



ACTIVATION PLAN IN PUBLIC BUILDINGS THROUGH ESCOS

ODYSSEE - MURE

**Monitoring of EU and National Energy
Efficiency Targets**

Madrid, June 21st 2010

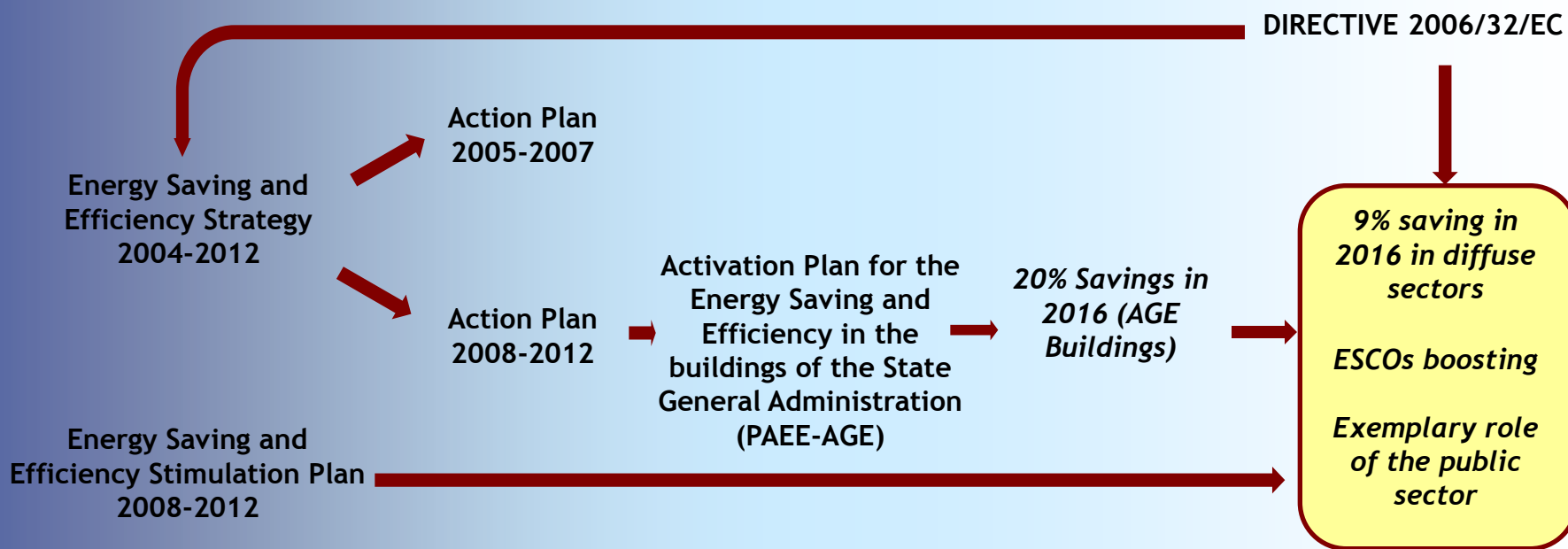
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Institute for Diversification and Energy Saving - IDAE



Reference Framework





Objective

1. Reduce the energy consumption by 20% in 2016 (PAEE-AGE objective) in 330 energy-consuming centres of the State General Administration
2. Revitalize the energy service market by increasing the offer and the demand of this business model, ensuring the growth and the feasibility of this market, as proposed in Directive 2006/32/EC.

The execution of this Energy Saving and Efficiency Action Plan will take place under the modality of ESCO energy service agreements.



LANDMARKS

LANDMARK I - Choice of ECC energy-consuming centres

LANDMARK II - Energy diagnosis and proposal of energy efficiency measures

LANDMARK III - Public-private partnership contract

LANDMARK IV - Follow-up of the energy service agreement



LANDMARK I

Criteria for choosing the 330 ECCs

Energy-Consuming Centre (ECC):

- Building or group of buildings that make up an action unit in terms of the execution of an energy service agreement.
- Surface > 30,000 m²
- Energy billing + maintenance of energy consuming installations > €400,000 /year.
(The buildings meeting the two requirements will be given priority, and so will in second place those whose consumption is higher than the stated figure).
- Freehold of the State General Administration or its Bodies and dependent societies: Ministries, Public Bodies, societies as stated in section 166.1, letters c) and d) in Law 33/2003, dated 3rd November, on the Estate of the Public Administrations, as well as State Public Foundations.



LANDMARK I

Criteria for choosing the 330 ECCs

Non-eligible buildings:

- Hired ones;
- Located abroad;
- Provisional ones with an envisage usage term ≤ 5 years;
- Its comprehensive refurbishing is envisaged in a given term ≤ 3 years;
- Its sale is envisaged in a term < 5 years.



LANDMARK I

IDAE's counselling in the choice of the 330 ECCs

- IDAE-Ministry meetings to counsel on the choice of the ECCs.
- Drafting of a ECC list of candidates on the part of each Ministry.
- It is preferable to have a large list initially, with ECC candidates for all three phases.
- Information to be provided to IDAE by the Ministry:
- Identification of ECCs
 - Number of buildings and ECC surface ($S > 30,000 \text{ m}^2$)
 - Billing: by energy sources + maintenance agreements for energy consuming installations (Billing $> \text{€}400,000/\text{year}$)
 - Energy consumption by energy sources (bills)



LANDMARK I

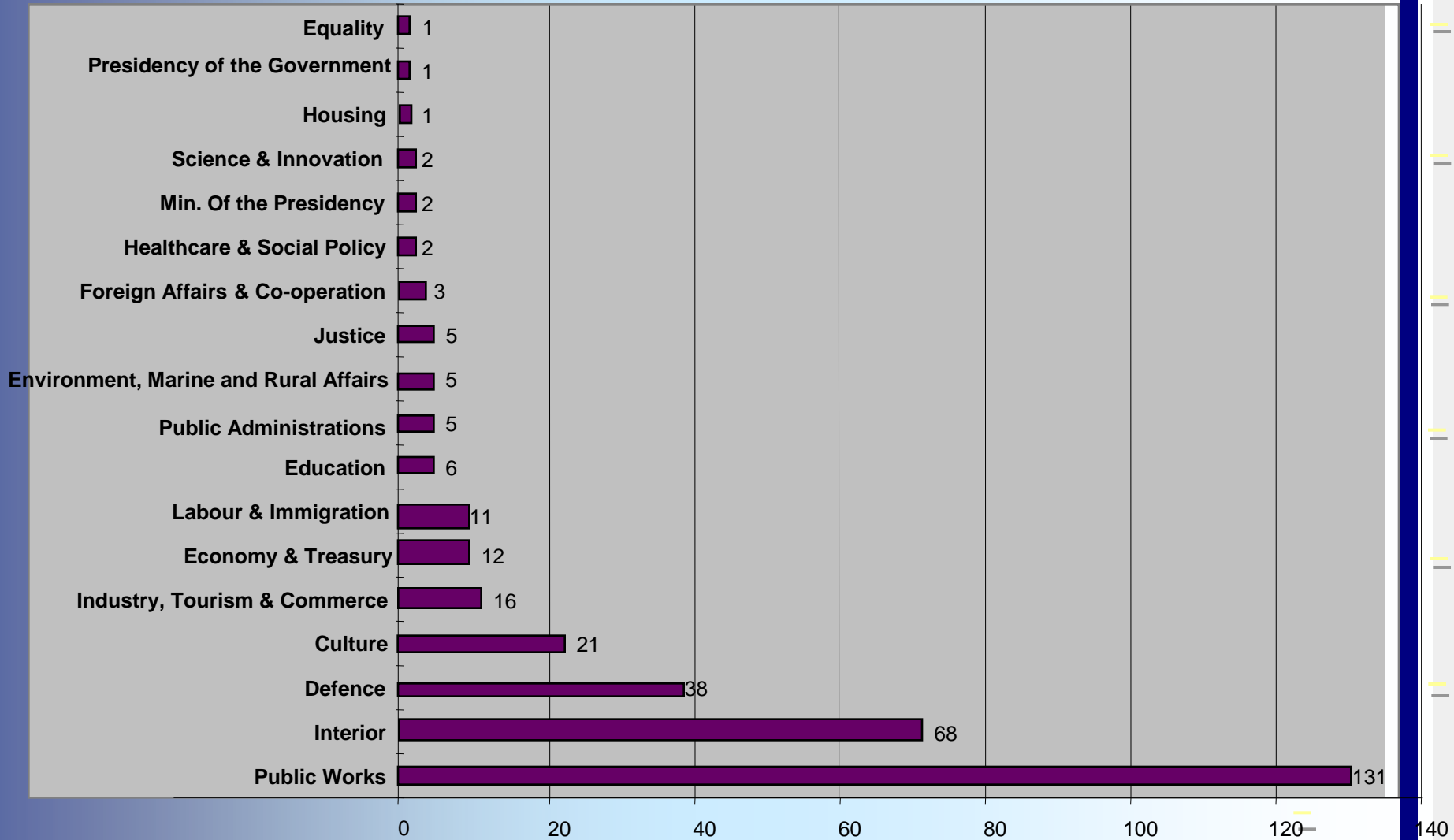
ECC distribution by Ministry

CHART I – CONSUMPTION CENTRES	PHASE 1 26/4/10	PHASE 2 26/6/10	PHASE 3 26/8/10	TOTAL
Ministry of Labour and Immigration	3	4	4	11
Ministry of Public Works	37	47	47	131
Ministry of Culture	6	8	7	21
Ministry of Economy and the Treasury	3	4	5	12
Ministry of the Interior	19	24	25	68
Ministry of Housing	1	0	0	1
Ministry of Industry, Tourism and Commerce	4	6	6	16
Ministry of Healthcare and Social Policy	1	1	0	2
Ministry for Public Administrations	1	2	2	5
Ministry of Environment, Marine and Rural Affairs	1	2	2	5
Ministry of Education	2	2	2	6
Ministry of Justice	1	2	2	5
Ministry of the Presidency	1	1	0	2
Presidency of the Government	1	0	0	1
Ministry of Foreign Affairs and Co-operation	1	1	1	3
Ministry of the Defence	11	13	14	38
Ministry of Science and Innovation	1	1	0	2
Ministry of Equality	1	0	0	1
TOTAL FIGURES	95	118	117	330



LANDMARK I Energy-consumption centres by Ministry

Number of ECC





LANDMARK II

Energy diagnosis and proposal of measures on energy saving

- Energy-Consuming Centre:
 - Collection of technical-energy information for each ECC: energy bills, plans, technical documentation, etc.) on the part of every person in charge of the ECC, in compliance with IDAE's outline.

- On the part of IDAE:
 - Visits to the ECC to carry out an inventory and data-collection to draft the energy diagnosis report.
 - Preliminary approach on energy saving and efficiency measures .

- Jointly ECC/IDAE:
 - Preliminary approach on energy saving and efficiency measures that may enable to meet the energy saving objectives.




LANDMARK II

- Classification of energy saving and efficiency measures:
 - Measures to hire energy supply
 - Measures to cut back the demand of energy for heating and cooling through the improvement of the thermal casing
 - Measures to improve the energy performance of thermal installations (heating, cooling and DHW)
 - Measures to improve the energy performance of both indoor and outdoor installations
 - Measures to improve the energy performance of other energy consuming installations
 - Measures to exploit renewable energies (solar thermal, biomass, geothermal energy, etc.
 - Measures to reuse residual energy
 - Measures to introduce high-efficiency energy heat, cold and electric power generation systems (co-generation)
 - Energy and maintenance management measures



LANDMARK III

Energy Services Agreement. Public - Private collaboration agreement

 Energy Services Agreement: an agreement signed with an ESCO to achieve a global, comprehensive action.

Features:

- Energy supply.
- Energy management.
- Maintenance agreements for energy-consuming installations.
- Implementation of energy saving and efficiency measures and exploitation of renewable and residual energy sources.

Length of the agreement: for as long as necessary to recover the investments made by the ESCO.

Payment of services: based, either partially or totally, on the economic saving achieved with the cutback in energy consumption.



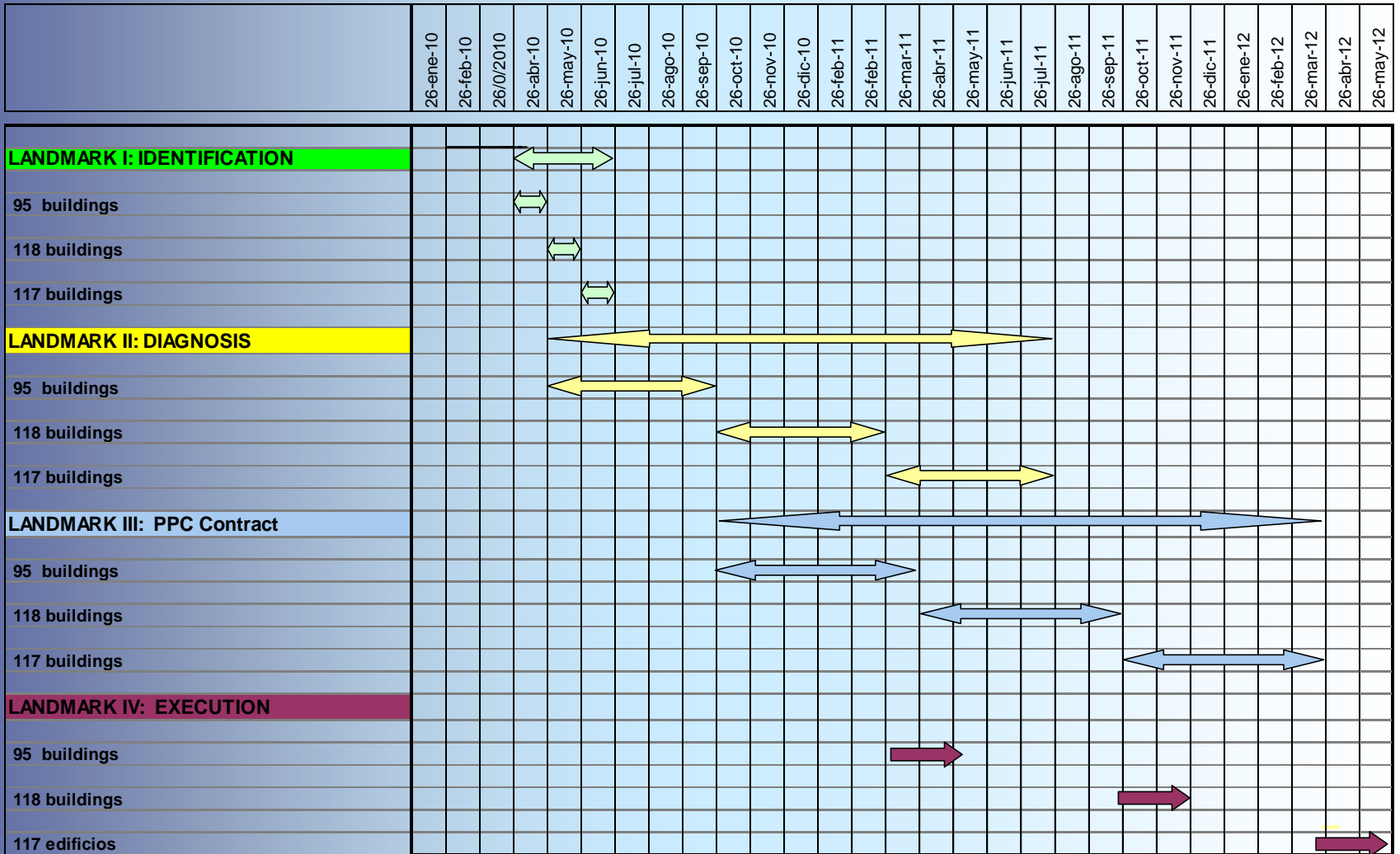
LANDMARK IV

Survey of the Energy Services Agreement

- Survey of the execution of the energy service agreements
- Survey of the results of the exploitation phase



AGENDA





Co-ordination of the Plan's execution

- **Co-ordination of the Plan:** Commission of Under-Secretaries and Secretaries of State.
- **In charge of the survey of the Plan:** Secretariat of State for Energy.
- The person in charge of the survey of the Plan is to draft, in joint collaboration with the IDAE.
 - A report with the list of the energy-consuming centres chosen by every Ministry.
 - A quarterly report on the situation of the Plan, stating the assessment and follow-up of the measures adopted by the various departments in compliance with the PAEE-AGE for 2007.

both to be submitted to the Commission of Under-Secretaries and Secretaries of State.



Training



PAEE - AGE

Plan de Ahorro y Eficiencia Energética en los edificios de la Administración General del Estado



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Cursos on-line 2010

1. INTRODUCCIÓN AL PLAN DE AHORRO Y EFICIENCIA ENERGÉTICA EN LOS EDIFICIOS DE LA AGE
2. CONTABILIZACIÓN ENERGÉTICA
3. CUMPLIMENTACIÓN DE CUESTIONARIOS DE PREDIAGNÓSTICO ENERGÉTICO
4. GESTIÓN ENERGÉTICA DE INSTALACIONES CONSUMIDORAS DE ENERGÍA EN EDIFICIOS
5. MEDIDAS DE AHORRO ENERGÉTICO EN ILUMINACIÓN INTERIOR DE EDIFICIOS
6. REALIZACIÓN Y SEGUIMIENTO DE PLANES DE AHORRO ENERGÉTICO EN EDIFICIOS
7. CONTRATACIÓN DE EMPRESAS DE SERVICIOS ENERGÉTICOS (ESEs)
8. CÓMO AHORRAR ENERGÍA EN EL PUESTO DE TRABAJO

¿QUE CURSOS PUEDO REALIZAR?

- Soy Gestor Energético
- Soy Responsable Energético
- Soy Usuario de la Administración



Acceso al Aula de Formación

Usuario

Contraseña

Entrar

[¿Olvidó su clave?](#)

ACCESIBILIDAD

alto contraste

+A

-A



[# Declaración accesibilidad](#)

Availability of the courses: 19 April 2010



Financing and economic aid line to ESCOs

- The Government will approve:
 - Financing instruments that investment projects in energy saving and efficiency could resort to, and particularly, investments derived from execution of this Plan through the ESCOs.
 - An economic support line within the PAEE aimed at the firms taking part in the competitive dialogue, in terms of a premium or a compensation for the ESCOs taking part in the competitive dialogue, as established in section 163 of the Public Sector Contract Law.
 - An economic energy support line within the PAEE, envisaged for the investments in energy saving and efficiency measures to take place in compliance with the PPP contract to be signed.



Financing line and economic support to ESCOs

- Support line to investments in energy saving and efficiency measures
 - (15% aid): M€ 52.5
 - M€ 40 budget for 2010 + M€ 12.5 budget for 2011
 - Certificate of acceptance, reception or delivery of installations, in compliance with the relevant technician of the Administration, as titleholder of the building.

- Support line to compensate ESCOs for taking part in the competitive dialogue: M€ 4.2 (budget for 2010).
 - ECC with a surface equal or over 50,000 m²: €5,000
 - ECC with a surface over 50,000 m² and under 70,000 m² : €6,000
 - ECC with a surface equal or over 70,000 m²: €7,000

- Approved by IDAE's Board of Directors. The decision will be further published in the *BOE* (Spanish Official Gazette).



Information on the energy services on the IDAE website

<http://www.idae.es/index.php/mod.pags/mem.detalle/idpag.51/relcategoria.2595/relmenu.143>

The screenshot shows the IDAE website interface. At the top, there are logos for the Spanish Government, the Ministry of Industry, Tourism and Commerce, IDAE (Instituto para la Diversificación y Ahorro de la Energía), and 'ahorra energía'. Below the logos is a search bar and navigation links for 'Español', 'Catalá', 'Euskara', 'Galego', 'English', 'Contactar', and 'Mapa Web'. The main content area is titled 'Servicios energéticos: Modelo de Contrato de Servicios Energéticos para Edificios Públicos'. It includes a breadcrumb trail: 'Inicio > Áreas de actividad > Ahorro y Eficiencia Energética > Servicios energéticos'. The text explains that energy efficiency is a valid strategy to solve the problem of scarce public funds and can contribute to reducing energy and climate issues. It mentions that in the public sector, there is a significant potential for energy savings, but it is difficult to achieve due to administrative or legal barriers. A photograph of a modern building with large glass windows is shown. The text continues to discuss the challenges of investing in energy-consuming technologies versus maintenance and energy supply for existing equipment.



THANK YOU FOR YOUR
ATTENTION

