



Setcom Project "Sustainable Energy in Tourism dominated Communities"

Ávila Deputy County Council
Área de Asuntos Europeos

WP2: Capacity Building. Task 2.1
Tools, Surveys and EMS



Legislation

1. **Technical Building Code.** (R.D.314/2006, de 17 de marzo)

Basic Document on Energy Saving: Establishes basic requirements on energy efficiency and renewable energy to be met by new buildings and those to be reformed or rehabilitated.

Contains of the following sections:

- HE.1: Limiting energy demand (heating and cooling).
- HE.2: Performance of the thermal plants. (RITE)
- HE.3: Energy efficiency of lighting installations.
- HE.4: Minimum solar contribution to heating energy hot water.
- HE.5: Minimum PV contribution to electric power.



Legislation

Measures developed:

RITE: Regulation of thermal plant in buildings

Conditions to be satisfied by the facilities in the heating, air conditioning and hot water to achieve a rational use of energy.

The higher energy efficiency requirements established by RITE, are:

- More energy-efficient equipment in the generation of heat and cold, as well as for moving and fluids transport.
- Better insulation in the equipment and pipelines of thermal fluids.
- Better regulation and control to maintain the design conditions in air-conditioned premises.
- Use of renewables energy sources, notably solar energy and biomass.
- Incorporation of subsystems of energy recovery and utilization of waste energy.
- Mandatory for accounting for consumption in the case of collective facilities.
- Gradual disappearance of most polluting solid fuels.
- Gradual disappearance of less efficient generators.

Legislation

Energy certification in buildings. (Real Decreto 47/2007, de 19 de enero), Basic procedure for certification of energy efficiency of new buildings

- Through an energy efficiency label, is assigned to each building a Class Energy Efficiency, which will vary from Class A, for the most energy efficient, class G, the least efficient.
- Establishing a register of recognized documents for energy certification of buildings.
- It provides the basic procedure for certification of energy efficiency of new buildings developed by the relevant authority in this area in the Community



Legislation

2. Renewable Energy Plan 2005-2010. (PER). (aprobado por Consejo de Ministros el 26 de agosto de 2005)

Budget: 23.598.641 ME

Reinforce the objectives of government energy policy and to comply with the international commitments of Spain (Kyoto Protocol)



Forecast:

- 12.1% of global energy consumption in 2010 will be supplied by renewable sources, contributing to the production of 30.3% of gross electricity consumption.
- Biofuels will contribute in 5.83% of petrol and diesel consumption for transport.

Legislation

- **Solar Energy;**

 - **Thermal Solar Plant;**

 - "Technical specifications of low Temperature facility"

 - General requirements, basic configurations, design criteria, applicable regulations, etc.

 - **PV Solar Plant;**

 - "Technical specifications Installations Isolated Network"

 - Requirements for installation, design criteria, etc.

 - "Technical specifications Installations Connected to Network"

 - Design, components and materials, etc.

 - **Thermoelectric Solar Plant**

- **Wind Power.**

- **Bio-mass;** (Real.Decreto 661/2007), the legal framework for electricity production and energy from biomass.

 - **Bio-fuel;** Bietanol y Biodiesel.

- **Hydroelectric Energy;**



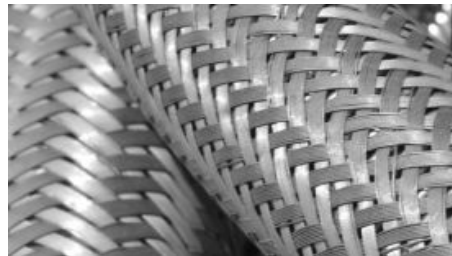
Nationwide legislation

3. New A.P. (2008-2012) from de Strategy of Energy Saving and Efficiency of Spain (E4)

-It will generate a saving of 87.9 million tonnes of oil equivalent (equivalent to 60% of primary energy consumption in Spain during 2006)

-It will enable a reduction in CO2 emissions to the atmosphere in 238 million tons

It concentrates its efforts in 7 sectors (Industry, Transport, Construction, Utilities, residential and office equipment, agriculture, and energy conversion) and specific measures for each



Estrategic objectives:

- Recognize savings in energy efficiency as an instrument of economic growth and social welfare.
- Provide suitable conditions in society for the development of energy efficiency and savings in all national strategies.
- Promote the competence in the market under the guiding principle of saving and energy efficiency.
- Consolidate Spain's position at the forefront of saving and energy efficiency.

Nationwide legislation

4. Sustainable Traffic:

-The **EC-Directive 1999/94**, (published in the Official Journal of the European Communities on 2000 January 18th), seeks information on fuel consumption and CO2 emissions from new cars, so that prospective buyers consider the purchase of more energy efficient cars.

“**Real Decreto 837/2002**” of August 2th. incorporates the Energy Labeling Guidelines into Spanish law.

LAW 34/2007, Air quality and atmospheric protection

Tax based on CO2 emissions

The Ministry of Environment has published a “**Draft of the Spanish Strategy for Sustainable Mobility**”

As a measure to support the objectives of the Directive and the “Real Decreto”, IDEA (Diversification and Saving Energy Institute) has developed a database in which people can get detailed and comparative information on fuel consumption and characteristics of new cars sold in Spain.



Aids

5. Aids:

1. - IDEA (Diversification and Saving Energy Institute)

IDEA programs to aid the financing of strategic projects of investment in energy efficiency and savings.

Budget Call 2008: 60 ME

2. - EREN. (Regional Authority for Energy of "Castilla y Leon").

Energy Saving and Efficiency:

- Subsidies to investments for Energy Saving and Energy Efficiency Improvement in the corporate sector
- Grants for conducting energy audits, technical feasibility studies, Energy, Energy Diagnostic and technical and economic feasibility studies.
- Subsidies to investments in improving the thermal envelope of existing buildings and to improve the energy rating of new buildings.
- Grants to support investments for energy saving and improved energy efficiency in the transportation sector.
- Subsidies to investments in energy saving and improvement of energy efficiency in facilities belonging to local bodies, public universities, public bodies and legal persons.

Aids

Aids:

EREN. (Regional Authority for Energy of "Castilla y León").

Renewable Energy :

- Actions-Grants for Solar Thermal, Solar Photovoltaic Energy not connected to the grid and Photovoltaic Energy Wind-not connected to the grid under the Solar Plan of "Castilla y León".

-ADE. Economic Development Agency.

Focused on companies, different lines of action, funding of up to 50%.



EMS

6. EMS;

There is an Energy Management System requirements of which are governed according to the standard developed by [AENOR UNE 216301](#). The new quality label is competent to certify the energy uses of all types of industries and companies regardless of the sector they belong or their turnover.

It provides organizations, regardless of their industry or size, a tool that facilitates the reduction of energy consumption, costs and associated funding as a result, emissions of greenhouse gases. It is a system of continuous improvement in the quality of energy use

In Spain has been a pilot in the Factory "El Alto", of "Cementos Portland", a cement company.



Features in Spain

- Spain is the second largest producer of wind energy in the world after Germany and ahead of the United States.
- Renewable energy created 180,000 jobs in Spain and of these 96,000 were in the wind sector.
- Spain has begun to produce 30% of the electricity consumed in the country from renewables.
- The drop in electricity demand by the economic crisis brings up the stakes for renewable energy and put Spain in the path of the target of 40 % green power by 2020 set by the European Union.
- The Wind Business Association said that in 2008 windmills avoided fuel imports by 1200 million, generated 40,000 jobs and prevent the emission of 20 million tons of CO₂, 5 % of Spanish emissions.
- Spain is the country with the biggest photovoltaic solar energy grew in 2008