

# INSTITUTIONAL MEMORY APEA 10<sup>th</sup> Anniversary



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**APEA 10 years**  
**Energy Agency of the Province of Avila**  
**Institutional report 1999/2009**

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It is now ten years since the Avila County Council, making a firm commitment to the future and laying the foundations of what would eventually be the Energy Agency of the Province of Ávila -APEA-, started the long road leading to turn our province into a benchmark and an example inside the regional, national and European energy scenes in the important area of renewable energies and energy efficiency.

We have gone a way punctuated by activities, which these pages reflect summarily, among which we can find organization and attendance to special events related to the world of energy, the development of European projects with the set up of model facilities in that field and countless experiences and exchange of knowledge, which have opened our horizon to the new challenges of the future.

I would like to congratulate sincerely those responsible for it all, the European Affairs Deputy, whose area comprises the Energy Agency of the Province of Ávila, the Director of the Agency and all the specialists closely collaborating with us, on the work done and commit ourselves again, as we did one decade ago, to the chosen option, which will undoubtedly be a path of growth and greater welfare for the whole population of Ávila.

Agustín González González  
President of the Ávila County Council

The celebration of the X anniversary of the APEA provides us with a unique opportunity to collect in this document the main activities performed throughout these ten years, but also to have a moment to thank those people who, as politicians or technicians in charge, have rendered their essential collaboration. This project would not have been possible without each and everyone of them.

APEA was born as a result of deep enthusiasm and with the aim to offer the necessary counseling and sow in our province the seed of preservation of our environment through the culture of a more efficient and responsible use of energy.

In any case, we are facing greater challenges: the situation of crisis of the energetic model, the need to watch over our environment and the potential of resources our province is endowed with. All of it makes us responsible for promoting actions that allow us to give the province, with all its municipalities, a leading role in Europe as regards work, efficient use of energy and the study of alternative energies.

Now, at long last, we have a moment to look back and behold the fruits of the work done, for which I would like to invite you to read this report containing the main actions performed throughout the life of APEA.

Luisa Martín Vázquez  
Director Energy Agency of the Province of Ávila

## **Energy Agency of the Province of Ávila - APEA-**

It is now ten years since the Energy Agency of the Province of Ávila started its operations, and in this time it has had as its main aim to promote efficiency, energy saving and encourage the use of renewable energies in the province, pursuing the right management of the local energy resources and seeking the optimal conditions to supply rural and urban areas with energy, in order to contribute to making local authorities aware, leading to improvements in the economic competitiveness of the province, activating new endogenous economic resources, forming and informing citizens in energy matters and, in short, contribute to the preservation of the environment by reducing the emission of greenhouse gases and diversify the energy sources reducing energy dependence.

The agency provides both advisory and outreach services allowing for the introduction in all fields of a culture based on the rational use of energy and constant search of energy efficiency through the development of demonstrative projects and participation in different projects of a European scope, a fact that has led in the last few years to expanding its sphere of action to European projects of a heritage-cultural kind.

## **1999 Beginning**

Proposal of the County Council to create an “Agency for the promotion of energy in the province” (AEPA) through the Santa Teresa Cultural Foundation.

**10**

## **2000**

Approval inside the organization of the Santa Teresa Cultural Foundation of the rules regulating the function of the Energy Agency of the Province.

12 December 2000

**11**

## **APEA 2001**

### **2001**

Start-up of the Agency within the SAVE project

After the constituting process of the Agency, it starts its course in the year 2001, within the framework of the SAVE European project.

In a first stage, efforts were focused on letting province citizens know about the existence of the Agency, which brought about the publishing of the first word-spreading materials intended for this aim.

Municipal Campaign for enhancing electric rate-setting in the province

The Municipal Campaign for enhancing electric rate-setting municipalities in the province addressing the municipalities of the province aimed at carrying out a detailed study of the different concepts of electric rate-setting and propose, in each case, the necessary contract modifications, assessing the improvements to perform and the cost reductions that would be obtained in each municipality with the implementation of those measures. 50 municipalities altogether had their energy diagnosis.

**15**

## **APEA 2002**

### **I Avila Conference on Renewable Energy**

The first Avila Conference on Renewable Energy took place on the 28<sup>th</sup>, 29<sup>th</sup> and 30<sup>th</sup> of January. It was jointly organised with the Construction Engineers and Technical Architects Association of Ávila, the Industrial Technical Engineers Association of Ávila, the Architects Association of Castilla y León - Ávila demarcation-, Avila City Council, and with the collaboration of the Regional Energy Body of Castilla y León (EREN), Institute for Energy Diversification and Saving (IDAE), Caja Duero and Chamber of Commerce of Ávila.

In this first edition the working groups were focused on Solar Thermal Power and Photovoltaics, the Institution and the Citizens when promoting solar power and Architecture and solar power: Is coexistence possible?. The I Exhibition on Environmental-friendly Architecture was a complement to the Conference.

### **Installation Centre Infantas Elena y Cristina**

In the year 2002, looking for a coverage of renewable energy in the buildings of the Avila County Council, the Centre Infantas Elena y Cristina was analyzed, as it met the requirements to host a Solar Thermal Power Facility.

Therefore, the respective subsidy was processed and the installation was designed and contracted, intended to cover 67% of the demand for hot water in the Centre throughout the year, with a peak of 100% coverage in the months of higher radiation.

The installation is made up of 110 collectors which total 231 m<sup>2</sup> of captation on one of the roofs of the Centre. The hot water generated is stored in the two 10,000 litre tanks placed in the Centre.

The saving of emissions of greenhouse gases (49 tons of CO<sub>2</sub>/year) as well as the economic saving that the facility involves (8,000 €/year) turns the facility into an example of profitability, as its cost was 91,630 €, 48,532 € of which was received as a subsidy from the IDAE, and therefore the investment was paid off in the sixth year of operation.

## **APEA 2003**

### **II Avila Conference on Renewable Energy**

In the month of April the Conference was held in its second edition, jointly organised with the Construction Engineers and Technical Architects Association of Ávila, the Industrial Technical Engineers Association of Ávila, the Architects Association of Castilla y León -Ávila demarcation-, Avila City Council, and with the collaboration of the Regional Energy Body of Castilla y León (EREN), Caja Duero and Chamber of Commerce of Ávila.

The working groups organised were focused on Renewable Energy in Industry, Biomass as fuel for the future, Architecture and Solar Power, and complying with the Kyoto Protocol in Spain.

The workshops, organised in a parallel way in the three days of the Conference, dealt with Dimensioning of facilities, integration of panels on roofs and Photovoltaic facilities connected to the mains.

#### **Photovoltaic solar plant in Naturávil**

Given the formative and disseminative character of the leisure Centre of Naturávil, in the year 2002 an exemplary installation of photovoltaic solar power was accomplished for recharging the batteries of golf trolleys. The Energy Agency designed and contracted the installation, apart from applying for a subsidy for it from the Regional Government of Castilla y León. The facility has 22 photovoltaic modules of ATERSA that total a power of 2,420 watts. The panels allow to charge 22 batteries of golf trolleys, avoiding conventional electricity consumption.

The panels were installed on the roof of the warehouse where golf trolleys are kept, thus integrating them in the Naturávil buildings.

22

#### **Thermal solar plant in Naturávil**

The Energy Agency designed, contracted and processed the corresponding subsidy and contracted the thermal solar installation of Naturávil. That installation was carried out to cover the needs of Sanitary Hot Water, heating system and temperature control for the indoors swimming pool, which is used for dissipating the temperature excess of the facility in the summer. The facility has 70 collectors which form a captation surface of 147 m<sup>2</sup>, installed on a supporting structure that is also used as a shadowing element in the parking. There are two tanks for storing sanitary hot water which total a volume of 6,000 litres.

The facility allows to cover 100% of the demand for SHW; 49% of the demand for heating and 56% of the swimming pool temperature control, covering the rest of heating needs with a natural gas boiler.

The facility has been used as an element for the dissemination of renewable energy, as it has set an example for the many visits of students in related courses, who were explained its characteristics on the spot.

#### Campaign for recycling used vegetable oils

The Energy Agency, along with other 12 bodies and firms of the European Union took part in the ALTERNER project “Local and Innovate Biodiesel”, led by the Regional Energy Body (EREN), which developed a Pilot Plan to collect used vegetable oils for the production of biofuel.

In the province of Ávila there were mobile collecting units, fixed collecting points in different streets of selected towns and a campaign carried out for handing in individual collection containers in residents’ associations, schools, etc.

23

The towns where the campaign was carried out were Ávila, Arévalo, Navalunga, Piedralaves, Sotillo de la Adrada and Casillas.

The campaign, which came to an end in the year 2005, meant obtaining valuable information for extrapolating this kind of campaigns to a wider geographical area.

#### **INTERREG III B Project ATLANTIC SPACE “AGRO” in collaboration with rural development area**

The Avila County Council, along with partners from France, Portugal, Great Britain, Spain and Ireland, takes part in the European project “AGRO” for Cooperation and Appreciation of Rural Heritage, within the frame of the Interreg III Atlantic Space Programme.

The project had as general objectives promoting coherence among agricultural policies and the sustainable development of the territory preserving biodiversity in the Atlantic Space, favouring at the same time forest practices which contribute to creating long-lasting employment through the appreciation of natural resources. Besides, the project involved reinforcing the spirit of cooperation and union between the different European regions.

Among the actions carried out it is possible to highlight those aimed at promoting the creation of companies for transformation and commercialization of ecological products related to silviculture and chestnut which involved a sustainable administration of natural resources as well as a Study of forest mycological use and organising Seminars and publishing a Guide of Silviculture and Chestnut culture.

#### Participation as a partner in EnerAgen

In the month of February the Energy Agency of the Province of Ávila took part in an active way in the constitutive process of the Association of Spanish Energy Management Agencies -ENERAGEN- which it joined from the start as a founding member.

24



Eneragen came to life as a joint initiative of the different Spanish agencies, joining forces to promote a rational use of energy, promoting efficiency, saving and diversification of energy resources.

Publicity campaign for advice on energy saving in the home

With the aim to bring closer and promote the culture of a rational use of energy among the citizens in our province, general interest brochures were distributed with El Diario de Avila under the name of “Guide for Energy Saving”, which contained different practical recommendations for energy saving in the home.

### **European Project “The route of Celtic Settlements and Stone Boars on the Spanish-Portuguese border”**

The Ávila County Council, along with other organizations from Spain and Portugal, led the European project “RED: The route of Celtic Settlements and Stone Boars on the Spanish-Portuguese border”, belonging to the Interreg III A Spain-Portugal programme.

The project had as objective the appreciation and restoration of the existing Celtic cultural heritage, thus contributing to its future preservation and divulgation as cultural heritage of priceless value in a place like Ávila that represents the core of Vetton culture.

As a result of this project many actions were developed for the restoration of different Celtic settlements and stone boars in our province, signposting of access routes to settlements and several zoomorphic figures scattered in our provincial geography, apart from the organization of the permanent exhibition “Vetonia: Culture and nature”, located on the ground floor of the Guzmanes Turret, headquarters of the County Council, with a clearly non-specialized, formative approach, without limiting the purest scientific rigour. This exhibition was complemented with the temporary exhibition “The discovery of Vettons” which showed a well cared for selection of objects and materials from the collections of the National Archaeological Museum.

## **APEA 2004**

### **I Course for Consultants in Renewable Energy**

By means of the signing of an agreement between the Santa Teresa Cultural Foundation through the Energy Agency of the Province and the Business School EOI, the first course for Consultants in Renewable Energy took place from September 2004 to March 2005, with 22 participants following the theoretical programme for three months and engaging in the preparation of a practical project in the other three, stage in which a tutor had been assigned to follow their progress.

Throughout the course the following topics were dealt with: Energy Context and Regulation Framework, Photovoltaic Solar Power, Thermal Solar Power, Wind Power, Minihidraulic, Energy Efficiency, Cogeneration, Biomass, Biomethanization, Fuel Batteries, Environmental Management Systems and Industrial Risks.

The Energy Agency contributed to the course providing the classrooms and teaching materials, as well as with the dissemination and recruiting of participants and secretaryship of the course both for students and instructors.

### **III Avila Conference on Renewable Energy**

The III Avila Conference on Renewable Energy took place from the 25<sup>th</sup> to the 28<sup>th</sup> of February 2004, jointly organised with the Construction Engineers and Technical Architects Association of Ávila, the Industrial Technical Engineers Association of Ávila, the Architects Association of East Castilla y León -Ávila demarcation-, and with the collaboration of the Avila City Council.

The Conference had several working groups such as Waste Management in an urban environment, Building and Renewable Energy, Bioclimatism and Energy Efficiency in urbanism and building and Help Systems for Renewable Energy. It was complemented by Urban Waste Workshops and visit to the Ávila Waste Treatment Plant, Heating and SHW by Biomass and low environmental impact Architecture.

**28**

### **European Environment Award 2003 -Spanish Section- to the Fontedoso Solar Plant**

In the aim 2003, with the aim to promote the Renewable Energy facilities in the province, the Energy Agency of Ávila promoted the participation of the company Fontedoso S.L. in the announcement of the European Environment Awards 2003-2004, for its Thermal Solar Power Plant for generating cold in the industrial process of water bottling.

The company received the prize in the Spanish section, awarded by the General Direction for the Environment of the European Commission acknowledging the innovative character of the facility, which has 540 square metres of capitation (240 panels) placed on a shelter in the parking of the

plant. Those panels generate high temperature water, used for the generation of the cold necessary for the bottling process by an absorption machine in the plant, apart from the hot water used for bottle disinfection and the needs of SHW in the plant.

The energy contribution covers 65% of the energy demanded by the bottling plant, which allows to save 80,400 litres of Bunker C per year, avoiding an emission to the atmosphere of 108 tons of CO<sub>2</sub> per year.

#### **APEA new member of FEDARENE**

APEA was made a partner of the European Federation of European Energy and Environment Agencies -FEDARENE-, and organization whose aims are to apply, coordinate and facilitate energy and environmental policies, promoting the exchange of experiences and the transfer of know-how and technology, as well as the representation in European institutions which contribute to the search of sustainable development.

29

#### **Transnational Meeting in Ávila with the Italian Regional Agency of Abruzzo**

In the month of November the Naturavila facilities hosted a transnational meeting with the Regional Energy Agency of the Italian Region of Abruzzo -ARAEN- within the European project SAVE II in order to exchange experiences related to activities carried out with schoolchildren as regards energy saving.

The aim was to promote knowledge and presence of renewable energy as well as the criterion and awareness of energy saving, through the experience and sensitization of schoolchildren, and thus engage adults in the family environment. The activities consisted in making projects in educational centres and drawing pictures related to the topic, with the aim to show the possibility of saving within the school environment.

#### **Participation of APEA in the Culture FORUM Barcelona 2004**

The Energy Agency of Ávila presented, in the framework of the Culture FORUM held in Barcelona in June 2004, its experience as a body promoting energy efficiency and renewable energy in the province of Avila, with a paper delivered by its Director, Luisa F. Martin, on "A sustainable energy model for a rural community: Good practices in the province of Ávila" in the section Dialogues.

30

#### **Energy Audits on 5 municipalities in Ávila**

The rate-setting study was arranged this year for 5 municipalities in the province of Ávila. The municipalities studied were the city of Ávila, El Barraco, Gavilanes, Mingorría and Salvadios.

The purpose of the studies was to analyze the electric tariffs of the municipalities, with the aim to study the improvements that might be introduced to reduce the cost of electricity consumption, since changes in the tariffs could mean potential savings of up to 10%.

## **APEA 2005**

### **Travelling Exhibition “Renewable Energy and Energy Efficiency”**

This exhibition created with the co-funding of the European Programme SAVE, was travelling in the municipalities and educational centres of the province of Ávila which asked to receive it in the years 2005 and 2006.

The exhibition, addressing general public and primary and secondary students, presented contents showing aspects both of Renewable Energy and of Saving and Energy Efficiency, structured in 4 thematic areas:

- I. Energy moves the world
- II. Renewable Energy vs. Conventional Energy
- III. Housing and Efficient Transport
- IV. Citizens as motor for change

The graphic area was about 100 m<sup>2</sup>, with very short visual messages. It had several elements containing positive messages inside and negative messages outside. The exhibition was completed by a computer with a CD with the interactive game called “Journey through Energy”, provided by IDAE. 45 travellings were carried out altogether, lasting one or two weeks depending on the size of the population. The area of the ground required by the exhibition was 80 m<sup>2</sup>.

### **IV Avila Conference on Renewable Energy**

From the 8<sup>th</sup> to the 10<sup>th</sup> of April the Avila Conference on Renewable Energy was held in the San Francisco Auditory, jointly organised with the Construction Engineers and Technical Architects Association of Ávila, the Industrial Technical Engineers Association of Ávila, the Architects Association of Castilla y León -Ávila demarcation-, Avila City Council, Avilasolar Enterprises and with the collaboration of the Institute for Energy Diversification and Saving (IDAE), the Regional Energy Body of Castilla y León (EREN), Avila Entrepreneurial Confederation (CONFAE) and Chamber of Commerce of Ávila.

34

The Conference was structured in working groups with different contents:

- Renewable Energy in an Agroforestry Environment
- Renewable Energy and Building
- Solar Power “in big and small terms”
- Emission Rights

In a parallel way it was possible to visit the exhibition of renewable toys and devices, as well as the stands of the different companies taking part in the Conference in the lateral naves of the San Francisco Auditorium.

In the sessions, attended by a great number of people, several papers were submitted to go in for the award given by the organization.

### **Study of Biomass Potential in the Community of Municipalities of Casagrande**

As a halfway step for the installation of a biomass boiler in Las Navas del Marqués, within the Biorreg-Floresta project, Novotec carried out a study of forest biomass potential in the Community of Municipalities of Casagrande.

That study intended to analyze the possibilities of biomass use in the area of installation of the boiler, so that the surrounding biomass could provide energy to the 1,000 kw power station to be installed in Las Navas del Marqués.

The study reached the conclusion that the municipality of Las Navas del Marqués had enough biomass available to cover 100% of the supply necessary for the boiler, and therefore the project would make use of the local forestry resources in the area.

35

### **European Project Biorreg-Floresta: Biomass Boiler in Las Navas del Marqués**

Within the European Project “Biorreg Floresta”, co-funded with a grant of the European programme of transnational cooperation Interreg III Atlantic Space which assessed the potential of renewable resources configuring an Atlas of Forestry Waste and its applications, a biomass boiler was installed in Las Navas del Marqués to supply heating and hot water to three municipal buildings through a network, also called “District Heating”.

This kind of heating consists of a great boiler, in this case biomass fed, supplying hot water to several far away buildings, through a network of pipes buried under the streets of the municipality. The three buildings the boiler provides with energy are the town hall, the swimming pool and the multiple use building.

Altogether, the boiler provides heating to an area of 3,526 m<sup>2</sup>, heats the swimming pool water and supplies sanitary hot water to the three buildings, with a power of 1,000 kw. The amount of demanded biomass is 1,190 tons per year, replacing the consumption of 357,000 kg of fuel, thus avoiding an emission to the atmosphere of 1,126 tons of CO<sub>2</sub>.

One of the added advantages of this project is that the biomass used in the power station comes from the mounts of the area, and so it makes use of the autoctonous resources, generating jobs locally.

### **Purchase of a Hybrid Vehicle by the Avila County Council**

With the purpose to incorporate a hybrid vehicle to the vehicle fleet of the Avila County Council, a collaboration agreement was established in the year

2005 between the County Council and the Regional Government of Castilla y León (Regional Ministry of Industry and Environment), which allowed for the acquisition of a hybrid vehicle.

36

The vehicle charges electric batteries while it is working and uses that energy in other driving periods, obtaining important fuel consumption savings in urban trips.

The vehicle cost 23,036.21 €, a third of which was paid by the Avila County Council according to the established agreement.

#### **Members of Avebiom**

APEA has formed part of the Spanish Association for Biomass Energy Appreciation -AVEBIOM- since the year 2005. This organization, which has as its final aim the development of the bioenergy sector in Spain, gathers several administrations with competences in the matter, and promotes the creation of companies related in a way or another with bioenergy, apart from organizing different events and forums among which Expobioenergy is a highlight.

#### **Meeting of Energy Agencies of Castilla y León**

In December 2005 the first meeting of Energy Agencies of Castilla y León was held in Burgos, with the attendance of representatives of the Regional Energy Body of Castilla y León (EREN), Energy Agency of the Province of Burgos (AGENBUR), Energy Agency of Valladolid (AEMVA) and Energy Agency of the Province of Avila (APEA), which laid the foundations for carrying out several joint actions on the Castilla y León level.

#### **Participation in the European Project Finance**

The Financing Instruments through National Associations Networking in Countries of Europe Project -FINANCE- aimed at reinforcing the role of the national associations of energy agencies, throughout the two years of its span of development. With

37

this purpose, an exchange of good experiences took place among European agencies, in the case of the Energy Agency of the Province of Avila the exchange was carried out with the Energy Agency of Toledo -APET-.

Financial aspects are a critical factor in the daily work of all energy agencies, that was the reason for the publication of a guide of their best practices in financial matters or projects accomplished by them, afterwards data were collected on a European level with the aim to find the replicability of the best practices.

### **Members of ADABE**

Since June 2005 APEA has been a member of The Association for Dissemination of Biomass Use in Spain-ADABE-, through which it is possible to have representation in different national and international events, as well as access to the information and documentation services of this Association.

### **New LED traffic lights in Ávila and Arévalo**

Thanks to the announcement of subsidies from the IDAE, and the collaboration of the Energy Agency of Ávila it was possible to change the traditional optics of conventional traffic lights in Ávila and Arévalo by LED optics.

The agreement established the free supply of the new lamps by IDAE, whereas the installation would be chargeable to the receiving municipality, apart from the removal of existing lamps and their deposit on a clean spot. The task of the Agency focused on providing information on the subsidy and the application for it. LED technology in traffic lights, besides obtaining 90% saving in energy consumption, reduces maintenance costs thanks to a longer useful life (up to 70,000h) with better visibility.

**38**

### **APEA rewarded by CESEFOR**

In the year 2005, the Energy Agency submitted the project “Network for Biomass Use in Rural Areas” to the Cesefor Institute of Castilla y León, a body that promotes biomass use in the region.

The project was awarded the third prize of the contest EUROCESEFOR 2005, receiving 1,000 euros and the corresponding diploma. The jury of this edition was composed by CESEFOR itself as well as EUROFOR, which based the award of prizes on the criteria of innovation, technical quality of the project and socioeconomic impact.

**39**



## **APEA 2006**

### **Study of Biomass Potential in the Province of Ávila**

In the year 2006, a study of biomass potential was carried out within the FUNDACIÓN BIODIVERSIDAD project, to complete the one conducted the previous year in the Community of Municipalities of Casagrande, covering now the rest of the province of Ávila.

The study performed focused on the biomass use potential in the province of Ávila, analyzing the possibilities of use of forestry biomass (trees and bushes) as well as agricultural biomass and industry waste to be used in the thermal sector.

The results of the study were reflected in the biomass potential of each municipality, thus offering them the possibility to analyze the amount of biomass each of them could make use of. Besides, the study selected several areas in the province of Ávila where it would be possible to locate biomass use facilities of different kind (pelletizing plants, electricity generation, etc.).

### **II Course for Consultants in Renewable Energy**

The second edition of the Course for Consultants in Renewable Energy was held from January to July thanks to the Collaboration Agreement between the Santa Teresa Cultural Foundation that the Energy Agency of the Province formed part of and the Business School EOI, and co-funded by the European Social Fund, with 22 participants in this edition following the theoretical programme for three months and engaging in the preparation of a practical project in the other three, stage in which a tutor had been assigned to follow their progress.

The following topics were dealt with throughout the course: Energy Context and Regulation Framework, Photovoltaic Solar Power, Thermal Solar Power, Wind Power, Minihidraulic, Energy Efficiency, Cogeneration, Biomass, Biomethanization, Fuel Batteries, Environmental Management Systems, Industrial Risks.

**42**

The Energy Agency contributed to the course providing the classrooms and teaching materials, as well as with the dissemination and recruiting of participants and secretaryship of the course for both students and instructors.

### **I University Week of Sustainable Development “Sustainable Waste Management”**

The I University Week of Sustainable Development was held between the 14<sup>th</sup> and the 17<sup>th</sup> of March 2006. The Conference was organized jointly with the Catholic University of Ávila, and co-funded by Caja de Ávila. Its main aim was to raise awareness and form university students in Sustainable Waste Management as a means to contribute to a sustainable development of our future society.

In the afternoon sessions the following practical workshops were organized:

1. Practical visit to the Mud Treatment Plant in Ávila.
2. Visit to the Waste Treatment Plant in Urraca-Miguel.
3. Workshop of Forestry Waste.

In the framework of this week the Exhibition on Renewable Energy and Energy Efficiency was opened to the public, there was also general interest material displayed in the multimedia vehicle with several videos on environmental education and waste treatment, as well as the collection of EREN posters on saving and efficiency and renewable energy.

### **Expobioenergy 2006**

The Energy Agency of Ávila took part as Ally of Expobioenergy in the first edition celebrated in October 2006, with the attendance of the most important companies and institutions of the sector of energy appreciation of biomass in Southern Europe.

The stand divulged the different projects the Agency was working on, and it also publicized the events scheduled for the next few months.

43

### **FIP Plan “Thermal Solar Installer”**

The Course for Thermal Solar Installers took place from the 17<sup>th</sup> of April to the 21<sup>st</sup> of July 2006, within the educational offer of the FIP Plan of Formation and Professional Incorporation, funded by the European Social Fund in collaboration with the Public Employment Service of the Regional Government of Castilla y León -ECYL-, whose theoretical part was taught at the classrooms of the Santa Teresa Cultural Foundation as an approved Centre, and the practical part in its open air area, where a demonstration thermal solar plant was installed to supply sanitary hot water to the toilets and showers of the camping site.

The course, aimed at the unemployed, was attended by 15 students, with a total length of 339 hours. Its main objective was to qualify professionally unemployed individuals, within an emerging sector like renewable energy, especially after the approval of the Technical Code of Building.

### **V Avila Conference on Renewable Energy**

The V Avila Conference on Renewable Energy took place on the 18<sup>th</sup> and 19<sup>th</sup> of May in the San Francisco Auditorium. It was jointly organised with the Construction Engineers and Technical Architects Association of Ávila, the Industrial Technical Engineers Association of Ávila, the Architects Association of Castilla y León -Ávila demarcation-, Avila City Council, and with the collaboration of the Institute for Energy Diversification and Saving (IDAE), the Regional Energy Body of Castilla y León (EREN), and the Chamber of Commerce of Ávila.

The conference, structured around Solid Biomass, Biofuel and Sustainable Architecture, had an opening Symposium about different aspects related to the new Technical Code of Building.

In a parallel way it was possible to visit the exhibition on Renewable Energy and Energy Efficiency and an exhibition on Bioclimatic Sustainable Architecture, as well as the stands of the different companies taking part in the Conference in the lateral naves of the San Francisco Auditorium.

44

Sergio de Otto received the award “Renewable of the Year” in the closing ceremony, as an acknowledgement to his work in favour of the promotion and diffusion of renewable energy in our country.

#### **Installation of a radio ham Antenna**

The Energy Agency of the Province, in collaboration with the Radio Ham Association in Avila, arranged to contract the isolated photovoltaic solar plant to supply electric energy to the antenna that this association has in the Zapatero peak with the purpose to collaborate in communication tasks of a social kind.

The action, carried out in the year 2006, consisted in the calculation of the necessary power of photovoltaic panels, contracting the installation, and applying for and justifying the corresponding subsidies.

Altogether, a power of 825 wp was installed, which with the 400 w generator that existed, allowed for a 4 day autonomy in the electricity consumption of the antenna. The subsidy requested from the Regional Government of Castilla y León covered 50% of the cost.

#### **FEDARENE General Assembly**

In September 2006, the Agency attended the FEDARENE General Assembly that took place in Paris, where it was presented as new member of the European Association of Energy and Environment Agencies. There has been an active collaboration between them ever since.

### **Formation and sensitization of SMEs and self-employed workers from Avila in environmental matters**

Co-funded by the European Social Fund (ESF) through the Biodiversity Foundation in the framework of the Operating Programme “Entrepreneurial Initiative and Continuous Training” of the ESF for the period 2000-2006, the Ávila County Council in collaboration with the Rural Development Area developed the project “Formation and sensitization of SMEs and self-employed workers from Avila in environmental matters through renewable energy and energy efficiency”.

The general aim of the project was the contribution to the preservation and improvement of the environment through the continuous training and sensitization of SMEs and self-employed workers to promote the right practices in saving and efficient use of energy in the province of Ávila, by means of the organization of both in-person and distance education courses, Conferences, Travelling Campaign, as well as the publication of the Guide for Good Practices and the conduction of Environmental Studies.

### **Visit to Magic Box**

In December 2006 APEA paid an institutional visit to the Superior School of Architecture of the Technical University of Madrid with the purpose to get to know the Magic Box 2005, a prototype of efficient house of the future which took part as the only European representative in the Decathlon Solar in the United States, a competition directed to assess prototypes of more energy-efficient houses developed by multidisciplinary university groups.

The house, which had several sources of renewable energy for its self-sufficiency, was the topic of a paper in Avila Energy: European Congress of Renewable Energy and Energy Efficiency, as well as the presentation of its fundamentals in the parallel exhibition to the Congress.

## **APEA 2007**

### **Collaboration with EREN and the City Council of Ávila to implement a bike rental service**

The City Council of Ávila, with the collaboration of the Energy Agency of the Province, and the economic support of the Regional Government of Castilla y León through the EREN started up in the year 2007 a system of bike rental on three spots in the city.

The systems intends to stimulate bicycle use as a sustainable means of transport, since 130 bicycles are available for the citizens free of charge, so that users can move in the city, the three return points are located in strategic places and mean another alternative to achieve sustainable mobility.

### **Ávila Energy: European Congress of Renewable Energy and Energy Efficiency**

On the 25<sup>th</sup> and 26<sup>th</sup> of April 2007 Ávila Energy: European Congress of Renewable Energy and Energy Efficiency took place in El Barco de Ávila (Ávila), with the support of the European Programme of Intelligent Energy.

ÁVILA ENERGY was a meeting forum on an European level for experts, institutions, companies and professionals related to the sector of Renewable Energy and Energy Efficiency, with over 200 participants.

The sessions were structured in the following way:

- European Collaboration in energy matters
- Applications of saving and energy efficiency
- Experiences in renewable energy

Some complementary activities to the papers were organized in the framework of this Congress, such as the Exhibition on Renewable Energy, multimedia vehicle with videos and presentations on renewable energy, energy efficiency and climate change, as well as exhibitions on Bioclimatic Architecture.

**48**

The Congress had a great support on the part of the productive industrial and services sector, attending the different sessions and with the participation of distinguished representatives in the papers and presentations in the halls annexed to the Congress. The same could be said about the public and institutional sector.

## **V General Assembly of EnerAgen**

On the 24<sup>th</sup> of April 2007 the Energy Agency of the Province of Ávila acted as a host to the V General Assembly of the Spanish Association of Energy Management-EnerAgen-, a meeting that took place in the town of El Barco de Ávila, preceded by the General Meeting, with the attendance of representatives of the main Spanish energy agencies and bodies. On the morning of the 25<sup>th</sup> there was a technical visit to the “district heating” installed in the Avila town of Las Navas del Marqués.

#### **Presence in Expobioenergy 2007**

In October 2007, the Agency represented the province in the 2<sup>nd</sup> edition of Expobioenergy, the largest fair of bioenergy in Southern Europe, attended by almost 10,000 representatives from all over Europe, which took place in Valladolid, with a stand shared with the Energy Agency of Burgos.

#### **Biomun 2007**

APEA participated as a guest organization in BIOMUN, the I Congress of Bioenergetic Solutions for municipalities, held in León in the month of March, with a paper delivered by the Director, “Development of thermal mini-networks”.

49

#### **VI Avila Conference on Renewable Energy**

The VI Avila Conference on Renewable Energy took place from the 17<sup>th</sup> to the 19<sup>th</sup> of October 2007. It was organised by a group of associations headed by the Ávila County Council through the Energy Agency, including the Ávila City Council; the University of Salamanca; the Gotarrendura Town Council, the Architects Association; the Technical Engineers Association and the Construction Engineers and Technical Architects Association. This edition of the Conference had the sponsorship of Gas Natural, Mecanoca and Isofón, apart from the collaboration of 7 companies and other 7 institutions.

The Conference was divided into three thematic tables, discussing different aspects of renewable energy, efficiency and saving. The first one dealt with thermal applications of solar power. Afterwards, the next table raised issues of energy efficiency. On the second day of the Conference, the third table counted with the participation of experts in Photovoltaic Solar Power, concluding with the last table on the Future of Renewable Energy.

The Conference was completed with an exhibition of companies in the entrance to the San Francisco Auditorium and a visit to renewable energy facilities, where participants were shown part of the theoretical aspects dealt with on the tables. Besides, the prize “Renewable of the Year 2007” was awarded to the plant that the company Nissan Motor Ibérica owns in Ávila, acknowledging their efforts to use renewable energy in part of the production process.

#### **PROBIO European Project**

Co-funded with the support of the Intelligent Energy European Programme, the Agency took part, together with other 6 partners from Slovenia, Italy and

Spain, in the PROBIO European project: Integrated promotion of the biodiesel chain. The main aim of the project was the promotion of biodiesel through the integration of all stakeholders who intervene in the different stages of production, distribution and final consumption.

**50**

The first transnational meeting for launching the project took place in Burgos in March 2007. Throughout the project a Panel of Experts was constituted, integrating representatives of the involved sectors. In the different meetings held, existing barriers and possible solutions were detected, which was the basis for designing the subsequent strategy of actions aimed at overcoming them:

- Courses of Energetic Crops addressed to agricultural workers
- Study on Energetic Crops in the province of Ávila
- Travelling exhibition “We would like to help you know biofuel”
- Campaign for biodiesel customer fidelization “Points Card”
- Visit to facilities of a biodiesel production plant Biocom Pisuegra

### **Innovative Thinking European Project**

The Innovative Thinking Project, developed by 14 partners of 6 European countries, led by the Swedish municipality of Dals-Ed, lasted two and a half years, from December 2006 to July 2009, funded by the Intelligent Energy for Europe programme. The project pursued the creation of sustainable communities within the participating countries, thus increasing energy efficiency and incorporating renewable energy in them.

The activities performed in Ávila had as starting point an analysis of energy reality in the province of Ávila, carried out by APEA, which allowed to justify the actions taken according to the saving potential in each sector. Among the actions accomplished, it is possible to highlight the following:

- Publication of a leaflet with the subsidies that can be applied for when installing energy efficient or renewable energy systems.
- Publication of a guide of energy efficiency in public lighting.
- Organization of a course on renewable energy, saving and energy efficiency, addressed to municipal specialists and politicians.

**51**

- Organization of a course on renewable energy, saving and energy efficiency, addressed to owners of rural tourism houses.

The community formed around this project gathers 14 municipalities, 5 companies, 7 associations and 3 educational centres. Out of the 29 total participants, 22 have collaborated to perform some of the actions pursued by the project. It finished with the edition of a guide including the positive and negative aspects found during its development, which will allow future communities to learn the positive things, and avoid what was not as successful

as could be expected, thus facilitating the creation of groups that increase their consumption of renewable energy and energy efficiency.

### **Empire European Project**

The ENPIRE Project, funded by the Intelligent Energy for Europe Project, set out to find the definition and application of measures of saving and energy efficiency in urban areas (new or restored) with the purpose to reduce energy consumption of the houses to be built. With that aim, it involved stakeholders of the process of building new or recovered urban areas: municipalities (and rest of administrations), developers, builders, users of the houses...as this reduction will have important advantages for all involved parties.

17 partners took part in the project, representing 7 countries, and in each of them a local case was studied, representative of the building style of each country. The local project studied in Spain was an urban development of detached houses in Sanchidrián. The study revealed possible improvements in insulation; heating systems; improvements in urbanization...which increase energy efficiency in the houses built.

On a local level, the Town Council of Sanchidrián, the firm that built the houses, and the Associations of the province (Architects, Technical Architects and Engineers) participated in the project.

52

### **Energy audit in the County Council buildings**

With the aim to reduce energy consumption in public buildings, the County Council of Ávila carried out Energy Audits in three of its buildings, so as to be able to know the current energy consumption, as well as the characteristics of the buildings, and the measures proposed to improve the consumption in them. Those audits were subsidized by 50% by the Regional Government of Castilla y León, by means of the Regional Energy Body.

Thus, buildings with different features were audited, such as the Guzmanes Turret, a historical building that hosts the headquarters of the County Council of Ávila; the Residence Infantas Elena y Cristina, used as a health centre; and the building of the Santa Teresa Cultural Foundation, a historical building dedicated to office use and university studies.

### **Improvement of thermal enclosure in building UCAV-FCST**

In the year 2007, in the framework of the repair carried out in the roof of the building of the Santa Teresa Cultural Foundation, where the Catholic University of Ávila -UCAV- has its headquarters, and based on the energy audit previously performed in the building, there was an improvement in the existing thermal enclosure, thus reducing the energy demand of the building by improving its outside insulation.

The improvement was partly co-funded with a subsidy of 58,600 euros granted by the General Direction for Energy and Mines of the Regional Government of



Castilla y León, within the Action Plan for Saving and Energy Efficiency Strategy.

53

#### **Low-consumption bulb distribution**

In the year 2005, low-consumption bulbs were distributed, provided by the Regional Energy Body of Castilla y León, within the National Strategy E4 for Saving and Energy Efficiency. The lamps, which were sent to all municipalities in Ávila, were aimed at providing an exemplary measure to the citizens insofar as they are used in municipal premises.

#### **Efficient driving course in collaboration with EREN**

In collaboration with the Regional Energy Body of Castilla y León EREN and in the framework of E4, Spanish Strategy for saving and energy efficiency developed by the Institute for Diversification and Energy Saving IDAE, Avila hosted some courses intended for showing drivers the fuel saving potential an efficient driving can involve, only by implementing a series of measures.

#### **Workshop School of Renewable Energy in Arévalo**

The Workshop School “Renewable Moraña”, which lasted two years (Dec 06 - Nov 08), where 12 students under 25 years old had their training, provided theoretical-practical formation on thermal solar energy, photovoltaics and small wind energy. The works carried out by the students were a wind-solar installation, isolated in the booth of the Arevalo cemetery, and thermal installations in the kindergarten and sports centre of the same town.

54

#### **INTERREG III B SUDOE “VAGEM” Project**

The County Council of Ávila, through APEA, took part in the European project VAGEM, “Appreciation and Administration of Ecomuseums” in the frame of the European project Interreg Sudoe III B co-funded with the help of FEDER funds, in which it participated together with partners from Portugal and France.

The actions taken in the province of Ávila throughout the 18 months of length of the project were, among others: elaboration of an inventory of resources of the Ambles Valley, equipment of the nature interpretation centre of Muñogalindo, signposting in routes and edition of a Guide to Ambles Valley.

#### **SATENT Project to have tourist information of the province available on TDT**

Integrated in the Avanza Plan, and co-funded by the Ministry for Industry, Commerce and Tourism within the Announcement of Digital City Council, the County Council of Ávila together with the County Council of Soria started up the SATENT project, aimed at facilitating the development of the information society in local environments.

The objective of the project is to improve the interaction of the citizens with the provincial administration, activating new ways of communication by means of a multi-channel platform through TDT, PDAs, 3G mobile devices and public points of access.

## **APEA 2008**

### **Expobioenergy 2008**

From the 16<sup>th</sup> to the 18<sup>th</sup> of October 2008, APEA was present in the 3<sup>rd</sup> edition of Expobioenergy, International Bioenergy Fair, sharing a stand with the Energy Agencies of Burgos and Valladolid. This edition was honoured with the visit of Juan Vicente Herrera, President of the Regional Government of Castilla y León, who could know first hand the different projects our Agency participates in.

In this edition, APEA was also present with the delivery of a paper by its director in the talks organised in the frame of the fair, and it was also possible to show in the premises the Exhibition “We would like to help you know biodiesel” on request from the organisers themselves, jointly with the Energy Agency of Burgos.

### **VII Avila Conference on Renewable Energy**

The VII Avila Conference on Renewable Energy took place on the 21<sup>st</sup>, 22<sup>nd</sup>, 23<sup>rd</sup> and 24<sup>th</sup> of October 2008. It was organised by the County Council of Ávila through the Energy Agency; the City Council of Ávila; the University of Salamanca; the Catholic University of Ávila; the Town Council of Gotarrendura; the Architects Association; the Technical Engineers Association and the Construction Engineers and Technical Architects Association, with the sponsorship of the Regional Government of Castilla y León -EREN; Conergy; Gas Natural and Isofotón, as well as the collaboration of other companies and institutions.

There was a pre-conference day dealing with topics related to renewable energy, saving and energy efficiency for rural tourism housing. Afterwards, there were different working tables on diverse matters, such as: Experiences in Sustainable Architecture; the Future of Renewable Energy; Energy Efficiency and Sustainable Mobility. Finally there were visits to the factory of Nissan-Ávila, Las Cogotas hydroelectric power station and Gotarrendura solar orchards.

There was also an exhibition on show, for the promotion of the use of biodiesel, as well as an award to the best paper. The Conference, with the attendance of over 200 people, came to an end with the granting of the Prize “Renewable of the Year 2008” to Francisco del Rio for his contribution to this Conference from its beginning.

58

### **Travelling Exhibition “We would like to help you know biodiesel”**

Opened in March 2008, this exhibition was framed as another dissemination and awareness action within the PROBIO European Project: Integrated promotion of the biodiesel chain, with the co-funding of the European Programme Intelligent Energy Europe. Its travelling, offered to all the

municipalities in the province and the educational centres by the Presidency of the County Council of Ávila, was aimed at general public and primary and secondary education students.

There were 27 travellings altogether, including 3 educational centres. It is possible to remark its presentation in Expobioenergy 2008, International Fair on Bio-mass held in Valladolid in October 2008, with over 13,000 attendants.

-The content was divided into the sections of Presentation, Raw Materials and Production, Distribution and Consumption, and finally Benefits of Biodiesel and Frequently Asked Questions.

-The exhibition had a plant area of 80 m<sup>2</sup>, and a graphic area of about 100 m<sup>2</sup>, with very short visual messages, aided by charts and photographs, as well as real samples of seeds and biodiesel.

-The exhibition was complemented with an LCD 26” screen integrated in the central station panel, where the video “Biofuel to replace oil” was shown, edited by the General Direction for Energy and Transport of the European Union.

-There were informative leaflets available on the content and objectives of the exhibition, as well as promotional posters with a size of 35x85 cm. **59**

### **Participation in Biomun 2008**

In the framework of the Expobioenergy Fair, held in Valladolid in the month of October, APEA was a guest in the second edition of BIOMUN, Congress of Energy Solutions for municipalities, taking part with the delivery of a paper by its Director, Luisa Martín Vázquez: “Presentation of efficient and real solutions that contribute to the sustainability of municipalities”.

### **Courses of Energetic Crops: Arévalo and Muñana**

Within the PROBIO European project, the towns of Arévalo and Muñana hosted, in the months of June and October 2008, two courses on Energy Crops intended for agricultural workers and professionals of the agricultural sector in the province, covering the different possibilities and alternatives of energy crops aimed at the production of biodiesel, with the purpose to promote agricultural cultivations that produce economic benefits for agricultural workers as well as environmental benefits by contributing to obtaining sources of renewable energy as biodiesel is.

The courses, with almost 80 participants, were structured in two blocks, a theoretical initial one on the first day, both in morning and afternoon sessions, to analyze basic minimal concepts which allow to obtain competitive quality productions, as well as sowing techniques and processes, and the most suitable kinds of phytosanitary treatment and fertilization according to the species to grow. Participants were also informed about the corresponding rules and regulations.

A second practical block took place on the morning of the second day, including a technical visit to the biodiesel production plant of the ACOR cooperative in the town of Olmedo, together with the visit to the trial fields where it was possible to observe the differences in the yield of the different cultivations according to the alterations carried out in the growing conditions.

60

### **Study on Energetic Crops in the province of Ávila**

In the framework of the PROBIO European project, it was requested from the Agrofood Agricultural and Technological Centre, Itagra, to carry out a Study of the Potential of Energy Crops for biodiesel production in the province of Ávila, whose main objective was to analyze the crops currently existing in the province, which could be used as raw materials to produce biofuel and describe the growing potential in the province depending on its geographic and climatic conditions.

The sustainability indicators, after studying the different trials, concluded that in those related to resources consumption, area needs and fertilization needs, sunflower is the crop which causes the least environmental impact, besides, it is the most efficient on energy terms and it is also biodiesel obtained from sunflower the one which generates the lowest amount of emissions. Apart from sunflower and as a complementary option, the growing of rape can be established as rotation head, both in dry and irrigated land.

As regards the impact of these crops on diversification, soil fertility and rotations, it concludes that the unavoidable presence of oilseeds is beneficial for crops, both in dry and irrigated land.

### **Employment Workshop on Renewable Energy in Tiñosillos**

Within the ET/CO/TE programme, promoted by the Public Employment Service of the Regional Government of Castilla y León, the Employment Workshop “Renewable Adaja” trained 8 people over 25 years old in the renewable energy installer module throughout a year (Dec 07 - Nov 08), focusing the theoretical-practical formation received on thermal solar energy. The works performed by the students were solar energy installations in the Pilgrims Hostel in Gotarrendura; a rural house in Pajares de Adaja; the Day Centre in Sanchidrián and the swimming pool changing rooms in Mingorría and La Colilla.

61

### **SETCOM European Project**

Together with other 9 European partners and framed within the “Intelligent Energy for Europe” European programme, the project, with a budget of 1,383,589 €, has as its main aims to raise awareness on all stakeholders in the tourist sector about the need for a rational, sustainable use of energy including its saving, use of efficient equipment and renewable energy sources in the facilities, as well as increase awareness of the concept “Sustainable

Energy in Tourism” on an European level and start up Plans of Energy Action for their application in the participating regions.

Within the main actions we can find an analysis of the situation in the province through the collection of tools, studies and better practices in tourism companies, the organization of seminars for energy sensitization and energy audits in facilities, the start up of energy action plans, awareness campaigns addressed to both tourists and employees and a section for communication and dissemination by means of generic leaflets of the project, a formative documentary and a website of the project where it is possible to check all the information on the actions carried out and the results obtained.

The County Council collaborates with the following institutions as consultant members of the project: Great Duke of Alba Institution, Gredos Houses, Confae, Catholic University of Ávila and of course the Tourist Board of the County Council.

### **PROMOTION 3E European Project**

APEA in collaboration with the Rural Development Area of the institution and together with other 10 European partners takes part in this project within the “Intelligent Energy for Europe” European programme, with a budget of 1,168,178 € and the main aim of reducing energy consumption in electrical appliances and equipment used in houses by means of the promotion of the use of more efficient devices, as well as measures which increase the quality and effectiveness of the information received by consumers. **62**

The actions to be taken in the 36 months length of the project will be directed to make consumers aware of the use of efficient electrical appliances for energy saving, increase the sales of this kind of electrical appliances, inform and do training to salespeople so as to give them selling arguments in order to contribute to promote the advantages of this type of devices.

### **EREN Subsidies 2008**

Counselling in saving, energy efficiency and renewable energy matters carried out by the Agency, in many cases, is complemented with the application for a subsidy for the actions demanded by town councils.

The application for subsidy meant 14 applications in 2008, 8 out of which were asking for a subsidy to improve public lighting; 4 for installations of thermal solar energy, 1 for photovoltaic solar energy and 1 for thermal enclosure. Among all applications, 227,180 euros were asked for, for investments amounting to a budget of 449,674 euros. **63**

### **Transnational Meeting in Avila, PROBIO Project**

In June, the partners of the PROBIO European project met in Ávila to hold the fourth transnational meeting, with the purpose to examine the different

actions taken so far and plan the actions for the next semester. The President of the Provincial Institution welcomed the partners, offering a joint press conference afterwards.

In the frame of the meeting and after concluding the session held in the legislative chamber, there was a visit to the travelling exhibition “We would like to help you know biodiesel”, located in the exhibitions room of the Guzmanes Turret, as well as a guided tour of the city.

On the second day there was a technical visit to the biodiesel plant that the ACOR cooperative has in the town of Olmedo, where the partners could know first hand the operational capacity of a plant that administers in an integral way the whole production process from the collection of the seeds to the biodiesel expedition.

### **Transnational Meeting in Avila, ENPIRE Project**

The ENPIRE European project, belonging to the Intelligent Energy for Europe programme, held its second international meeting in Ávila, on the 16<sup>th</sup> and 17<sup>th</sup> of June 2008.

The meeting set out to analyze the project from the point of view of the activities carried out in the six months of existence of the project, as well as the tasks to perform in the next six months after the meeting, with the participation of 18 partners from 14 different associations, in representation of the 7 Member States which took part in the project.

Apart from the meeting itself, the partners paid a visit to the travelling exhibition on biodiesel, within the PROBIO project, as well as a visit to the Pilgrims Hostel and the solar orchards of the municipality of Gotarrendura.

64

### **Actions on the municipal lighting of Hoyo de Pinares**

In the year 2008, after the Energy Audit carried out on the public lighting of the municipality, the Energy Agency of Ávila applied for a subsidy to improve the lighting of the Municipality of Hoyo de Pinares, which consisted in the substitution of 309 lamps, the installation of 4 flux reducers and 54 double level ballasts.

The total cost of the action was 142,006 €, of which 75,206.38 € were received as a subsidy from the Regional Government of Castilla y León, through EREN. The rest of the investment was supported by the Company for Energy Services GEYCA and partly by the Town Council of Hoyo de Pinares itself, which for a six-year period will amortize the investment made by that company thanks to the savings generated by the installation, around 50%, in such a way that the consistory will not have any additional expenses.

## **Improvement of the public lighting in Arevalillo, Muñogalindo and Salobralejo**

In the year 2008, in the frame of the promotion of energy efficiency, the Energy Agency collaborated with several municipalities in the province to promote the application for grants, which eventually led to the award of 4 subsidies for improving public lighting with energy efficiency criteria: Muñogalindo, Salobralejo, Arevalillo and Hoyo de Pinares.

Those 4 subsidies, with the exception of the one in Hoyo de Pinares, were carried out with conventional financing. Those three grants meant replacing 129 mercury steam lamps for high pressure sodium steam and the installation of 5 flux regulators. The total cost of the three actions amounted to 68,735.49 euros, of which the Town Councils received 25,355.51 € as a subsidy awarded by the Regional Government of Castilla y León through EREN. The period of amortization of subsidies was close to 6 years, thanks to the reduction of energy consumption by 40%. **65**

## **APEA in ExpoZaragoza 2008**

On the 13<sup>th</sup> and 14<sup>th</sup> of August 2008, the Energy Agency of Ávila paid a technical visit to the International Exhibition of Zaragoza, with the main aim of knowing the innovations presented in Renewable Energy matters in the theme pavilion “Oikos”, where the sustainable house was shown as immediate future, based on the transformation and accumulation of energy at zero cost, by means of hydrogen batteries, and complemented with different “green” methods of energy transformation.

The general concept of “Oikos” comes from the idea of how to have ecological, cheap energy, available for everyone, with the purpose of maintaining a reasonable level of well-being.



## **APEA 2009**

### **PRESERVE European Project**

The County Council of Ávila, through the European Affairs Area, takes part as a member in the European project PRESERVE “Peer Reviews for Sustainable Eco Regions Via Europe”, belonging to the INTERREG IV C programme, together with other 12 European partners from Lithuania, Slovakia, Sweden, Austria, Italy, Greece, Hungary, Romania and Denmark, led by the Assembly of Regions in Europe.

The project aims at contributing to the improvement of sustainable tourist development policies from the point of view of the preservation of the cultural and natural heritage of the participating regions.

The methodology consists in a process of mutual learning by means of the exchange of experiences, and the conduction of detailed evaluations on the spot for a week in order to analyze the tourism development policies carried out, with the purpose of elaborating an Action Plan which will reinforce or perhaps improve, the tourist planning in our province and therefore the preservation of our cultural and natural heritage.

### **Avila agricultural workers visit a biodiesel production plant**

On the 27<sup>th</sup> of March, a great number of agricultural workers, representatives of cooperatives and unions in our province, together with the provincial deputies responsible for European Affairs and Rural Development, visited in the town of Castrojeriz in Burgos the facilities of Biocom Pisuegra, dedicated to the production of biodiesel, owned by the agrarian cooperative Odarpi.

The visit, framed in the PROBIO European project, basically aimed at knowing first hand this project, which had an investment of about two million euros and which can become a future alternative for agriculture in our province.

68

The participants were shown the different stages of the production process, for which it is expected to use as raw materials seeds of sunflower, rape and soya, from the energy crops of the partners themselves. The plant has a production capacity of 10,000 tn of biodiesel per year, and the destiny of the final product is the sale to wholesalers and petrol stations selling biodiesel.

### **Celebration of European Solar day in Mingorría**

On the 15<sup>th</sup> of May the Energy Agency of Ávila went to the Associated Rural Centre “Miguel Delibes” in Mingorría, to celebrate with the schoolchildren the European Solar Day. In the frame of this visit, the students received basic guidelines on energy saving that the children can implement in their own homes, receiving commemorative material of that day provided by the Intelligent Energy Europe programme.

## **Subsidies EREN 2009**

In the year 2009, after the good experience of the previous year, the number of applications processed by the Agency increased to 18, 10 of which for improvement of public lighting; 3 for thermal solar energy installations; 3 for photovoltaic solar energy and 2 subsidies for improving the thermal enclosure. The total cost of these actions was 452,107 €, for which subsidies amounting to 174,039 € were applied for.

## **Campaign of biodiesel promotion**

The campaign for biodiesel promotion was valid throughout the year 2009, integrated in the PROBIO European project, and aimed at promoting the consumption of this biofuel by means of a system of customer fidelization through the “probio points card”. Thus, by filling up the tank in any of the four petrol stations participating in the campaign, vehicles exceeding 1,000

69

points and lorries exceeding 10,000 points obtained a double benefit consisting in the reimbursement of 50% of the vehicle tax by the County Council of Ávila, apart from receiving the polar fleece jacket promotional of the campaign.

## **Subsidy for the purchase of a hybrid vehicle**

With the aim to promote more efficient vehicles from the point of view of energy and environment, the Regional Government of Castilla y León, by means of the General Direction of Energy and Mines, has awarded the County Council of Ávila a subsidy for the acquisition of two hybrid vehicles, funded by 60% by the Regional Ministries of the Economy and Employment and of the Environment, and contributing the County Council itself with the remaining 40%.

## **Attendance to I European Conference against Climate Change**

On the 23<sup>rd</sup>, 24<sup>th</sup> and 25<sup>th</sup> of September, APEA was represented in the I European Conference for the Promotion of Local Actions to Combat Climate Change, hosted in Huelva under the motto “Let´s transform words into actions”, and which gathered hundreds of participants from all over Europe with the purpose to promote actions from local institutions. Several prestigious speakers on a European and international level took part in the different scheduled sessions.

## **Participation in Brussels OPEN DAYS 2009**

The County Council of Ávila participated in the OPEN DAYS -European Week of Regions and Cities 2009 - celebrated in Brussels, from the 5<sup>th</sup> to the 8<sup>th</sup> of October, and which gathered over 6,000 participants from 40 countries, including all the Member States of the EU, the candidate countries and Brazil,

China, Iceland, Japan, Russia, Ukraine and the USA. Among them, there were politicians, professionals, academicians and representatives of companies, banks and organizations of civil society for the exchange and creation of networks on local and regional issues.

70

Under the general theme “Global challenges, European answers”, the debates focused on the regional answers to the economic crisis and the climate change as well as the future tendencies of Territorial Cooperation within the European framework.

### **Transnational Meeting in Ávila, SETCOM Project**

On the 21<sup>st</sup> and 22<sup>nd</sup> of October, Avila hosted the 3<sup>rd</sup> Transnational Meeting of the Setcom European Project, which aims to include concepts about the rational use of energy in the different kinds of accommodation and restaurants of the sector. This meeting gathered partners from Germany, Greece, Finland, Latvia, Italy, Portugal, Slovenia and France, apart from Spain, represented by the County Council of Ávila.

During the meeting, which analyzed the development of the different work packages and coordinated the activities scheduled for the next few months, there was also a technical visit to a rural tourism house that uses different saving and efficiency measures, apart from renewable energy.

### **Attendance to I Motor and Alternative Fuel Show**

The Energy Agency of Ávila was present in the month of November in the first event dedicated exclusively to alternative vehicles and fuel, celebrated in Valladolid to show the main advances in the sector as concerns sustainable mobility and the presentation of several models of vehicles, such as hybrid, electric, GLP, etc, as well as different innovations in the auxiliary motor industry, which no doubt will contribute to lead the way to a more environmental-friendly car in the next few years.

This first edition had the support of the Regional Government of Castilla y León, by means of EREN, IDAE, as well as the motor industry represented by Renault, Mercedes, Toyota, Iveco, Chevrolet and Michelin among others.

71

## APEA

### Papers

### Seminars

### Courses

### Congresses

-Paper in Course for Consultants in Renewable Energy of the Madrid Industrial Organization School. (E.O.I.). Ávila, September 2004.

-Paper in the XVII Conference on Consumption of the City Council of Ávila. Ávila, October 2006.

-Paper in the course “Economical driving/Sustainable driving” in the II Conference on Road Safety, celebrated in Avila, December 2006. University of Salamanca.

-Paper in Course for Consultants in Renewable Energy of the Madrid Industrial Organization School. (E.O.I.). January 2006.

-Paper in XII Environmental Conference. University of Salamanca. March 2007.

-Paper in the Biodiversity Foundation courses “Formation and Sensitization of Avila SMEs and self-employed workers in Environmental Issues through renewable energy and Energy Efficiency”. Ávila. January-June 07.

-Paper in the Conference Saving and Energy Efficiency Potential in SMEs, organized by CONFAE, June 2007.

-Paper in the Conference Photovoltaic Solar Installation, organized by CONFAE, June 2007.

-Paper in the conference series Administration of the resources of Ambles Valley”. Muñogalindo (Ávila). August 2008.

-Paper in BIOMUN 08, International Bioenergy Congress, “Presentation of effective and real solutions which contribute to the sustainability of municipalities”, Valladolid, October 2008.

-Paper “Renewable Energy in the home”, II Conference on Consumption, Town Council of Villamayor (Salamanca), October 2008.

-Paper “Saving and Energy Efficiency Measures to comply with the Technical Code of Building”, Real Estate Fair Ávila Centre, Ávila, June 2008.

-Paper in VI Avila Conference on Renewable Energy, “PROBIO European Project”, Ávila, October 2007.

-Paper Conference on Saving and Energy Efficiency Potential in SMEs and Solar Photovoltaic Installations, CONFAE, Ávila, June 2007.

-Paper “Renewable Energy and Energy Efficiency: Bioenergy”, Biodiversity Foundation - Ministry of the Environment, Cillán (Ávila), January 2007.

-Paper “Renewable Energy and Energy Efficiency: Bioenergy”, Biodiversity Foundation - Ministry of the Environment, Nava de Arévalo (Ávila), December 2006.

75

-Paper Renewable Energy in TCB, Real Estate Fair, Open Commercial Centre, June 2008.

-Paper Building Energy Certification, Real Estate Fair, Open Commercial Centre, June 2008.

-Paper Employment and Renewable Energy, Trade Unions Environment Week, UGT, Ávila, June 2007.

- Paper Saving and Energy Efficiency in the Home, Environmental Conference, Rural Women's Association, "La Andariega", Gotarrendura (Ávila), April 2008.
- Paper Photovoltaic Solar Energy. Opportunities for Business. Course on Photovoltaic Solar Energy, CONFAE, Ávila, June 2007.
- Paper Saving and Energy Efficiency. Opportunities for Business, Course on Energy Efficiency, CONFAE, Ávila, June 2007.
- Paper Creation of Environmental Companies, Biodiversity Foundation Course, Cillán (Ávila), January 2007.
- Paper in the Conference "Mayor School" celebrated in Gotarrendura (Ávila), March 2008.
- Paper in the Conference on Consumption organized by the City Council of Ávila "The Energy Agency of the Province: Potential of Renewable Energy in Ávila". **76**

### **Press**

APEA has appeared many times on the different mass media, both general and specialized, as a result of the activities the Energy Agency of the Province of Ávila has participated in, undoubtedly contributing to a better diffusion of the actions taken. We would like this Institutional Report to bear a public acknowledgement and sincere gratefulness to all mass media for their collaboration with our dissemination activity. **77**

And last but not least, we would like to express our sincerest gratitude to all the people and organizations that, in one way or another, have collaborated with our Agency throughout these ten years, and without whose contribution it would not have been possible to travel this road, among which we cannot fail to mention the Presidents of the County Council of Ávila, Deputies responsible for the Area and the rest of Province Deputies, Members of APEA Administration Board, Great Duke of Alba Institution, Santa Teresa Cultural Foundation, all Municipalities in our province, Regional Government of Castilla y León, EREN, IDEA, Agencies and Energy Bodies all over Spain, Institutions and European partners, Universities, Energy Associations, Entrepreneurial Associations, Professional Associations, Students in Courses, Participants in Conferences and Seminars, Collaborators and Companies in the sector, Suppliers and each and everyone of the citizens of our province, for whom we work daily and we hope continue trusting our work.

To all of them, thank you.