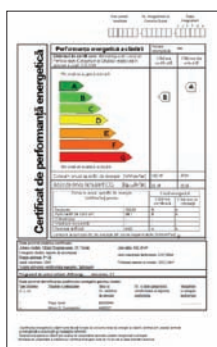


FIG. 71 | EPC FOR “MIHAIL KOGALNICEANU” HIGH-SCHOOL

Thermal “scanning” of buildings

Other key activity of the agency was to take infrared images of most of the buildings (both blocks of flats, individual dwellings or public buildings) in order to show the citizen where their houses have energy “leaks”. This was a successful way to make understand all categories of people about importance of energy saving.



FIG. 72 | THERMAL “SCANNED” BUILDINGS

Electricity consumptions monitoring

Starting with 2008 ALEEM monitors the consumptions of electricity, gas and water in the schools of Vaslui. Data was used at elaboration of energy balance but monthly graphics were realized in order to check if anomalies appear and quickly remediate them. As result, it was observed a total reduction of 15% from total consumptions, by a better energy management of these buildings.

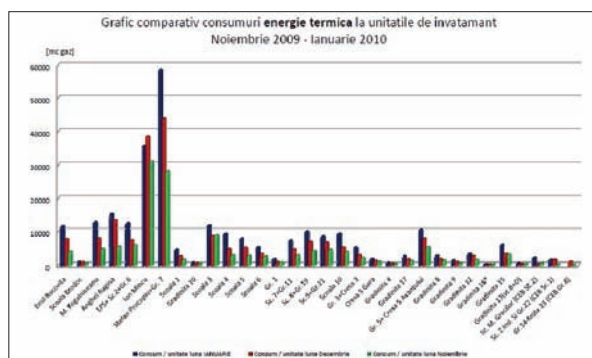


FIG. 73 | GRAPHIC ON ENERGY CONSUMPTIONS IN SCHOOLS

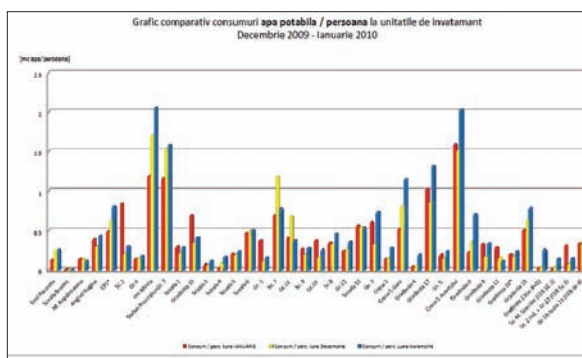


FIG. 74 | GRAPHIC ON WATER CONSUMPTIONS IN SCHOOLS

Earth Hour and Mobility Week

ALEEM contributed to yearly promotion of the international event “Earth Hour” and organized annually in partnership with the Agency for Environment Protection Vaslui of training sessions in secondary schools and high-schools, with the occasion of the event “Mobility Week”;



FIG. 75 | TRAINING SESSIONS IN SCHOOLS



Association Owner's Meetings

Director of the agency monthly participated at general meetings of owners associations where it was periodically presented the necessity of the efficient use of energy at home and the practical measures to use energy efficiently.



FIG. 76 | ASSOCIATION OWNER'S MEETINGS

Agency Website and Press Articles

Press articles on the agency's main activities and results were periodically published and agency's website – www.energyvaslui.ro – was created and periodically updated. The website contains useful information regarding the legislation in the energy sector and the financial schemes existing for private actors, authorities and citizens, agency's main activities and results, measures to be taken in order to use energy efficiently, links to local, national and European energy actors, authorities and programmes.

There were developed strong communication and dissemination actions at local level about national Programmes which finance investments in energy sector in the interest of citizens;



FIG. 77 | PRESS ARTICLES AND AGENCY WEBSITE

ALEEM brought its contribution to enhancement of project' laws in the energy field which stand to be adopted by the parliament.

Conferences and Brochures Edition

International Conference "Funding programmes for energy efficiency – solution to get over the financial crisis" was organized in Vaslui on 5th of May 2009. The conference had a great success.

There were launched two brochures: "Guide for Homeowners – Energy Performance Certificate" and "Guide for Drivers – Solutions to face the economical crisis but not only..." If the first guide wants to promote among people the benefits of energy performance certificate for dwellings, the second guide offers concrete solutions about the measures drivers can take to adapt an "eco-driving" style and reduce the fuel consumptions of their own cars.



FIG. 78 | BROCHURES EDITION



Participation at National events on energy issues:



FIG. 79 | SEMINAR ON THE NEW LEGISLATION REGARDING ENERGY PERFORMANCE CERTIFICATE, BUCHAREST 14TH OF APRIL 2010



FIG. 80 | INTERNATIONAL CONFERENCE ON RENEWABLE, ALBA-IULIA, 25TH OF SEPTEMBER 2010

ALEEM is Covenant Coordinator for Vaslui Municipality which adhered at European Commission initiative "Covenant of Mayors". Adhering to the Covenant shows continuous interest of local community on energy efficiency and use of renewable domains. ALEEM, as covenant coordinator for the city, elaborates the Sustainable Energy Action Plan for the municipality and will monitor its implementation.



FIG. 81 | CEREMONY FOR THE SIGNATURE OF "COVENANT OF MAYORS"

3.3.5

Future Strategy of the Agency

ALEEM Vaslui enjoys full support of local authorities, citizens and stakeholders from Vaslui. Therefore, we will continue our efforts to offer efficient and quality services, as:

- consultancy for citizens and stakeholders belonging to public and private sectors on how they can make energy savings at home or work (no cost – low cost – big investments measures);
- consultancy for citizens and stakeholders belonging to public and private sectors to attract financial sources for various investments in energy sector and not only, both from national and European financing Programmes;
- to being a permanent connection link between the national authorities which finance energy projects and local authorities and citizens;
- monitoring and benchmarking of main utilities (gas, electrical energy, water consumptions) for all public buildings from Vaslui.
- to being involved actively in all the events focused on energy, environment protection, sustainable development (as Mobility Week, Earth Hour etc.);
- to maintain strong contacts with project' partners and permanently looking for new partners for European cooperation in the fields of energy, environment protection, education, longlife learning, etc.

3.3.6

EU added Value & Cooperation

ALEEM Vaslui has very good contacts with project partners and is permanently looking to establish new partnerships with similar bodies across Europe in order to form consortium for submitting project proposals under regional, national and European programmes. As result, a cooperation programme on monitoring and benchmarking of energy consumptions in public buildings in association with an institution from Flanders, Belgium will start be implemented.



FIG. 82 | KICKOFF MEETING BARREIRO 2007



FIG. 83 | CONTRACTORS MEETING IN BRUXELLES 2008



FIG. 84 | STAFF EXCHANGE IN MALTA 2009



FIG. 85 | CONSORTIUM MEETING VASLUI 2009



FIG. 86 | CONSORTIUM MEETING MALTA 2010





Activities Summary

3.4 MIEMA

Malta Intelligent Energy Management Agency

3.4.1

MIEMA is leading the way to a clean and sustainable energy future

Taking stock of the local situation in the energy field after more than three years of activities of the Malta Intelligent Energy Management Agency (MIEMA), there can be little doubt that the establishment of the Agency was an effective and timely contribution to the island's efforts to a more sustainable energy future. Thanks to its participation in the European Commission's IEE programme, MIEMA has shared experiences with its partners from Portugal, Italy and Romania and learned significantly in the process. In turn, this experience was shared with the 68 Local Councils of the Maltese Islands in their ongoing strategies to tackle vital energy matters.

Malta's heavy dependence on fossil fuels, its monopolistic distribution network and vulnerable isolated state – both geographically and infra-structurally – renders more difficult the country's energy situation. Furthermore, its small territorial size and high population density increase the challenge to exploit renewable sources like wind and solar energy, of which there is an abundant supply. The Agency has therefore campaigned to reduce energy demand, raising public awareness on the need for energy conservation and efficiency measures, while promoting renewable energies.

Throughout these years, MIEMA has collaborated with all the national players in the energy field. It also managed to build a strong relationship with sectoral and professional associations, industrial groups, civil society organizations and environmental NGOs. Municipalities are taking steps to turn their localities into sustainable communities – energy-conscious villages, towns and cities. Indeed, almost half of all Maltese municipalities have signed the Covenant of Mayors and expressed their commitment to fight Climate Change, which incidentally will be hitting Malta hard.

At a time when energy issues are grabbing the headlines, our citizens rightly demand to be given a reliable service to help them take the right decisions and actions where their energy needs are concerned. Businesses cannot afford to lose their competitiveness due to higher electricity costs. Likewise, the hospitality industry – a main pillar of the Maltese economy – has no choice but to reduce energy consumption to survive. MIEMA will continue to serve these entities when they seek professional advice and guidance.

On behalf of the other mayors appointed to the MIEMA board, as well as the national institutions and ministries represented on the Agency, I reiterate our commitment to support the European drive to reduce greenhouse-gas emissions and the government's efforts to put the island on a low-carbon economy, so vital for our well-being. As MIEMA strives to achieve its vision of a secure, affordable and clean provision of energy, it looks with optimism at a future which may be brighter for our children.

**President of MIEMA,
Mayor of Pietà,
Dr. Malcolm Mifsud**

3.4.2

MIEMA composition

The Malta Intelligent Energy Management Agency (MIEMA) was set up through the Intelligent Energy – Europe programme of the European Commission. It is a public equivalent organization covering all the national territory.

The management board of the agency is composed of the mayors of Pietà and Pembroke (Malta), and San Lawrenz (Gozo), as well as representatives of the Ministry for Resources and Rural Affairs, the Ministry of Finance, the Malta Resources Authority, the Department for Consumer Affairs, the University of Malta and the Fondazzjoni Temi Zammit. Dr Malcolm Mifsud, mayor of Pietà, was appointed Chairman, while Ing. Antoine Riolo, CEO of the Malta Resources Authority, occupies the position of Deputy Chairman. The agency has a staff complement of six.

MIEMA has established a Scientific Committee made up of a team of experts from the University of Malta, the Ministry for Resources and Rural Affairs and FTZ to assist the management board on the technical aspects of the activities and projects of the Agency. These experts also support and advise the work groups set up by MIEMA for its individual projects and activities. Such work groups include specialists and stakeholders on topics like Biofuels from Microalgae, Wave Energy and Electric-powered Boats.

After moving its office from Paola to Gzira, close to the University of Malta, in order to be in a more central location, MIEMA will start operating from an office in Valletta. This will make it more accessible to the public and will enable it to serve consumers better.

3.4.3

MIEMA description of the local scenario

MIEMA is the only energy agency in Malta, covering the whole territory of the islands. It has filled a gap which other energy-related institutions had not been properly addressing, taking up a crucial role for the promotion of energy efficiency and renewables. It is working in close cooperation with the Ministry for Resources and Rural Affairs, responsible for energy matters. A good relationship of collaboration and mutual support has also been established with the most relevant stakeholders and public entities, such as the Malta Resources Authority, the Institute for Sustainable Energy, the University of Malta, the Malta Council for Science and Technology, Wasteserv, Enemalta, MIMCOL, Malta Enterprise, the Building Industry Consultative Committee and the Malta Tourism Authority.

Three mayors, two from Malta and one from Gozo, have been appointed on the management board of the Agency, representing both of the main Maltese islands. Gozo, a separate region having a more rural character, is being promoted by the Government as an environmental island, through the Eco-Gozo Project. This has given the Agency the opportunity to contribute to the clean energy initiatives of the Ministry for Gozo, the Gozo business and tourism communities, as well as Local Councils, Gozitan associations and NGOs.

The Agency has organized a series of activities for all the 68 Local Councils of Malta. It is also working with the Association of Local Councils, particularly on the Covenant of Mayors. The needs of different municipalities, depending on the particular characteristics and economic activities of the localities concerned are taken into account when local actions are proposed.



FIG. 87 | MIEMA STAFF EXPLAINING THE AGENCY'S ACTIVITIES TO FINANCE MINISTER MR. TONIO FENECH



FIG. 88 | MEETING WITH THE MAYORS ON THE COVENANT OF MAYORS

3.4.4

Most Important Actions / Projects & Experiences

MIEMA has focused its programme of activities in areas which were not being tackled by the ministries or other institutions. As a result, it sought to complement the work conducted by other players in the energy field.

Energy Planning

The Malta Resources Authority (MRA) has published a National Energy Efficiency Action Plan for Malta which takes into account the trends of energy consumption on the island. Due to the importance of the tourism industry to Malta and the special emphasis placed on the energy needs of the tourism industry in areas where tourism is particularly high, the Agency has agreed with MRA to focus on the sections of the plan dealing with tourism activity. It has therefore produced information leaflets for hoteliers and restaurateurs, as well as shop owners, targeting the main commercial areas.

MIEMA has also collaborated with Malta Enterprise, the national agency for the support of enterprise, to collate the results of energy audits carried out in hotels so that generalized data for the sector could be produced. An industry-wide survey was conducted to obtain additional data and identify trends regarding energy consumption.



FIG. 89 | MIEMA SEMINAR ON ENERGY AUDITS METHODOLOGY



FIG. 90 | PRESS CONFERENCE TO LAUNCH THE HOTEL AUDITS: MIEMA DIRECTOR MR. JESMOND XUERE (LEFT) AND PARLIAMENTARY SECRETARY FOR TOURISM DR MARIO DE MARCO

Renewables

MIEMA has assisted various entities to consider renewable energy sources (RES) for their needs. As a result, a number of installations – PVs, solar water heaters, grey water systems, etc – were put up in hotels, language schools and other buildings. The Agency is also assisting the Ministry for Resources and Rural Affairs on new projects involving solar and wind energy.

MIEMA has collaborated with MRA on the introduction of legislation, entitled “Guarantee of Origin certificates for Electricity generated from Renewables and High Efficiency Co-generation”, introducing Green Certificates. It has also organized two round tables on the subject of renewables, and a seminar on wave energy as an alternative renewable source holding good potential for Malta. A conference on the same subject is currently being organized.

Net Metering

MIEMA has had a series of discussions with Enemalta Corporation on the introduction of both net metering and smart meters. While promoting these initiatives, MIEMA has also sought to assist consumers to exploit these systems and save on their energy consumption.

MIEMA has carried out a number of energy audits in private and public buildings to assist the owners to introduce energy conservation measures and to consider renewables. The most successful installations have been reviewed and are being promoted on the Agency’s website. The direct outcome of this activity enhances solar power as a viable renewable energy resource for Malta from an economic point of view, apart from its clear environmental benefits.

Energy Certification of Buildings

Legislation on the energy certification of buildings has now entered into force. Two MIEMA engineers have attended the course and qualified to issue the relevant certification. In line with the focus of the agency’s activities on the tourism and commercial zones, therefore, a number of hotels and buildings representing the hospitality sector were being energy certified. Other buildings were chosen from among those of government entities.

The impacts of the certifications and ensuing interventions were directed towards appreciation by a wider audience, being specifically made in buildings which are open to the public. This had the effect of raising the visibility of the project and encouraging other entities to implement similar actions. A press conference was also held prior to launching an industry-wide survey for hotels. MIEMA was joined in this press conference by the Malta Tourism Authority, the Malta Hotels and Restaurants Association, the Ministry for Resources and Rural Affairs, Malta Enterprise and the Parliamentary Secretariat for Tourism. A brochure on the energy certification of buildings has been published and widely circulated.

Biofuels

The Agency concentrated some of its activities on the area of biofuels from marine microalgae. The particular conditions of sun and seawater required for the cultivation of these algae are available in abundance in Malta, and marine algal cultures are not in direct competition with the cultivation of food crops. MIEMA set up a national network and organized a symposium, the latter serving as a knowledge-gathering meeting with experts in the field, on the most appropriate ways to produce biofuels from such algae on an industrial scale. It was intended also to identify investors for the establishment of installations for the production of biofuels. A demonstration facility to research the economic potential and sustainability of an algaculture industry in Malta is being set up, whereby the results of the initial research will be published and disseminated.



FIG. 91 | MEETING WITH THE MINISTER FOR RESOURCES AND RURAL AFFAIRS ON BIOFUEL FROM ALGAE



FIG. 92 | PROFESSOR BERTUCCO OF THE UNIVERSITY OF PADOVA MAKING A POINT AT THE ALGAL BIOFUEL SYMPOSIUM

Energy saving on public lighting

MIEMA is helping the local councils who have committed to the Covenant of Mayors, and who intend to adopt energy-saving measures with respect to public lighting. It has held meetings with the mayors, both collectively and individually, in order to identify the peculiar problems relating to urban and rural municipalities. The consortium members were also introduced to the mayors and contributed to the exchange of experiences on the subject of renewable energies and energy efficiency on a local scale. On the same subject, MIEMA also had meetings with the Local Councils Association.

Other activities

MIEMA organized a number of infodays, in collaboration with the Malta National Contact Point for the Competitiveness and Innovation Programme (CIP Malta NCP). A series of roundtable discussions with the main stakeholders served to create awareness of the various energy related funding opportunities that exist within the IEE programme, and to promote local initiatives on the topics in question. The events provided a forum for debate and experience sharing, and outlined various avenues that could be considered by stakeholders regarding energy efficiency and renewable energy projects under IEE or other programmes. The roundtables also served as a meeting platform to establish direct communication channels and set the basis for further collaborations and joint projects between stakeholders.

MIEMA also developed a website with an attractive layout and useful tools. A number of publications and promotional material were designed and produced. MIEMA has participated in a number of events with a view to publicizing its activities and the concepts of energy efficiency and renewable energies. The Agency has participated in the Europe Close to You Fair, the Eco-Fest fair, and the Researchers' Achievements Exhibition. MIEMA also participated with a stand in the European SME Week.



FIG. 93 | MIEMA STAND AT EUROPE CLOSE TO YOU FAIR 2008



FIG. 94 | MIEMA STAND AT EUROPE CLOSE TO YOU FAIR 2009



FIG. 95 | MIEMA STAND AT SME WEEK, MAY 2009

MIEMA, acting in collaboration with the Malta National Contact Point for the EU's Competitiveness and Innovation Programme (CIP Malta NCP), the Malta-EU Steering & Action Committee (MEUSAC) and Local Councils Executive Secretaries Association (ASKLM), organised a joint information workshop to create awareness of the various energy related funding opportunities that exist for local councils, within and beyond the IEE programme. The event also aimed at disseminating information about the 'Covenant of Mayors', which seeks to bring together European towns and cities in a permanent network to exchange and apply good practices to improve energy efficiency in the urban environment. This event provided a forum for debate and experience sharing and outlined various avenues that can be considered to pursue by local councils regarding energy efficiency and renewable energy projects. It served as well as a meeting platform to establish direct communication channels and set the base for further collaborations and joint projects between local councils.



FIG. 96 | MIEMA PRESENTATION AT A SEMINAR FOR LOCAL COUNCILS



FIG. 97 | THE PANEL AT THE SEMINAR

The Agency participated actively in a visit to Malta on the collaboration in the field of alternative energy research and development by a Chinese delegation from the Gansu Natural Energy Research Institute (GNERI) Asia-Pacific Research & Training Center for Solar Energy (ARTCSE). The institute is mainly engaged in the studies and application of the new and renewable energy, especially for solar energy technique, domestic and foreign technical cooperation and training, technical consultation and exchange, new product development. At present, GNERI/ARTCSE has already become one of the famous national research agencies. The delegation visited the Agency for a one to one discussions on possible cooperation in the field of renewable energy sources.



FIG. 98 | THE CHINESE DELEGATION MEETING MIEMA PERSONNEL



FIG. 99 | PRESENTATION BY MIEMA TO THE CHINESE DELEGATION

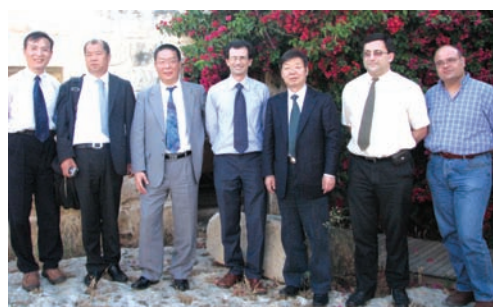


FIG. 100 | GROUP PHOTO WITH THE CHINESE DELEGATION



FIG. 101 | MIEMA'S STEFAN DE MARCO WITH THE CHINESE COLLEAGUES

On behalf of the Ministry for Resources & Rural Affairs (Malta) and the Royal Norwegian Embassy, MIEMA organized a bilateral seminar on Energy Efficiency and Renewable Energy. The seminar was aimed at bringing together high profile Norwegian companies and local experts to set the scene for discussions that could potentially lead to future collaboration.



FIG. 102 | BILATERAL SEMINAR ON ENERGY EFFICIENCY AND RENEWABLE ENERGY



FIG. 103 | RESOURCES AND RURAL AFFAIRS MINISTER PULLICINO GIVING THE CLOSING SPEECH WITH MS. ELISABETH WALAAS, NORWEGIAN STATE SECRETARY FOR FOREIGN AFFAIRS

MIEMA also worked with the Institute for Sustainable Energy on a Seminar "Towards a Sustainable Energy Future for Malta". This seminar was organized under the patronage of the University of Malta and the Malta Council for Science and Technology and in collaboration with MIEMA. The seminar consisted of several presentations on various aspects of Renewable Energy and Energy Efficiency, including their technology status and potential in Malta. All of the speakers were leading experts in the field. The seminar attracted key policy makers, academics, industrial players, government officials, members from various NGOs, teachers and students.

Agency personnel have also participated on national radio and TV programmes to promote MIEMA's activities. The Agency has a regular weekly slot on energy efficiency issues on the national TV channel.



FIG. 104 | MIEMA ENERGY SPECIALIST SPEAKING AT HOMPESCH RADIO

3.4.5

Future Strategy of the Agency

MIEMA will continue to work with state and local government and agencies with a view to improving the energy performance of the Maltese islands, with a special focus on the potential for economic growth and competitiveness in the global economy through excellence and leadership in energy efficiency and renewable energy sources. MIEMA will continue to offer services in the energy field to various entities, and will endeavour to exploit funding opportunities within European programmes, and in this sense it has already been successful in securing three projects under the Interreg IVB MED Programme:

Enerscapes (MIEMA as Lead Partner) – The project deals with the growing use of Renewable Energy Sources (RES), unquestionably important for the reduction of greenhouse gas emissions, and their compatibility with landscape and heritage preservation policies. Moving into the field of landscape protection, the main referring source for the project will be the European Landscape Convention. Starting from this common platform, project partners will identify the most suitable strategies for considering ecological, landscape and heritage aspects while setting up RES promotion policies.

MEDEEA – The project addresses one of the main weaknesses of the MED area, i.e. an energy efficiency level lower than the EU average. It promotes the take up of a common tool for energy planning across the Mediterranean, as means to increase efficiency, thus reducing both greenhouse gases emissions (= better environment) and the costs born by public and private actors (= more competitiveness). Energy planning is also key to promoting renewable energy, which has such a high potential in this zone of Europe and which brings along technology innovation, economic development, and new qualification of workforce. The use of common tools allows to increase cohesion and to identify MED specific energy features to give them a greater role at EU level.

LiMIT4WeDA – The project deals with mobility in areas affected by weak demand of transport. Such urban or rural areas are generally characterized by inefficient public transport systems and consequently a widespread use of private car. This reduces the territorial accessibility of these areas while perpetrating a not sustainable mobility system which discriminates people. The projects will elaborate solutions to make local public transport systems for weak demand areas more flexible and less expensive. This will be achieved by means of the use of new technologies, the creation of networks, experimentation of light mobility, infomobility and intermodal transport for people, sensitization of decision makers at different levels, citizens awareness raising.

3.4.6

EU added Value & Cooperation

In its 3 years of existence MIEMA has established contact with a number of networks of European Energy Agencies. It is a Campaign Associate with the Sustainable Energy Europe, as well as being part of vast networks of European organizations, including state, regional and local government and agencies, NGO's, research institutions and educational institutions. The Agency has participated fully in the common activities of the consortium partners, namely S.energia of Barreiro, Moita, Montijo and Alcochete (Portugal), SEA of Oristano (Italy), and ALEEM of Vaslui (Romania).

MIEMA participated in staff exchanges between the partners, and received the partners in June 2008. The exchanged employees were able to concretely live the daily life of the Agency.

The Agency has established contacts and is exploring possibilities of collaboration with a number of Energy Agencies of small autonomous island regions, such as Sicily, Sardinia, Cyprus and Crete. The Director of the Energy Agency of Enna, in Sicily, has this year visited MIEMA. A number of proposals with the Agencies of the islands mentioned are also being prepared. The aim of such a relationship is to tap the 'mentor' Agency's experience in the very specific situation of small islands with similar characteristics, particularly size, climatic conditions and geographic location. The Agency is also seeking collaboration with Islenet – an Island network – to enhance transferability of best practices with experienced Agencies and develop a closer relationship with such organizations.

MIEMA participated in the Energy Agency Directors Meeting in Brussels in November 2009. The meeting enabled the local authorities to become more familiar with the EU Energy Policy, and to contribute to the achievement of RES targets possible at local level. The event was an opportunity for participants to be more actively involved in the successful operation and continuity of the Energy Agency.



FIG. 105 | KICK-OFF MEETING IN BARREIRO, NOVEMBER 2007



FIG. 106 | PARTICIPATION IN SEMINAR FOR MUNICIPALITIES AND CITIZENS, BARREIRO 2007



FIG. 107 | PRESENTATION BY MIEMA, BARREIRO 2007



FIG. 108 | STAFF EXCHANGE, MALTA 2008



FIG. 109 | STAFF EXCHANGE, MALTA 2008



FIG. 110 | CONSORTIUM MEETING VASLUI, 2009

Agencies Contacts

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