



MINISTRY  
OF INDUSTRY, ENERGY AND  
TOURISM

STATE SECRETARIAT FOR ENERGY

**REPORT TO THE COMMISSION ON THE TRANSPOSITION OF ARTICLE 5(5)  
AND (6) OF DIRECTIVE 2012/27/EU**

***ENERGY INVENTORY OF CENTRAL GOVERNMENT BUILDINGS IN SPAIN AND  
ALTERNATIVE APPROACH***

**SPAIN**

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## 1. PURPOSE

Article 5(5) of Directive 2012/27/EU of 25 October 2012 on energy efficiency (Exemplary role of public bodies' buildings) stipulates that Member States must **establish and make publicly available by 31 December 2013 an energy inventory of central government buildings.**

On the basis of that inventory, 3% of the floor area of those buildings must be renovated each year from 1 January 2014 to meet at least the minimum energy performance requirements laid down pursuant to Article 4 of Directive 2010/31/EU.

Spain hereby submits its energy inventory of central government buildings in accordance with Article 5(5) of Directive 2012/27/EU and notifies the alternative approach that may be adopted by Spain in order to comply with that Article in accordance with Article 5(6).

## 2. INVENTORY OF CENTRAL GOVERNMENT BUILDINGS

In accordance with Article 5(5), an inventory of heated and/or cooled buildings that are occupied and owned by the central government and have a floor area of more than 500 m<sup>2</sup> was established and made publicly available before 31 December 2013.

The characteristics of that inventory are described below.



## 2.1. SCOPE OF THE INVENTORY OF BUILDINGS

The scope of the inventory is laid down in Article 5(5) of the Directive as follows:

For the purposes of paragraph 1, by 31 December 2013, Member States shall establish and make publicly available an inventory of heated and/or cooled central government buildings with a total useful floor area over 500 m<sup>2</sup> and, as of 9 July 2015, over 250 m<sup>2</sup>, excluding buildings exempted on the basis of paragraph 2. The inventory shall contain the following data:

- (a) the floor area in m<sup>2</sup>; and
- (b) the energy performance of each building or relevant energy data.

Accordingly, the following considerations were taken into account when drawing up the inventory:

- (a) In accordance with the definition given in Article 2(9) of the Directive, 'central government' was deemed to encompass all public bodies identified as state authorities (*Administración General del Estado* — AGE) in Law No 6/1997 of 14 April 1997 on the organisation and operation of the state authorities.

The criteria set out in the interpretative notes produced by the Joint Meeting Energy Demand Management Committee ('Energy Services' Formation — Directive 2006/32/EC) and Committee on Cogeneration (Directive 2004/8/EC) and Annex 4 to Directive 2004/18/EC were also followed.

- (b) The inventory covers only heated and/or cooled buildings with a total floor area of more than 500 m<sup>2</sup>. The inventory of buildings with a total floor area of more than 250 m<sup>2</sup> will be carried out before 9 July 2015, as specified in the Directive.
- (c) The buildings selected for the inventory are owned by the central government, were occupied at the time the inventory took place and have a heating and/or cooling system.
- (d) Article 5(2) of the Directive gives the option of excluding from the inventory 'buildings officially protected as part of a designated environment, or because of their special architectural or historical merit, in so far as compliance with certain minimum energy performance requirements would unacceptably alter their character or appearance' (Article 5(2) of Directive 2012/27/EU).

Accordingly, the inventory does not include buildings which have been granted some level of protection under the various town planning rules adopted by the local authorities and the authorities responsible for architectural or historical heritage in the Autonomous Communities and at central government level.



However, although such protected buildings have not been included in this inventory, an energy inventory was also performed on those buildings following the same methodology, and they may be targeted by specific action programmes to improve energy efficiency while taking into account their special architectural features.

- (e) In accordance with the Directive, the inventory also excludes 'buildings owned by the armed forces or central government and serving national defence purposes, apart from single living quarters or office buildings for the armed forces and other staff employed by national defence authorities' (Article 5(2) of Directive 2012/27/EU).

Nevertheless, the Ministry of Defence has developed its own property and energy management system, known as SINFRADEF, which contains information on consumption and energy efficiency for all its buildings.

Thus, although security considerations have meant that no information has been included in this inventory for the Ministry of Defence, there is a system in place for its buildings with similar objectives to those laid down in Article 5 of the Directive.

For these purposes, buildings belonging to the Directorate-General for the Civil Guard are also considered to be buildings serving national defence purposes, which is why they have not been included in this inventory, although an energy inventory was also performed on those buildings following the same methodology, and they may be targeted by specific action programmes to improve energy efficiency while taking into account their specific characteristics.

- (f) Lastly, the inventory does not include 'buildings used as places of worship and for religious activities' (Article 5(2) of Directive 2012/27/EU), which are also exempt from this obligation under the Directive. However, no such buildings were identified among the building stock owned by the central government.

## 2.2. PERFORMING THE INVENTORY

In order to perform the inventory, the Institute for Energy Saving and Diversification (IDAE), a body attached to the Ministry of Industry, Energy and Tourism through the State Secretariat for Energy, designed and developed an **IT platform for energy and property management (Plataforma Informática de Gestión Energética y Patrimonial — PIGEP)**. Its main aim is to centralise and process property and energy data for buildings belonging to central government.

The inventory was performed in 2013, in cooperation with all of the ministries concerned, using the PIGEP software. Buildings were selected and energy and property data submitted for inclusion by the ministries through energy managers in every ministry and energy officers in every building, who had been specifically appointed by each ministry to comply with the Directive.

As the PIGEP software will remain operational, the energy officers for each building will be able to keep the inventory up to date by adding or removing buildings or energy consumption.



### 2.3. DESCRIPTION OF THE INVENTORY

The inventory contains a list of buildings selected in accordance with the parameters outlined in section 2.1 hereof. They have been grouped by ministry (with the exception of the Ministry of Defence, for the reasons given in section 2.1(e)) in the following order:

- Ministry of Agriculture, Food and Environment (MAGRAMA)
- Ministry of Foreign Affairs and Cooperation (MAEC)
- Ministry of Economy and Competition (MINECO)
- Ministry of Education, Culture and Sport (MECD)
- Ministry of Employment and Social Security (MEYSS)
- Ministry of Internal Development (MFOM)
- Ministry of Finance and Public Administration (MINHAP)
- Ministry of Industry, Energy and Tourism (MINETUR)
- Ministry of the Interior (MIR)
- Ministry of Justice (MJUSTICIA)
- Ministry of the Office of Prime Minister (MPR)
- Ministry of Health, Social Services and Equality (MSSSI)

The energy inventory includes the following data:

- **PaaeAge code:** identifies each building by means of a code in the PIGEP software
- **Name:** name of the building
- **Type of road:** whether it is a street, ringroad, avenue, etc.
- **Road name:** street name
- **Number:** street number of the building
- **Population**
- **Province**
- **Floor area:** total floor area of the building
- **Energy consumption:** electricity, natural gas, diesel oil, propane and total energy consumption in 2012 in kWh
- **Energy rating – overall CO<sub>2</sub> emissions:** energy rating of the building calculated in accordance with Royal Decree 235/2013 of 5 April 2013 approving the basic procedure for certification of the energy efficiency of buildings. The energy efficiency of the building is indicated by means of a letter, on a scale ranging from A to G, where A is the most efficient and G is the least efficient (°).

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\* The inventory contains the energy ratings as at 31 December 2013.



Accordingly, 1 763 buildings were identified that meet the parameters laid down in section 2.1, with a floor area of more than 11 million m<sup>2</sup>. Their main characteristics are shown in the following table:

Ministry	No of buildings	Floor area (m <sup>2</sup> )	Electricity (kWh)	Natural gas (kWh)	Diesel oil (kWh)	Propane (kWh)	TOTAL (kWh)
MAGRAMA	13	114 206	4 680 352	460 815	1 077 087	0	6 218 254
MAEC	3	6 743	218 355	32 882	216 300	0	467 537
MINECO	142	869 370	128 698 258	21 552 446	12 970 351	97 272	163 318 327
MECD	56	520 668	19 392 654	3 348 261	1 440 196	0	24 181 111
MEYSS	585	1 887 975	115 959 445	10 524 258	8 485 431	29 101	134 998 235
MFOM	55	199 938	11 208 489	343 369	3 254 550	0	14 806 408
MINHAP	373	1 460 122	80 328 605	10 253 752	14 739 506	19 542	105 341 433
MINETUR	7	318 340	23 949 789	3 596 749	1 021 332	0	28 567 870
MIR	486	5 358 938	302 594 535	94 311 520	155 049 195	13 022 243	564 977 514
MJUSTICIA	4	20 889	4 861 131	59 379	0	0	4 920 510
MPR	4	116 866	17 644 938	220 326	1 386 730	0	19 251 994
MSSSI	35	326 190	23 475 895	3 488 741	16 635 151	353 511	43 953 298
<b>TOTAL</b>	<b>1 763</b>	<b>11 200 244</b>	<b>733 012 446</b>	<b>148 192 498</b>	<b>216 275 829</b>	<b>13 521 669</b>	<b>1 111 002 491</b>

The inventory can be found on the website of the Ministry of Industry, Energy and Tourism:

<http://www.minetur.gob.es/energia/desarrollo/EficienciaEnergetica/directiva2012/Paginas/directiva-2012-27UE.aspx>

### 3. ALTERNATIVE APPROACH

Member States are required to inform the Commission, by 31 December 2013, of the alternative measures that they plan to adopt in accordance with Article 5(1) to (5). According to paragraph 6, such cost-effective measures may include 'deep renovations and measures for behavioural change of occupants, to achieve, by 2020, an amount of energy savings in eligible buildings owned and occupied by their central government that is at least equivalent to that required in paragraph 1, reported on an annual basis'.

Spain has undertaken to comply with the main approach set out in Article 5 of the Directive by renovating 3% of the total floor area of heated and/or cooled buildings owned and occupied by its central government each year to meet at least the minimum energy performance requirements that it has set pursuant to Article 4 of Directive 2010/31/EU.

However, the Directive allows Member States to adopt an alternative approach in accordance with Article 5(6), provided that it achieves an improvement in the energy performance of the buildings that is equivalent to the first option.



As stated in one of the interpretative notes issued in respect of this Directive, one option is to count energy savings brought about by changes in consumers' behaviour as a result of training and awareness-raising measures.

In this respect, the Ministry of Industry, Energy and Tourism will be able to promote training and awareness-raising initiatives on the rational use of energy within central government through the Institute for Energy Saving and Diversity.

An indicative and non-exhaustive list of some of these initiatives is provided below:

- an on-line training platform on energy efficiency and savings for state authorities (<http://formacion.paeec-ae.es/>);
- development of training and awareness-raising courses for energy managers of public buildings and public-sector workers, with recommendations for saving energy at work;
- classroom-based training courses on energy efficiency and savings for energy managers and public-sector workers;
- publication of guidelines on energy efficiency and saving measures applicable to public buildings;
- specific legislation for public buildings on operating conditions and the operation of energy-using equipment in public buildings;
- awareness-raising campaigns designed to promote energy saving among public-sector workers.

Spain thus reserves the right to use this alternative approach to supplement the measures being taken to achieve the renovation of 3% of its building stock each year.

Given that Spain has set up an IT platform for energy and property management (PIGEP) which makes it possible to monitor the energy consumption and energy rating of central government buildings on an annual basis, this will be the tool used to measure the equivalent savings achieved by adopting the alternative approach, either in whole or in part.

Similarly, depending on the progress made towards complying with the energy targets set in Article 5, obligations may be met during the period 2014–20, at the discretion of the Spanish Government, through annual contributions to the National Energy Efficiency Fund of an amount equivalent to the investments required to meet those obligations, in accordance with Article 20(5) of the Directive.

#### **4. CONCLUSIONS**

In accordance with the requirements laid down in Article 5(5) of Directive 2012/27/EU of 25 October 2012 on energy efficiency (Exemplary role of public bodies' buildings), an energy inventory of heated and/or cooled buildings that are occupied and owned by the central government and have a total floor area of more than 500 m<sup>2</sup> was drawn up and made publicly available before 31 December 2013 on the website of the Ministry of Industry, Energy and Tourism. The inventory of buildings with a total floor area of more than 250 m<sup>2</sup> will be carried out before 9 July 2015, as specified in the Directive.

On the basis of the inventory, 3% of the total floor area will be renovated each year from 1 January 2014, so that the renovated floor area meets at least the minimum energy performance requirements laid down pursuant to Article 4 of Directive 2010/31/EU.





Furthermore, in accordance with Article 5(6), we hereby notify the alternative approach that may be adopted by Spain to comply with that article, including, where appropriate, other cost-effective measures, such as deep renovations and measures designed to change the behaviour of the occupants.

Similarly, if it is deemed necessary in order to meet the targets set, it is possible to make use of the National Energy Efficiency Fund, in accordance with Article 20(5), by contributing an amount equivalent to the investments required to meet the obligations imposed.