

## EL-EFF REGION

### WP 3: Regional action plan

Drafted by: Government of Navarre

#### I. Background (2-4 pages)

##### ➤ Spain and Europe

In Spain it exists the **2008-2012 Action Plan**, under **Spain's Energy Saving and Efficiency Strategy (E4) 2004-2012**.

#### **Strategic targets:**

- To acknowledge energy saving and energy efficiency as a tool for economic growth and social welfare.
- To create appropriate conditions for knowledge of energy saving and energy efficiency to become more widespread and better developed in society, in particular as regards the measures in all the national strategies and in the Spanish Climate Change Strategy.
- To encourage competition in the market under the guiding principle of energy saving and efficiency.
- To strengthen the position of Spain at the forefront of energy saving and efficiency.

The new Action Plan for the period 2008-2012 (PE4+) is the continuation of the plan run during the period 2005 to 2007.

The Plan consists of a set of concrete measures which specifically target seven disaggregated sectors: Industry, Transport, Construction, Public Services, household and office automation equipment, agriculture, and energy transformation.

The current Plan (PA4+) forms part of the Energy Efficiency Action Plan at the European Community level, thereby contributing to delivering Spain's response not only to achieving the commitments set in Directive 2006/32 EC, which defines a framework for a joint effort to achieve energy savings of 9% in 2016, but the more ambitious target, included in the decision of the European council dated 9 March 2007, namely to achieve levels of savings of 20% by 2020.

Then, Navarre as region of Spain and helping to achieve the objectives of the E4 and the National Action Plan (PA4+), has developed some measures in collaboration with IDAE (National Institute for Diversification and Saving of Energy) as a working plan that is established year by year with its own objectives. We can call it the **Action Plan of Navarre**

➤ **Navarre**

Navarre is located in the north of Spain. It is a highly industrialized region; Gross Added Value for the industry sector is 32.3%, as opposed to 21.5 % for the national level. The unemployment rate in Navarre is 6.30%. Spain's is 10.20%. Surface of Navarre: 10,421 sq km.

<b>General data on the region of Navarre</b>		<b>Year</b>
Number of inhabitants	605.876	2007
Extension	10.421 Km <sup>2</sup>	
Population density	55 inhabitants/Km <sup>2</sup>	
Number of households (most recent data)	202.601	2007
Number of 1-person householders (most recent data)	40.527	2007
Number of 2-person householders (most recent data)	48.915	2007
Number of 3-person householders (most recent data)	43.327	2007
Number of 4 or more-person householders (most recent data)	69.832	2007
GDP	14.804.827,000.0 0	Euro
GDP/inhabitant	24.761	Euro

<b>Consumption data of the region of Navarre</b>		<b>Year</b>
Electricity consumption <u>Households</u> (domestic sector)	819,232 GWh	2006
Electricity consumption <u>Service Sector</u> (commerce & trade & public sector)	669,872 GWh	2006
Electricity consumption <u>Industry</u>	2.665,5 GWh	2006
Electricity consumption Agriculture	82,93 GWh	2006
Electricity consumption <u>other sectors</u> *	428,767 GWh	2006
<b>Total Electricity consumption in the region</b>	4.666,33 GWh	2006
<b>Total Energy Consumption in the region</b>	23.748,6 GWh	2006
<b>Share of electricity in total energy consumption</b>	19,6 %	2006

\* It includes the following sectors:  
 Collection, treatment, distribution of water.  
 Railway transportation.  
 Other transport companies.  
 Administration and public services, and street lighting.

Navarre has the goal of reducing electricity consumption for the period 2005-2010 on a figure equivalent to 1.89% of the forecasted consumption for this period on a no change scenario.

The Government of Navarre through the implementation of Energy Plans is carrying out suitable policies on the saving and efficient use of energy and on the use of renewable energies with the maximum respect for the environment. It contributes so to the fulfilment of the objectives set by Spain and the European Union.

One of these objectives is to enhance actions in the region of Navarre focused on the electricity efficient consume (**Action Plan of Navarre**).

Following are showed the measures from the National Saving and Efficiency Plan E4. These **saving targets** are determinants in the saving and efficiency policy of the Government of Navarre because it exists an agreement of actuaciones between both entities in this field.

<b>Sectors Measures of PAE4+ 2008-2012</b>		<b>Saving of Final Energy (ktoe)</b>	<b>Averted emissions (ktCO<sub>2</sub>)</b>	<b>Public Aids (K€)</b>	<b>Investments (K€)</b>
	<b>TOTAL INDUSTRY</b>	7.904	24.029	370.284	1.671.119
Public Services	Public-lighting installations	462	2.039	56.718	866.974
	Energy Audits and Studies	...	...	600	600
	Formation to public technicians	...	...	240	0
	Installations - water treatment	230	1.014	31.658	483.915
	<b>TOTAL SERVICES</b>	691	3.053	89.216	1.350.889
Equipment	Renovation plan for household appliances "Renove Plan"	1.509	13.132	532.500	1.992.235
	Equipment Plan and efficient use of the energy in Public Administration	220	1.914	0	0
	<b>TOTAL EQUIPMENT</b>	1.729	15.046	532.500	1.992.235
Building	Rehabilitation of the existing building envelope	1.450	4.245	175.150	2.677.295
	Improvement of the energy efficiency in the heat system in the existing buildings	1.685	7.155	243.315	3.719.205
	Improvement of the energy efficiency in the indoor illumination system in the existing buildings	3.339	29.205	176.292	2.694.681
	To promote the energy efficiency (high level qualification) in new construction and rehabilitation works	1.315	8.586	208.914	208.914
	<b>TOTAL BUILDING</b>	7.789	49.191	803.671	9.300.095

The **targets** of saving with the horizon 2010 are then conditioned by the Spanish national policies and by the new Navarran Energy Plan that will have a duration of 2011-2015 and that will be developed next year.

In the following board is showed the generated savings in the framework of efficiency of the Energy Plan. And also are established **the targets** of consumption in the efficient framework that establish the Energy Plan horizon 2010.

	Electricity Energy Consumption	BASE Tendencies (toe)	With EFFICIENCY measures (toe)	SAVING (toe)
	REAL (toe)			
1995	230.997	230.997	230.997	
1996	250.022	250.022	250.022	
1997	262.206	262.206	262.206	
1998	277.019	277.019	277.019	
1999	286.636	286.636	286.636	
2000	311.321	311.321	311.321	
2001	320.127	320.127	320.127	
2002	332.672	332.672	332.672	
2003	357.995	357.995	357.995	
2004	0	374.885	374.885	
2005	0	392.585	392.186	399
2006	0	411.134	407.973	3.161
2007	0	430.573	424.356	6.217
2008	0	450.947	441.387	9.560
2009	0	472.300	458.953	13.347
2010	0	494.681	477.363	17.318

	Electricity Energy Consumption	Total with EFFICIENT measures	RCS Tendency	RCS with EFFICIENT measures
	Total Tendency			
	Year %	Year %	Year %	Year %
1995				
1996	8,24%	8,24%	11,85%	11,85%
1997	4,87%	4,87%	-0,76%	-0,76%
1998	5,65%	5,65%	5,84%	5,84%
1999	3,47%	3,47%	7,22%	7,22%
2000	8,61%	8,61%	3,93%	3,93%
2001	2,83%	2,83%	5,97%	5,97%
2002	3,92%	3,92%	2,86%	2,86%
2003	7,61%	7,61%	8,16%	8,16%
2004	4,72%	4,72%	5,50%	5,50%
2005	4,72%	4,61%	5,50%	5,23%
2006	4,72%	4,03%	5,50%	4,21%
2007	4,73%	4,02%	5,50%	4,21%
2008	4,73%	4,01%	5,50%	4,22%
2009	4,74%	3,98%	5,50%	4,14%
2010	4,74%	4,01%	5,50%	4,24%

The Energy Plan horizon 2010 of Navarre says that there is a wide potential for improvement in the energy efficient use field, both at the execution of particular measures and at the gradual change in the way that energy is used to generate the comfort that the society is demanding.

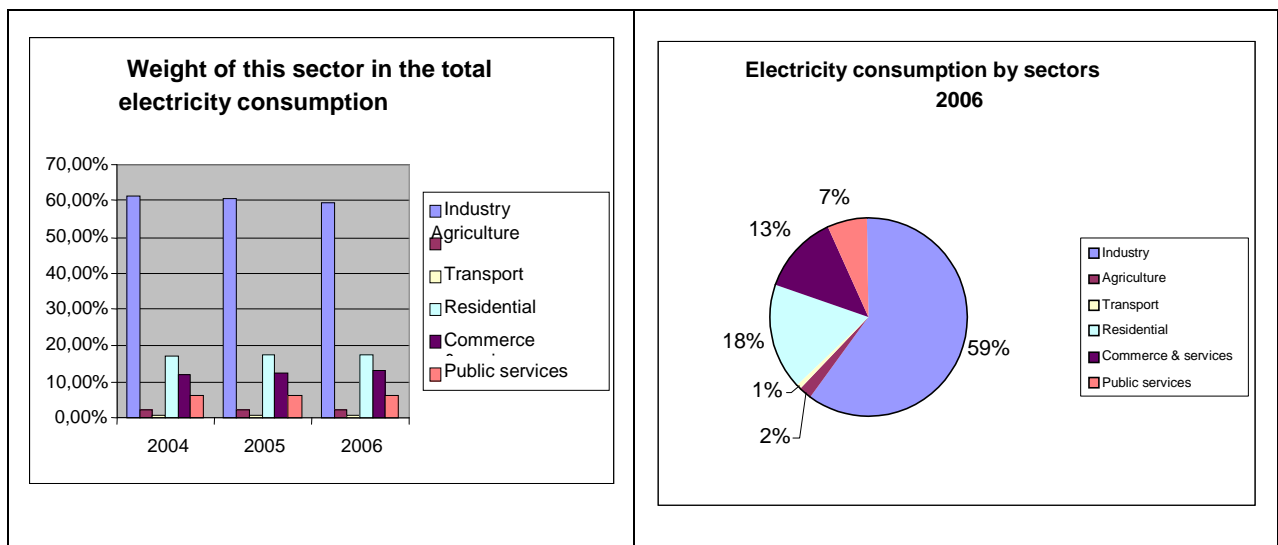
Therefore a **group of measures** are being promoted in order to decrease the energy consumption, while its reduction is also foreseen linked to a better use of energy resources, thanks to awareness campaigns.

This document as part of the EL-EFF Regions project it will be focused in two different sectors

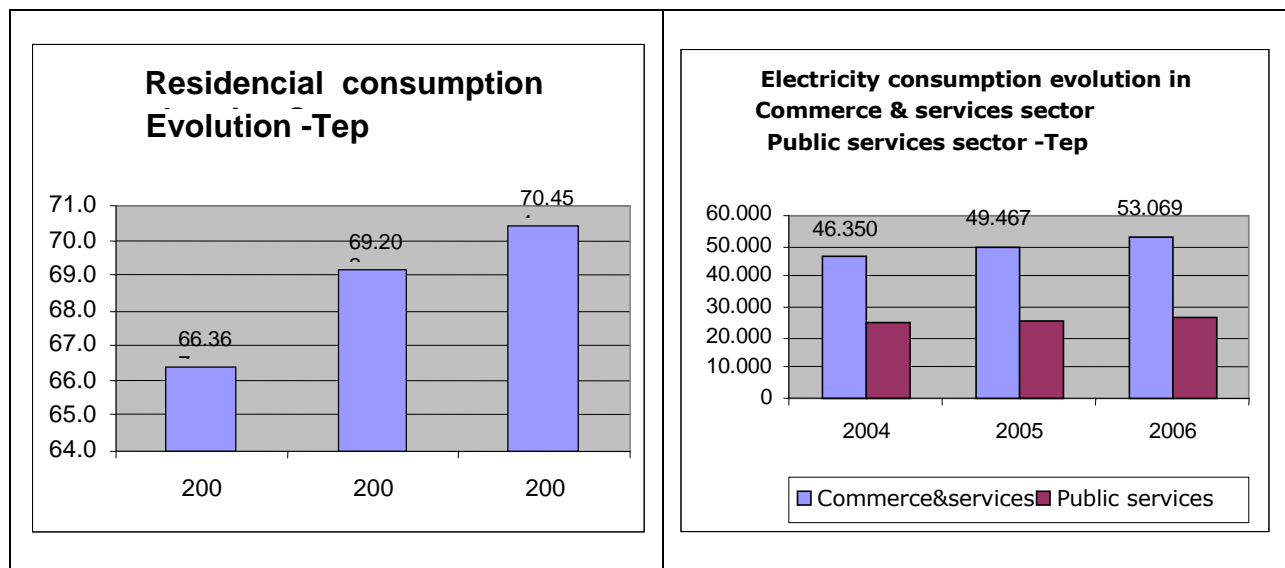
- residential sector (domestic sector)
- part of the services sector (public services and retirement homes for elderly people)

Though in Navarre the Industrial sector is still the highest consumer of electric energy, this ratio is being decreased year after year due to the **residential and services sector increase**.

In 2006 the industry consume reached the 59 % of the total consume and the commerce and services consume the 13% while the public services sector the 7%.



In Navarre the **residential sector is the 18%** of the total electricity consumption and it is foreseen that it will continue to rise.



The homes for elderly sector, among the services sector, has an ongoing development and its importance will increase in terms of energy consume taking into consideration that Navarre has one of the highest life expectancy within the regions of the development countries, and the number of elderly people is increasing.

Household consumption average distribution obtained from last years in Navarre is the following:

Average consumption per household in Navarre	%
Heating	68%
ACS	16%
Lighting	2%
Household appliances	13%
<b>TOTAL</b>	<b>100%</b>

Then, for the residential sector for example some measures are foreseen in this Action Plan of Navarre:

- the renovation of household appliances with an expected energetic saving of 11.558 toe during the period of execution of the Plan.
- Households lighting improvement. That will allow a saving of 3.420 toe during the same period.

## Electricity prices & market liberalisation in Navarre

	Price per kWh in Euro	Year
Typical electricity price household including all taxes ( <u>not</u> "special" tariffs for domestic hot water/heat pumps/electric heating etc.)	0,124	<b>2006</b>
This price consists of:		
Energy costs (Power term)	0,088	
Grid Charges /Energy term)	0,012	
Charges/levies for green electricity/CHP etc		
VAT	16%	
Other taxes (CO2 etc.) (Tax over electricity)	0,005	
Other:.....	0,002	
Typical electricity price household	0,1312 €/kWh	<b>2007</b>
Typical electricity price household	0,1257 €/kWh	<b>2006</b>
Typical electricity price household	0,1203 €/kWh	<b>2005</b>
Typical electricity price household	0,1182 €/kWh	<b>2004</b>
Typical electricity price household	0,1178 €/kWh	<b>2003</b>
Typical electricity price <u>service sector</u> (price range for commerce & public sector), including all taxes	0,1190 €/kWh	<b>2006</b>
Typical electricity price <u>industry</u> (price range), including all taxes	0,1311 €/kWh	<b>2006</b>

## II. Target groups (1-2 pages)

The main target groups and stakeholders involved are: public entities, energy companies, renewable energy specialized companies, an elderly home entity, some consultancy firm and some departments from the regional government.

- The main electrical distribution company in Navarre is IBERDROLA. Other company present in the northeast area is ENDESA.

There are also other small distribution companies like Electra Berruela, Electra Valdizarbe and Electra Saltega.

- Public bodies:

The Department of Innovation, Enterprise and Employment of the Government of Navarre concedes the administrative authorization both for the production of electric energy and for the use of consumer equipments.

When the infrastructures for the production and consumption of electricity are shared by Navarre and other regions, administrative authorization is agreed by the Energy and Industry Department from the Spanish Central Government Delegation in Navarre.

Pamplona's Energy Agency carries out energy consultancy works and other activities linked to the efficient use energy in the capital city of Navarre, like for example the regulation for the installation of solar equipments in both new buildings and rehabilitated ones.

National Centre of Renewable Energies (CENER).

Environmental Resources Centre of Navarre (CRANA)

- Consumers and users associations, business associations, trade and professional associations from Navarre also participate in the saving and efficient use of electricity.

- Chambers of Commerce and Agricultural Chambers.

- Professional Associations.

In November 2007, the Department of Innovation, Enterprise and Employment of the Government of Navarre, in the frame of this project (EL-EFF Region), developed a survey with the most representative companies and institutions of the region to discuss about possible proposals on electricity efficiency and to propose measures for its saving. After having received the survey answers, and with the intention of opening a discussion among the stakeholders, a meeting/roundtable was organized on the 12<sup>th</sup> December.

### **Results and conclusions from the survey and the roundtable:**

In the debate carried out with the stakeholders about the possible measures to propose, the following conclusions have been reached:

1. Electricity is a cheap good and it doesn't have a priority space in the family budget, therefore a short term saving is not foreseen.
2. There is not saving consciousness because the electricity consumption has always represented as a higher welfare.
3. It is necessary to make the population aware that even with less consumption the welfare is maintained. The energy waste has to be avoided.
4. Energy saving is directly linked with climate change and the safety of the supply. That means that the people's perception about these two aspects is very important in order to obtain the saving (there are contradictory versions about climate change, different news concerning the existing reserves, new technologies available may alter the perception and the decisions of users)
5. Awareness should be carried out focusing on youth and on the schools as education is the key for the behaviour of future consumers and also because the achievements come out from the school environment to other like the family, sports, etc.

6. An appropriate measure agreed by the participants is to organize in different schools a contest of electricity saving measures and proposals, giving the chance to obtain prizes related to the saving achieved or to the originality of the ideas proposed by the students at the school or at home.
7. It is considered very convenient to keep on with the saving measures in industries, municipalities and the public sector in general. The Administration should give an example as the society is requiring.
8. The Administration may carry out normative measures and also achieve great electricity saving linked to the good management of buildings thanks to the collaboration of employees. For instance, in public buildings counters per floor could be placed to know the consumption in each floor and to measure the results when implementing saving measures.

### **III. Benefits & main barriers (1-2 pages)**

- The Action Plan is going to bring direct benefits, such as energy (and money) saving and reducing greenhouse gas emissions.

This Action Plan of Navarre contributes in part to achieve the challenges of the National Spanish Action Plan (PAE4+). Thus the Spanish Industry Minister says “considering a value of EUR 480 per tonne of oil equivalent (toe) (i.e., USD 65 per barrel) and EUR 18 per tonne of CO<sub>2</sub>, the returns for both concepts would amount to EUR M 42,207.8 and EUR M 4,286, respectively, thus writing off the proposed investment for the period, estimates by 2017 being a return of EUR 3.25 per invested euro”.

The Spanish Ministry of Industry stated that in 2017 “investments will have been compensated by the benefits resulting from the Plan: energy saving and lower import rates (mainly regarding petroleum products), lower CO<sub>2</sub> emissions and a reduced recourse to international carbon credit markets”.

- The main obstacles/barriers identified so far as hampering this saving effect and a more efficient use of electricity as a response to climate change are the following:
  - Conflict with “welfare”
  - Conflict with status.
  - Insignificance of individual action against a global background
  - Relevant economic sectors perceive this as a threat to their interests
  - Unawareness and lack of certainties as regards the gravity of the problem of climate change
  - Complexity, global reach and cross-cutting nature of the problem
  - Lack of information, of quick channels and lack of trust in the sources – if energy saving equals money saving, how come no investments are being made to a larger extent?

#### **IV. Area of activities & suggested measures**

Energy-saving, energy-efficiency and environmentally-friendly actions and measures of the Government of Navarre within the 2008 work plan, within the 2008-2012 Action Plan on energy saving and efficiency strategy at territorial level within the Autonomous Community of Navarre include:

##### ➤ **SECTOR: HOUSEHOLD AND OFFICE EQUIPMENT**

#### **MEASURE 1. Renovation plan for household appliances “Renove Plan”**

<b>COMUNIDAD FORAL DE NAVARRA</b>
<p><b>TITLE OF THE MEASURE</b>  <b>“PLAN RENOVE DE ELECTRODOMÉSTICOS” – RENOVATION PLAN FOR HOUSEHOLD APPLIANCES</b></p>
<p><b>DESCRIPTION OF THE MEASURE</b></p> <p>The <b>objective</b> of this measure is to reduce electricity consumption in households by the replacement of fridges, freezers, washing machines, dishwashers and ovens by Class A or above energy label appliances. It also envisages replacing conventional electric and ceramic glass stoves by induction or gas stoves.</p> <p>To attain this objective a subsidy scheme is launched for the purchase of such appliances provided that less efficient equipments are replaced (“Renove Plan”).</p> <p>The amount received by the purchaser for each Class A or above appliance amounts to EUR 85. A fixed amount has been considered instead of a variable amount subject to the price of the appliance on the following grounds:</p> <ul style="list-style-type: none"> <li>• It favours an easier management of the subsidy scheme, by simplifying calculations for all the parties concerned (purchasers, retailers, Administration).</li> <li>• It prevents manipulating prices to access one price range or other in order to obtain a higher or lower subsidy.</li> <li>• This EUR 85 economic aid meets the economic incentives recommended by IDAE.</li> </ul> <p>A limit of 10,000 appliances is set for eligibility purposes, which means a budget of EUR 850,000.00 for purchasers (EUR 85.00 per appliance) and EUR 25,000.00 for retailers (EUR 2.50 per sale). See below “Implementation means and mechanisms”.</p> <p>To prove that the appliance has been actually and adequately disposed of, pursuant to Royal Decree 208/2005 of 25 February 2005 on electric and electronic equipment and waste management, a certificate of delivery to the waste service manager shall be exhibited among other justifying documents to benefit from the eligibility scheme.</p>
<p><b>PLANNING</b></p> <ol style="list-style-type: none"> <li>1. Approval and publishing notice of the call: July 2008.</li> <li>2. Adherence of retailers to the call: July-August 2008.</li> <li>3. Subsidised sales period and submission by collaborating retailers of subsidy applications: July-December 2008 (or until the available budget is used up, the sooner of the two dates).</li> <li>4. Economic (invoices &amp; payments) and material checking of the investment and payment of</li> </ol>

the payment of the subsidy.

On a monthly basis, collaborating retailers shall submit the documents regarding sales made under the household appliances renovation plan “Plan Renove de Electrodomésticos 2008” for the previous month, and then the Government of Navarre shall pay the eligible subsidies to the purchasers.

#### RESPONSIBLE BODY FOR IMPLEMENTING THE MEASURE

Energy efficiency and renewable energies Division. Business Promotion Service. Department of Innovation, Enterprise & Employment of the Government of Navarre.

#### IMPLEMENTING INSTRUMENT

Public call for subsidy scheme:

Resolution 2188/2008, of 2 July 2008, of the Director-General of Enterprise, approving the call for subsidies under the household appliances renovation plan “Plan Renove de Electrodomésticos 2008”. Published in the Official Journal of Navarre no. 88 of 18/07/2008. Resolution 2363/2008 of 6 August 2008 of the Director-General of Enterprise, approving the economic compensation budget for collaborating retailers under the household appliances renovation plan “Plan Renove de Electrodomésticos 2008”. Published in the Official Journal of Navarre no. 104 of 25/08/2008.

#### COMPATIBILITY OF AID SCHEME

Subsidies under this call are compatible with other subsidies granted by the public administration of the Government of Navarre, of further public administrations, public or private bodies and individuals, whether national or international.

#### FINANCING OF THE MEASURE<sup>(6)</sup>

IDAE (€): 255,000.00	GOVERNMENT OF NAVARRE (€): 620,000.00	PRIVATE (€): 3,400,000.00
-------------------------	--	---------------------------

#### ENERGY SAVING

PRIMARY ENERGY (toe): 6,631.428	TYPE OF ENERGY SAVED: electrical
FINAL ENERGY (toe): 2,479.577	ENERGY SAVING ATTAINED: -
<b>INDICATORS</b>	
AID / SAVING(€/toe final energy): 352.88	INVESTMENT/ SAVING (€/toe final energy): 1,724.08
INVESTMENT LEVERAGE /IDAE AID (%): 489%	

#### IMPLEMENTING MEANS AND INSTRUMENTS

The processing of subsidy applications shall be carried out by the a public company, CEINSA (Business Innovation Centre of Navarre). A member of the administrative staff shall work full-time on this task, with the collaboration of another member of CEINSA staff for any eventual specific task.

Considering the large number of potential beneficiaries and in order to speed up the processing of the subsidies for all the stakeholders, this measure features certain peculiarities:

1. The measure relies on the collaboration of retailers for the processing of the subsidies. Collaborating retailers may subscribe a collaboration agreement with the Department of Innovation, Enterprise & Employment. This is meant to avoid having final customers to process the subsidy, which might in some cases prove far too complicated for them to handle. Retailers are more accustomed to this type of proceedings, and will receive an economic compensation for taking part and collaborating in the measure (EUR 2.50 for each processed sale of electrical appliance).
2. A specific software shall be developed for the household appliances renovation plan “Plan Renove de Electrodomésticos 2008” and made available at the Government of Navarra’s website ([www.navarra.es](http://www.navarra.es)). The software shall meet the following objectives: universal access to information and publicising the measure; automating to a large extent the adhesion process of retailers and the subsidy application of customers; obtaining real-time updated data on eligible electrical appliances (so that, if the budget is used up, no further discounts may be applied by the retailer to be subsequently paid by the Government of Navarra); etc.
3. A publicity campaign is required to disseminate the measure among the general public, since, unlike the beneficiaries of other public aid and subsidy schemes, the average citizen is not aware or does not check common dissemination channels for this type of measures (such as the Official Journal of Navarra ).

A quota of 10,000 eligible appliances is established for the subsidy scheme. This means a budget of EUR 850,000.00 for direct subsidies to purchasers (EUR 85.00 per appliance) and EUR 25,000.00 for compensating collaborating retailers (EUR 2.50 per sale). See below “IMPLEMENTING MEANS AND INSTRUMENTS”. The scheme amounts to a total EUR 875,000.00, as shown in the summary chart. The EUR 255,000.00 contributed by IDAE shall be allocated to subsidizing the purchase, whereas of the EUR 620,000.00 contributed by the Government of Navarra, EUR 595,000.00 shall be allocated to subsidizing the purchase and EUR 25,000.00 to compensate collaborating retailers.

Likewise, expenses resulting from the publicity campaign described in section 3 above shall be included into dissemination expenses (See Dissemination section).

## **ENERGY-ECONOMIC RATIO**

EUR 30.35 /MWh (electric power, final energy). According to PAE4+, the final energy saved amounts to 1,509 ktoe for a public funding of 532,500 kEUR. Figures are translated into EUR/toe by considering 1 MWh = 0,086 toe, and then into primary energy by applying a conversion factor of 1 MWh final energy = 0.23 toe primary energy.

## **ENERGY SAVING**

Energy saving (thermal & electrical) are calculated by dividing the public aid allocated to the measure (only the amount corresponding to subsidising the purchase, not the one corresponding to compensating retailers for participating in the measure) by the ratios considered in the previous point.

➤ **SECTOR: PUBLIC SERVICES**

**MEASURE 2. Renovation of existing public-lighting installations**

<b>COMUNIDAD FORAL DE NAVARRA</b>
<p><b>TITLE OF THE MEASURE</b></p> <p><b>RENOVATION OF EXISTING PUBLIC-LIGHTING INSTALLATIONS</b></p>
<p><b>DESCRIPTION OF THE MEASURE</b></p> <p>This action seeks to reduce energy consumption of existing public-lightning installations by renovating such installations using energy saving and efficiency criteria.</p> <p>To attain this objective a call for subsidies is opened for energy-saving oriented actions reducing the consumption of electric power for public lightning purposes, under which subsidies are granted to cover part of the investment made by local collectivities in the Autonomous Community of Navarre making investments to reduce energy consumption from public-lightning installations.</p> <p>Under this public aid scheme, actions successfully reducing the consumption of electric power in public-lightning installations shall be considered eligible costs, including but not limited to the following:</p> <ul style="list-style-type: none"> <li>• Replacing mercury vapour lamps and ancillary equipment with high-pressure sodium vapour lamps.</li> <li>• Replacing general purpose luminaires with high performance lower voltage lamps.</li> <li>• Installing light intensity regulating systems allowing to reduce the intensity of lightning in public areas when activity decreases.</li> <li>• Installing systems for turning on/off street lightning based on astronomical clocks, presence detectors or hand-operated switches.</li> <li>• Replacing current technologies with LED-based technologies in traffic lights to increase energy efficiency.</li> </ul> <p>The subsidy share ranges between 21% and 30% of the investment made, depending on the population of the applying local collectivity.</p>
<p><b>PLANNING</b></p> <ol style="list-style-type: none"> <li>1. Approval and publishing notice of the call: July 2008.</li> <li>2. Initial granting of the aid upon submission of the application and subsequent positive assessment: October 2008 – February 2009.</li> <li>3. Economic (invoices &amp; payments) and material verification of the investment: January – September 2009, depending on the end date of each action.</li> <li>4. Payment of the subsidy: February – October 2009, depending on the end date of each action.</li> </ol>
<p><b>RESPONSIBLE BODY FOR IMPLEMENTING THE MEASURE</b></p> <p>Energy efficiency and renewable energies Division. Business Promotion Service. Department of Innovation, Enterprise &amp; Employment of the Government of Navarre.</p>
<p><b>IMPLEMENTING INSTRUMENT</b></p> <p>Public call for subsidy scheme: Resolution 2183/2008 of 2 July 2008 of the Director-General</p>

of Enterprise, approving the 2008 call for subsidies in public-lightning energy-saving actions. Published in the Official Journal of Navarre no. 93 of 30/07/2008.

#### COMPATIBILITY OF AID SCHEME

The subsidies under this call are incompatible for the same installations with other subsidies from schemes arranged by the Government of Navarre for investments in installations using renewable energies and former schemes arranged by the Government of Navarre for energy saving and efficiency actions.

If one given activity receives funds from several subsidy schemes, such sums, whether from one or from several schemes, shall not exceed the total cost of the activity.

#### FINANCING OF THE MEASURE<sup>(6)</sup>

IDAE (€): 310,000.00	C.F. DE NAVARRA (€): 0,0	PRIVADO (€): 838,148,15
----------------------	--------------------------	-------------------------

#### ENERGY SAVING

PRIMARY ENERGY (toe): 6.748,854	TYPE OF ENERGY SAVED <sup>(8)</sup> : eléctrica
FINAL ENERGY (toe): 2.523,485	ENERGY SAVING ATTAINED <sup>(9)</sup> : -

#### INDICATORS

AID / SAVING(€/toe final energy): 122,85	INVESTMENT / SAVING (€/toe final energy): 454,99
INVESTMENT LEVERAGE /IDAE AID (%): 370%	

#### IMPLEMENTING MEANS AND INSTRUMENTS

The applications submitted shall be processed by two members of the staff of the Energy efficiency and renewable energies Division of the Department of Innovation, Enterprise & Employment (Fernando Señas, Head of Section, and Esperanza Aristu, technician), further supported by the administrative, accounting and legal services of the above Department if necessary. Additionally, considering the work estimates and the scarcity of resources available, the measure shall rely on the collaboration of a public company, CEINSA (Business Innovation Centre of Navarre), involving in all the full-time dedication of several members of its staff.

#### ENERGY-ECONOMIC RATIO

EUR 10.56 /MWh (electric power, final energy). According to PAE4+, the final energy saved amounts to 461.7 ktoe for a public funding of 56,718 kEUR. Figures are translated into EUR/toe by considering 1 MWh = 0,086 toe, and then into primary energy by applying a conversion factor of 1 MWh final energy = 0.23 toe primary energy.

#### ENERGY SAVING

The energy saving obtained is displayed in the chart and is calculated by dividing the funds provided by the previous ratio.

**MEASURE 3. Studies, viability surveys and audits in existing public-lightning installations**

<b>COMUNIDAD FORAL DE NAVARRA</b>		
<b>TITLE OF THE MEASURE</b>		
<b>STUDIES, VIABILITY SURVEYS AND AUDITS IN EXISTING PUBLIC-LIGHTNING INSTALLATIONS</b>		
<b>DESCRIPTION OF THE MEASURE</b>		
<p>The objective of this measure is to identify the potential for energy saving in existing public-lightning installations, to ultimately facilitate decision making as regards energy-efficiency investments in such installations.</p> <p>To attain this objective a call for subsidies is open for energy audits in public-lightning installations, under which local collectivities in the Autonomous Community of Navarre may receive funds to cover up to 50% of the cost of the audit.</p> <p>The audits shall necessarily include a section entitled “Conclusions and recommendations”.</p>		
<b>PLANNING</b>		
<ol style="list-style-type: none"> <li>1. Approval and publishing notice of the call: July 2008.</li> <li>2. Initial granting of the aid upon submission of the application and subsequent positive assessment: October 2008 – February 2009.</li> <li>3. Economic (invoices &amp; payments) and material verification of the investment: January – September 2009, depending on the end date of each action.</li> <li>4. Payment of the subsidy: February – October 2009, depending on the end date of each action.</li> </ol>		
<b>RESPONSIBLE BODY FOR IMPLEMENTING THE MEASURE</b>		
Energy efficiency and renewable energies Division. Business Promotion Service. Department of Innovation, Enterprise & Employment of the Government of Navarre.		
<b>IMPLEMENTING INSTRUMENT</b>		
Public call for subsidy scheme: Resolution 2183/2008 of 2 July 2008 of the Director-General of Enterprise, approving the 2008 call for subsidies in public-lightning energy-saving actions. Published in the Official Journal of Navarre no. 93 of 30/07/2008.		
<b>COMPATIBILITY OF AID SCHEME</b>		
<p>The subsidies under this call are incompatible for the same installations with other subsidies from schemes arranged by the Government of Navarre for investments in installations using renewable energies and former schemes arranged by the Government of Navarre for energy saving and efficiency actions.</p> <p>If one given activity receives funds from several subsidy schemes, such sums, whether from one or from several schemes, shall not exceed the total cost of the activity.</p>		
<b>FINANCING OF THE MEASURE<sup>(6)</sup></b>		
IDAIE (€): 15,000.00	C.F. DE NAVARRA (€): 0,0	PRIVATE (€): 15,000.00

<b>ENERGY SAVING</b>	
PRIMARY ENERGY (toe): -	TYPE OF ENERGY SAVED: -
FINAL ENERGY (toe): -	ENERGY SAVING ATTAINED: -
<b>INDICATORS</b>	
AID / SAVING(€/toe final energy): -	INVESTMENT / SAVING (€/toe final energy): -
INVESTMENT LEVERAGE /IDAE AID (%): 200%	

## IMPLEMENTING MEANS AND INSTRUMENTS

The applications submitted shall be processed by two members of the staff of the Energy efficiency and renewable energies Division of the Department of Innovation, Enterprise & Employment (Fernando Señas, Head of Section, and Esperanza Aristu, technician), further supported by the administrative, accounting and legal services of the above Department if necessary. Additionally, considering the work estimates and the scarcity of resources available, the measure shall rely on the collaboration of a public company, CEINSA (Business Innovation Centre of Navarre), involving in all the full-time dedication of several members of its staff.

## ENERGY-ECONOMIC RATIO

No ratio may be calculated since the action shall have no direct energy saving effect. Indirect effects may be calculated, yet it is subject to many variants.

## ENERGY SAVING

Conducting energy audits does not involve in itself energy saving, for no actual energy saving measures are implemented. However, the spirit of the measure is to identify opportunities for energy saving, which shall included in the conclusions of the audit, and which, if eventually implemented, shall actually cause energy saving by the applicant for aid.

### ➤ AWARENESS RAISING AND DISSEMINATION

#### **MEASURE 4. Awareness raising and dissemination**

<b>COMUNIDAD FORAL DE NAVARRA</b>
TITLE OF THE MEASURE
<b>DISSEMINATION</b>
DESCRIPTION OF THE MEASURE
<p>The implementation of the 2008 Work Plan involves much promotion, publicity and awareness raising work to get the public in general and the sectors involved in particular to become aware of the measures, thus stimulating their participation. Additionally, this promotional work shall raise the general awareness on the seriousness of current energy wasting.</p> <p>This dissemination plan unfolds by way of three actions:</p>

**Publicity campaign of the household appliances renovation plan “Plan Renove de Electrodomésticos 2008”:**

A publicity campaign is required to disseminate the measure among the general public, since, unlike the beneficiaries of other public aid and subsidy schemes, the average citizen is not aware or does not check common dissemination channels for this type of measures (such as the Official Journal of Navarre).

The costs of this publicity campaign shall be charged in the dissemination budget.

**Information and awareness-raising programme on efficient use of energy:**

The launching of an ambitious plan is scheduled comprising horizontal communication and awareness raising measures (i.e. reaching all the sectors involved as well as the general public) to help promote and to secure the success of the Work Plan.

Awareness-raising actions shall be conducted by CRANA (Environmental Resources Centre of Navarre), which has a wide experience in awareness raising actions in environmental and energy issues addressed to the different sectors of society.

These promotional, communication and awareness-raising measures are divided into 3 groups:

- Information (support to other measures under the Plan).
- Awareness raising (awareness raising actions).
- Pilot experiences (in schools, associations of condominium owners, local governments, regional administration).

The Plan shall be implemented from November 2008 through October 2009.

**PLANNING**

**Publicity campaign of the household appliances renovation plan “Plan Renove de Electrodomésticos 2008”:**

1. Designing the campaign: June 2008.
2. Implementing the campaign: August – October 2008.

**Information and awareness-raising programme on efficient use of energy:**

1. Designing the programme: July – October 2008.
2. Implementing the programme: November 2008 – October 2009.

**RESPONSIBLE BODY FOR IMPLEMENTING THE MEASURE**

Energy efficiency and renewable energies Division. Business Promotion Service. Department of Innovation, Enterprise & Employment of the Government of Navarre.

**IMPLEMENTING INSTRUMENT**

**Publicity campaign of the household appliances renovation plan “Plan Renove de Electrodomésticos 2008”:**

Contracting publicity.

**Information and awareness-raising programme on efficient use of energy:**

Commissioning the Environmental Resources Centre of Navarre - CRANA.

**COMPATIBILITY OF AID SCHEME**

N/A.

FINANCING OF THE MEASURE		
IDAE (€): 100,000.00 “Renove” Plan 2008: 0.00 Campaign other measures: 0.00 CRANA Awareness programme: 100,000.00	GOVERNMENT OF NAVARRE (€): 88.697,95 “Renove” Plan 2008: 48,490.58 Campaign other measures: 40,207.37 CRANA Awareness programme: 0,00	PRIVATE (€): 0.00

ENERGY SAVING	
PRIMARY ENERGY (toe): -	TYPE OF ENERGY SAVED: -
FINAL ENERGY (toe): -	ENERGY SAVING ATTAINED: -
INDICATORS	
AID / SAVING(€/toe): -	INVESTMENT / SAVING (€/toe):
INVESTMENT LEVERAGE /IDAE AID (%): -	

Below is a description of the activities included in the “Information and awareness-raising Programme”:

- Activity 1. Dissemination
- Activity 2. Conferences and lectures
- Activity 3. Energy plans

## **ACTIVITY 4.1. DISSEMINATION**

**Budget: EUR 5,000.00**

Informing the different social and economic sectors of Navarre on current issues regarding energy and climate change, using different means: web site, electronic newsletter, e-mail and press announcements. Special treatment shall be given to information on measures regarding energy saving/efficiency and renewable energies under the 2008 Action Plan and Energy Plan of Navarre.

### **ACTION 4.1.1 Dissemination of Aids**

#### **DESCRIPTION**

Dissemination via email of economic aid to energy measures implemented under the plan and under other plans and programmes among beneficiary sectors.

Aids under the 2008 Action Plan and aids to renewable energies shall be disseminated by means of an initial communication at the beginning of the call and a reminder before the deadline for submitting applications.

#### **BENEFICIARIES**

- Business associations (regional and sectoral), trade unions, chamber of commerce
- Cogeneration and renewable energy companies, maintenance companies, consultants, energy services companies, etc.
- Companies and associations in the transport sector: ANET, TRADISNA

- Administrators of condominium blocks, architects, municipal rehabilitation offices, promoters, planners and builders.
- Local governments, intermunicipal services associations.
- Development agencies, sports associations and clubs, etc.

INDICATORS	expected results
Number of communications via e-mail	2
Number of people targeted by each communication	1,200

BUDGET: EUR 3,100.00

#### **ACTION 4.1.2. Information Day on Plan Aids**

##### DESCRIPTION

Organizing an information day in Pamplona on the aids under the 2008 Action Plan upon opening of the call for applications.

This information day shall be conducted in collaboration with the Department of Innovation and DG Transport of the Government of Navarre, depending on the deadlines for the calls and the contents deemed adequate.

Announcements shall be contracted in the two local newspapers to disseminate the information day.

##### BENEFICIARIES

Same as in action 4.1.1.

INDICATORS	expected results
Press announcements	2
Number of invitations	1,200
Number of attendants to the information day	80

BUDGET: EUR 300.00

#### **ACTION 4.1.3. Web- based dissemination of information on energy and climate change**

##### DESCRIPTION

Keeping updated information on CRANA's website ([www.crana.org](http://www.crana.org)) on the actions of the Action Plan and the Energy Plan of Navarre, on the situation of energy in Navarre, energy saving and efficiency best practices, including links to the following websites: Department of Innovation (Efficiency and Renewable Energies Division), Government of Navarre and IDEA (Institute for Diversification and Saving of Energy).

Making available via CRANA's Environmental Resources Guide of Navarre ([www.grana.org](http://www.grana.org)) regional news on energy and climate change getting media coverage. Updating the database available on the website on efficient and environmentally friendly products in the building sector.

##### BENEFICIARIES

General public

INDICATORS	expected results
No. of visits to <a href="http://www.crana.org">www.crana.org</a>	50,000
No. of visits to <a href="http://www.grana.org">www.grana.org</a>	120,000

BUDGET: EUR 800.00

#### **ACTION 4.1.4. Newsletter-based dissemination of information on energy and climate change**

##### DESCRIPTION

CRANA's bimonthly newsletter includes a section on energy and climate change with news regarding energy at regional, national and world level. This section shall inform on the development of the measures of the Action Plan.

##### BENEFICIARIES

General public

##### INDICATORS

expected results

No. of newsletters	6
No. of recipients of the newsletter	2.400

BUDGET: EUR 600.00

#### **ACTION 4.1.5. Information and advice service on energy efficiency and renewable energies**

##### DESCRIPTION

Meeting the increasing demand for information on energy efficiency and renewable energies: materials, systems, technologies and above all public aids

##### BENEFICIARIES

General public

##### INDICATORS

expected results

No. of queries	150
----------------	-----

BUDGET: EUR 200.00

### **ACTIVITY 4.2. CONFERENCES, VISITS, WORKSHOPS AND THEATRE ACTIVITIES**

**BUDGET: EUR 19,968.00**

Promoting the dissemination of information and debates on energy saving and efficiency, sustainable mobility and fighting climate change (values of the new energy culture), including habits, behaviours and technologies based on positive models and seeking to build a positive image of energy saving and efficiency.

The two main actions shall be carried out in Pamplona. The other actions have a more local approach and shall target smaller localities in Navarre.

#### **ACTION 4. 2.1. Conferences & Debates**

##### DESCRIPTION

Organising two conferences & debates on current issues regarding energy and climate change in Pamplona.

One announcement shall be published in the two local newspapers for each conference.

The first conference shall be held in autumn 2008 and shall serve to publicly present the energy balance of Navarre for 2007 and the Energy Plan of Navarre 2010.

The second conference shall be held in spring 2009 and shall consist of a public debate on certain issues (as yet pending).

#### BENEFICIARIES

General public

#### INDICATORS

#### expected results

No. of announcements	4
No. of invitations to the conferences	1,200
No. of attendants to the conferences	100
Total no. of attendants	200

BUDGET: EUR 10,482.00

#### **ACTION 4.2.2. Technical visit**

#### DESCRIPTION

Organising a visit to a series of buildings considered as innovative from a bioclimatic and renewable energy viewpoint.

Organising a visit to the Town Hall of Noain-Valle de Elorz, to CENIFER headquarters in the old customs house of Imarcoain.

#### BENEFICIARIES

Professionals such as architects, promoters and builders, town planning managers in local governments

#### INDICATORS

#### expected results

No. of lectures	4
No. of attendants per lecture	25
Total no. of attendants to lectures	100

BUDGET: EUR 762.00

#### **ACTION 4.2.3. Workshops on energy consumption**

#### DESCRIPTION

Holding workshops on energy consumption in households in different localities of Navarre. Local collectivities having conducted energy plans shall be prioritized to favour combined action. Applications submitted by other local collectivities shall be considered on a second stage.

The call and dissemination tasks shall be arranged and carried out by the local collectivities.

**BENEFICIARIES**

General public

**INDICATORS**

expected results

No. of workshops	8
No. of attendants to workshops	20
Total no. of attendants to workshops	160

BUDGET: EUR 1,524.00

**ACTION 4.2.4. Theatre activities****DESCRIPTION**

An entertaining and relaxed way of raising the awareness of the public in general, this activity may add up to further cultural or festive activities. This interactive play, performed by the TROKOLO theatre group, has been on stage for 3 years around Navarre and in other Autonomous Communities around Spain.

**BENEFICIARIES**

General public

**INDICATORS**

expected results

No. of performances	8
No. of attendants per performance	50
Total no. of attendants to performances	400

BUDGET: EUR 7,200.00

**ACTIVITY 4.3. ENERGY PLANS****BUDGET: EUR 56,970.00****ACTION 4.3.1. Schools****DESCRIPTION**

Starting and monitoring energy action plans in secondary schools comprising measures for curricular integration, energy management and improvement of habits and participation.

**TASKS**

Starting energy action plans in the six schools that replied to the call opened in May 2008 to conduct energy plans.

Monitoring the energy plans launched in previous years in 8 schools.

Providing advice on energy and climate change to schools in Navarre via phone and e-mail.  
Opening a new call for proposals for energy plans in private and public schools in the second quarter in 2009.

Delivering a practical training course on energy in secondary schools for teaching and other than teaching staff.

Launching a blog on energy plans to be updated by schools.

Designing and translating educational material on energy.

Each school shall receive an electric power meter and a digital thermometer.

The programme shall be carried out in collaboration with the Department of Education of the Government of Navarre and INAP (Institute of Public Administrations of Navarre).

The programme shall be supported by a technical assistance.

#### BENEFICIARIES

Teaching and other than teaching staff from schools

#### INDICATORS

expected results

No. of schools with energy plans	14
No. of attendants to the training course	30

BUDGET: EUR 23,330.00

### **ACTION 4.3.2. Public Administrations**

#### DESCRIPTION

Launching of energy action plans in 5 facilities belonging to 6 local administrations (municipalities or intermunicipal services associations).

Drafting of an evaluation report on the energy plans implemented in the last 4 years.

Organising a conference on energy and climate change at municipal level.

#### TASKS

Signing a collaboration agreement between stakeholders (CRANA and local collectivity).

Drafting of a technical report on the state and management of energy-consuming facilities.

Arranging a participative process to compare measures leading to the drafting of an Action Plan.

The measures launched under the Action Plan shall be monitored for a period of 3 months.

Each local body shall receive an electric power meter and a digital thermometer.

A public call shall be opened for local government during the first quarter in 2009.

Information and advice shall be provided to all the local collectivities contacting the service.

Interviews shall be conducted among local managers of facilities having launched their energy plans. A report shall be drawn to account for the evolution of consumption, consumption ratios per sq m, pilot measures applied, etc.

This programme shall be carried out in collaboration with the Federation of Municipalities and Local Councils of Navarre (FNMC) and the Urban Environment Division of the Department of the Environment and Rural Development of the Government of Navarre.

#### BENEFICIARIES

Local collectivities of Navarre

INDICATORS	expected results
Nº de energy plans launched	5
No. of queries replied	20
No. of evaluation reports	1
No. of attendants to the conference	40

BUDGET: EUR 33,640.00