



MINISTRY OF
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DEPARTMENTAL SECRETARIAT

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YOUR REF:

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DATE: 5 NOVEMBER 2014

SUBJECT: Pilot Project 6424/14/MOVE. Notification of information under Article 9 of Directive 2010/31/EU. Energy Performance of Buildings.

RECIPIENT: DIRECTOR GENERAL FOR THE COORDINATION OF EUROPEAN UNION COMMON POLICIES AND GENERAL AFFAIRS

With regard to the above matter, please find enclosed a report drawn up by the Directorate General of Architecture, Housing and Land in response to the European Commission's information request under the framework of this pilot project.

DEPARTMENTAL SECRETARY

[stamp: Ministry of Public Works. Departmental Secretary]

[signature]

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Report on progress with the NATIONAL PLAN FOR INCREASING THE NUMBER OF NEARLY ZERO-ENERGY BUILDINGS IN SPAIN

30 July 2014

1. Background

Article 9(1) of Directive 2010/31/EU regulating **nearly zero-energy buildings** obliges Member States to ensure that by 31 December 2020 all new buildings are nearly zero-energy buildings. This date is brought forward to 31 December 2018 for new buildings occupied and owned by public authorities.

In order to achieve this objective, it is also established that Member States must draw up national plans for increasing the number of nearly zero-energy buildings. These national plans may include targets differentiated according to the category of building.

Although the Directive does not explicitly establish a time limit for complying with this obligation, the Commission reported at the end of 2013 that the **deadline for submitting the said Plan was 4 March 2014**.

Failure to submit a Plan by the deadline **led to the opening of Pilot project 6224/14/ENER** notifying of non-compliance with the obligation, which reported that this amounted to an infringement of Article 9, making it impossible for the Commission to evaluate the Plan as it was bound to do under the terms of Article 9(4) and also called on the Spanish authorities to submit a Plan **within 10 weeks of receiving the notification**.

The plan should have been submitted by the Ministry of Foreign Affairs and Cooperation (MAEC) for forwarding to the Commission before 9 June 2014.

2. Essential contents of the Plan

The Plan simply reports on the progress that has been made in terms of energy performance regulations since approval of the Directive (it basically reports on the update of the Energy Saving Basic Document (Documento Básico de Ahorro de Energía – DB-HE) approved in September 2013), and on plans, programmes and other activities carried out by the government with a view to improving the energy performance of buildings (information that was taken word for word from the renovation strategy referred to in Article 4 of Directive 2012/27/EU, recently forwarded to Brussels).

The Plan is purely for information purposes and does not establish binding commitments over and above those directly arising out of the application of the Directive, such as the official definition of a nearly zero-energy building prior to 2018, the date when it is bound to be applied to public authority buildings. The attached presentation explains the specific contents of the Plan.



MINISTRY OF
PUBLIC WORKS

DIRECTORATE GENERAL OF
ARCHITECTURE, HOUSING AND
LAND

NATIONAL PLAN FOR INCREASING THE NUMBER OF NEARLY ZERO-ENERGY BUILDINGS IN SPAIN

Report by the Spanish State under Article 9 of Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings.



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NOTE. The contents reflect the template drawn up by the Commission, which is referred to in Commission Communication COM (2013) 483 final, although the Plan amalgamates sections 3 and 4 because the intermediate targets do not establish any differences with regard to public or private buildings. Sections 5, 6 and 7 were also amalgamated because the measures in the strategy are in many cases common to new or existing buildings and to public or private buildings.



INTRODUCTION

Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings contains numerous measures designed to reduce the energy consumption of buildings in the European Union, including those relating to the implementation of nearly zero-energy buildings.

Article 2 of the Directive defines a nearly zero-energy building as 'a building that has a very high energy performance, as determined in accordance with Annex I. The nearly zero or very low amount of energy required should be covered to a very significant extent by energy from renewable sources, including energy from renewable sources produced on-site or nearby'.

Article 9 regulates nearly zero-energy buildings and paragraph 1 obliges Member States to ensure that by 31 December 2020, all new buildings are nearly zero-energy buildings and brings this date forward to 31 December 2018 for new buildings occupied and owned by public authorities. In order to achieve this target, it also establishes that Member States must draw up national plans for increasing the number of nearly zero-energy buildings. These national plans may include targets differentiated according to the category of building.

Paragraph 2 of the same Article also establishes that Member States must furthermore, following the leading example of the public sector, develop policies and take measures such as the setting of targets in order to stimulate the transformation of buildings that are refurbished into nearly zero-energy buildings, and inform the Commission thereof in their national plans.

The content to be included in the national plans is established in Article 9(3), which states that they must include:

- a. the Member State's detailed application in practice of the definition of nearly zero-energy buildings, reflecting their national, regional or local conditions, and including a numerical indicator of primary energy use expressed in kWh/m² per year. Primary energy factors used for the determination of the primary energy use may be based on national or regional yearly average values and may take into account relevant European standards;
- b. intermediate targets for improving the energy performance of new buildings by 2015, with a view to preparing the implementation of article 9(1);
- c. information on the financial or other policies and measures adopted in the context of Article 9(1) and (2) for the promotion of nearly zero-energy buildings, including details of national requirements and measures concerning the use of energy from renewable sources in new buildings and existing buildings undergoing major renovation in the context of Article 13(4) of Directive 2009/28/EC and Articles 6 and 7 of the aforementioned Directive.

Article 9(4) and (5) of the Directive on the energy performance of buildings refer to the evaluation of these national plans by the Commission, notably the adequacy of the measures envisaged by the Member States in relation to the objectives of this Directive and the publication by the Commission of a report on the progress of Member States in increasing the number of nearly zero-energy buildings. On the basis of that report the Commission must develop an action plan and, if necessary, propose measures to increase the number of those buildings and encourage best practices as regards the cost-effective transformation of existing buildings into nearly zero-energy buildings.



Lastly, Article 9(6) states that Member States may decide not to apply the requirements set out in points (a) and (b) of paragraph 1 in specific and justifiable cases where the cost-benefit analysis over the economic lifecycle of the building in question is negative. Member States must inform the Commission thereof.

The plan contained in this report refers to the matters covered by Article 9 of the Directive, beginning with an estimation of the current status of Spanish building stock, then going on to cover the definition of nearly zero-energy buildings in the Spanish context and lastly setting out the long-term strategy for the implementation of nearly zero-energy buildings, setting intermediate targets and the financial policies and measures concerned with nearly zero-energy buildings.

1. CURRENT STATUS OF THE HOUSING STOCK

1.1 RESIDENTIAL SECTOR

In Spain there are 25 208 623 homes according to the 2011 census, which states that 71.5 % are main residences (17 528 518 homes), 14.8 % are second homes (3 616 895) and 13.8 % are empty houses and other types (3 374 291).

1.1.1 STRUCTURE OF THE HOUSING STOCK

The different statistics given below can be used to characterise the structure of the Spanish housing stock, breaking it down according to:

- **Year of construction:** differentiating five historic periods (<1940; 1941-1960; 1961-1980; 1981-2007; 2008-2011). These periods are significant due to technical or regulatory changes (see also paragraph 1.3):
 - o prior to 1940, traditional building,
 - o between 1940 and 1960, first cycle of urban expansion with types of blocks,
 - o between 1960 and 1980, second wave of urban expansion with changes in construction systems,
 - o between 1980 and 2007, new technical changes and period of application of NBE-CT/79 (Normas Básicas de la Edificación. Condiciones Térmicas – Basic Building Standards. Thermal Conditions), which required a minimal level of thermal insulation in the building envelope,
 - o from 2008, implementation of the Technical Building Code (CTE, Código Técnico de la Edificación), which lays down energy performance conditions for buildings;
- **Type of building:** differentiating buildings into single-family or multi-family units;
- **Number of floors in the building:** differentiating between buildings with fewer than three floors and other buildings.

Distribution of housing: Figure 1 shows the distribution of housing based on the above breakdown criteria.



	Unifamiliares		Plurifamiliares		Sin datos	TOTAL	Nº de viviendas en el edificio	Nº de plantas sobre rasante
	1 - 3	≥ 4	1 - 3	≥ 4				
< 1940	1.305.885	7.304	423.780	650.418			A	- G
1941 - 1960	1.042.011	2.656	492.944	1.127.383			B	- H
1961 - 1980	1.815.875	3.906	1.121.936	5.042.101			C	- E - I
1981 - 2007	3.139.296	10.215	1.913.055	4.498.101			D	- F - J
2008 - 2011	380.834	1.290	235.117	704.897				
Sin datos			170.727		518.181			
TOTAL						25.208.612		

Año de construcción

Clusters
22.311.240
(88,5%)

Key

Spanish	English
Unifamiliares	Single-family
Plurifamiliares	Multi-family
Sin datos	No data
No de viviendas en el edificio	No of homes in the building
No de plantas sobre rasante	No of floors above ground level
Año de construcción	Year of construction

Figure 1: Distribution of housing

Source: processed by Renovation Working Group (GTR) for the Ministry of Public Works based on the 2011 Census (National Statistical Institute (INE)).

Distribution of main residences: Figure 2 shows the distribution of main residences based on the above breakdown criteria.



	Unifamiliares		Plurifamiliares		Sin datos	TOTAL	Nº de viviendas en el edificio Nº de plantas sobre rasante
	1 - 3	≥ 4	1 - 3	≥ 4			
< 1940	680.683	3.687	272.852	489.329			A - G
1941 - 1960	624.646	1.457	346.055	889.611			B - H
1961 - 1980	1.156.215	2.388	781.206	4.483.755			C - E - I
1981 - 2007	2.236.882	7.774	1.312.285	3.444.532			D - F - J
2008 - 2011	233.647	660	122.404	438.446			
Sin datos			130.073		425.073		
TOTAL						18.083.664	

Clusters
16.099.148
(89%)

Key

Spanish	English
Unifamiliares	Single-family
Plurifamiliares	Multi-family
Sin datos	No data
No de viviendas en el edificio	No of homes in the building
No de plantas sobre rasante	No of floors above ground level
Año de construcción	Year of construction

Figure 2: Distribution of main residences

Source: processed by Renovation Working Group (GTR) for the Ministry of Public Works based on the 2011 Census (National Statistical Institute (INE)).

Distribution of the useful floor area of main residences: Figure 3 shows the distribution of main residences based on the above breakdown criteria.



	Unifamiliares		Plurifamiliares			Sin datos	TOTAL	Nº de viviendas en el edificio Nº de plantas sobre rasante
	1-3	≥ 4	1-3	≥ 4	Sin datos			
< 1940	78.244.487	382.885	27.386.051	39.515.220				A - G
1941 - 1960	66.176.212	145.390	31.878.165	70.877.908				B - H
1961 - 1980	129.065.721	230.015	76.296.155	371.590.554				C - E - I
1981 - 2007	378.346.703	719.359	132.672.875	299.812.496				D - F - J
2008 - 2011	29.700.186	57.913	12.642.154	36.188.247				
Sin datos			10.580.966		18.594.305	20.656.547		
TOTAL							1.731.729.562	

Clusters
1.542.567.369
(89,1%)

Key

Spanish	English
Unifamiliares	Single-family
Plurifamiliares	Multi-family
Sin datos	No data
No de viviendas en el edificio	No of homes in the building
No de plantas sobre rasante	No of floors above ground level
Año de construcción	Year of construction

Figure 3: Distribution of the useful floor area of main residences

Source: Processed by Renovation Working Group (GTR) for the Ministry of Public Works based on the 2011 Census (National Statistical Institute (INE)).

Distribution of main residences based on their state of preservation:

- **Poor state of preservation:** figure 4 shows the distribution of main residences with a poor state of preservation based on the above breakdown criteria.



	Unifamiliares		Plurifamiliares		Sin datos	TOTAL
	1 - 3	≥ 4	1 - 3	≥ 4		
< 1940	21.098	82	11.262	20.914		
1941 - 1960	9.569	7	7.850	15.254		
1961 - 1980	5.437	14	5.270	10.005		
1981 - 2007	2.642	0	1.657	4.270		
2008 - 2011	295	0	42	78		
Sin datos						
TOTAL						126.546

Año de construcción

Nº de viviendas en el edificio
 Nº de plantas sobre rasante
 A - G
 B - H
 C - E - I
 D - F - J
 Clústers
 106.916
 (84,5%)

Key

Spanish	English
Unifamiliares	Single-family
Plurifamiliares	Multi-family
Sin datos	No data
No de viviendas en el edificio	No of homes in the building
No de plantas sobre rasante	No of floors above ground level
Año de construcción	Year of construction

Figure 4: distribution of main residences with a poor state of preservation

Source: processed by Renovation Working Group (GTR) for the Ministry of Public Works based on the 2011 Census (National Statistical Institute (INE)).

- **Deficient state of preservation:** figure 5 shows the distribution of main residences with a deficient state of preservation based on the above breakdown criteria.



	Unifamiliares		Plurifamiliares		Sin datos	TOTAL	Nº de viviendas en el edificio Nº de plantas sobre rasante
	1 - 3	≥ 4	1 - 3	≥ 4			
< 1940	106.631	627	48.176	78.921			A - G
1941 - 1960	66.323	245	49.266	96.092			B - H
1961 - 1980	56.715	98	52.245	103.360			C - E - I
1981 - 2007	25.022	115	21.092	35.815			D - F - J
2008 - 2011	1.703	9	330	1.150			
Sin datos							
TOTAL						833.935	

Año de construcción

Clústers
732.216
(87,8%)

Key

Spanish	English
Unifamiliares	Single-family
Plurifamiliares	Multi-family
Sin datos	No data
No de viviendas en el edificio	No of homes in the building
No de plantas sobre rasante	No of floors above ground level
Año de construcción	Year of construction

Figure 5: distribution of main residences with a poor state of preservation.

Source: processed by Renovation Working Group (GTR) for the Ministry of Public Works based on the 2011 Census (National Statistical Institute (INE)).

Distribution of main residences with heating: Figure 6 shows the distribution of main residences with heating based on the above breakdown criteria.



	Unifamiliares		Plurifamiliares		Sin dats	TOTAL	Nº de viviendas en el edificio Nº de plantas sobre rasante
	1 - 3	≥ 4	1 - 3	≥ 4			
< 1940	538.772	3.236	226.318	430.613			A - G
1941 - 1960	492.852	1.222	283.589	781.860			B - H
1961 - 1980	924.347	1.896	630.968	3.950.334			C - E - I
1981 - 2007	1.943.533	7.097	1.083.598	3.120.483			D - F - J
2008 - 2011	205.741	617	102.311	402.380			
Sin dats			112.353		369.561		
TOTAL						15.613.681	

Año de construcción

**Clústers
16.099.148
(89%)**

Key

Spanish	English
Unifamiliares	Single-family
Plurifamiliares	Multi-family
Sin datos	No data
No de viviendas en el edificio	No of homes in the building
No de plantas sobre rasante	No of floors above ground level
Año de construcción	Year of construction

Figure 6: distribution of main residences with heating

Source: processed by Renovation Working Group (GTR) for the Ministry of Public Works based on the 2011 Census (National Statistical Institute (INE)).

1.1.2 DISTRIBUTION OF ENERGY CONSUMPTION IN HOUSING STOCK

The predominant consumption is for heating. The real energy consumption for heating out of the total of all main residences in Spain, distributed according to energy sources, was obtained from Ministry of Industry, Energy and Tourism (MINETUR)/Institute for Diversification and Energy Saving (IDAE) data (see Figure 7).

Type of use	Coal	Petroleum products			Gases	Renewables				Electrical energy	TOTAL
		LPG	Liquid fuels	TOTAL		Biomass	Solar	Geothermal	TOTAL		
	Ktoe	Ktoe	Ktoe	Ktoe	Ktoe	Ktoe	Ktoe	Ktoe	Ktoe	Ktoe	Ktoe
Heating	12	388	2 033	2 421	1 695	2 368	10	6	2 384	380	6 892
DHW	1	459	183	642	1 566	50	129	3	182	385	2 776
Cooking	2	185	-	185	399	26	-	-	26	479	1 091
Lighting	-	-	-	-	-	-	-	-	-	606	606
Air Conditioning	-	-	-	-	-	-	-	3	3	120	123
Electrical appliances	-	-	-	-	-	-	-	-	-	3 188	3 188
TOTAL	15	1 032	2 216	3 248	3 660	2 444	139	12	2 595	5 158	14 676



Figure 7. Final energy consumption in the domestic sector in Spain according to types of uses (2011).

Source: Institute for Diversification and Energy Saving (IDAE)

Figure 8 shows the distribution of this energy consumption (leaving aside energy consumption corresponding to coal, energy consumption corresponding to second homes and energy consumption for houses for which data were unavailable in the 2011 Census) according to type of house (single-family and multi-family), climate conditions and type of fuel.

DISTRIBUTION OF ENERGY USED FOR HEATING ACCORDING TO FUEL TYPE	Type of housing	
	Single-family	Multifamily
NORTH ATLANTIC AREA	MWh	MWh
TOTAL HEATING - PETROLEUM PRODUCTS	2 145 662	862 921
TOTAL HEATING - GAS	291 781	1 595 117
TOTAL HEATING - RENEWABLES	2 526 742	2 835
TOTAL HEATING - ELECTRICITY	137 152	539 250
TOTAL	5 101 336	3 000 123
CONTINENTAL AREA		
TOTAL HEATING - PETROLEUM PRODUCTS	8 145 127	8 950 298
TOTAL HEATING - GAS	2 601 256	7 221 319
TOTAL HEATING - RENEWABLES	10 806 596	4 427
TOTAL HEATING - ELECTRICITY	480 435	1 181 465
TOTAL	22 033 413	17 357 508
MEDITERRANEAN AREA		
TOTAL HEATING - PETROLEUM PRODUCTS	5 977 653	1 480 953
TOTAL HEATING - GAS	2 099 425	5 491 210
TOTAL HEATING - RENEWABLES	13 627 833	1 847
TOTAL HEATING - ELECTRICITY	594 419	1 392 030
TOTAL	22 299 335	8 366 040
TOTAL	49 434 085	28 723 671

Figure 8. Distribution of energy consumption for heating according to fuel type by SECH-SPAHOUSEC climate zone and type of housing (single-family/multi-family).

Source: processed by Renovation Working Group (GTR) for the Ministry of Public Works

With regard to distribution, the various provinces were grouped into three differentiated areas: Continental, Atlantic and Mediterranean, as shown in the attached map. This distribution was the one used for the SECH-SPAHOUSEC PROJECT¹. Analysis of energy consumption for the residential sector in Spain, which was taken into account in the breakdown of energy consumption (see figure 9).

¹Institute for Diversification and Energy Saving (IDAE) (2011). 'PROYECTO SECH-SPAHOUSEC. Analisis del consumo energetico del sector residencial en España [SECH-SPAHOUSEC PROJECT. Analysis of energy consumption in the Spanish residential sector]'. http://www.idae.es/index.php/mod.documentos/mem.descarga?file=/documentos_Informe_SPAHOUSEC_ACC_f68291_a3.pdf



Green: North Atlantic zone. Orange: Continental zone. Yellow: Mediterranean zone.

Figure 9. Climate zoning considered in the SECH-SPAHOUSEC project.

Source: Institute for Diversification and Energy Saving (IDAE) (2011) SECH-SPAHOUSEC PROJECT Analysis of energy consumption for the residential sector in Spain.

1.2 NON-RESIDENTIAL SECTOR

1.2.1. STRUCTURE OF THE HOUSING STOCK

The non-residential building sector, shown in Figure 10, was characterised based on type of use and year of construction. The distribution was evaluated by m² and not by buildings, given the enormous heterogeneity of the stock. This was carried out by making use of data offered by the Directorate General for Land Registry of the Ministry of Finance and local governments throughout Spain, apart from the Autonomous Communities of the Basque Country and Navarre (with reference to September 2013).

The user segments of greatest interest due to being those with the greatest energy intensity are:

- shops, with 26 % of the area and 65 % of the number of buildings;
- sports, with 23 % of the area and 3 % of buildings;
- offices, with 13 % of the area and 14 % of buildings;



- hotels and catering, with 12 % of the area and 10 % of buildings;
- culture and education, with 11 % of the area and 2 % of buildings;
- sanitary, with 6 % of the area and 2 % of buildings.

TOTAL BUILDING AREA BY USE AND DECADE OF CONSTRUCTION													
	Before 1900	1900-1920	1921-1940	1941-1950	1951-1960	1961-1970	1971-1980	1981-1990	1991-2001	2002-2011	From 2012 (*)	Others (**)	TOTALS
RESIDENTIAL													3 283 305 198
V-Residential	95 641 467	232 368 161	162 768 092	112 633 414	171 118 502	351 283 958	519 393 590	416 779 847	552 369 707	636 420 425	13 115 736	19 412 299	3 283 305 198
NON RESIDENTIAL													1 992 915 303
SERVICE SECTOR, SERVICES AND EQUIPMENT													825 585 829
O-Offices	933 429	2 196 443	2 255 814	2 261 444	3 311 727	9 398 951	16 948 099	12 095 266	25 661 331	35 350 391	761 313	117 228	111 291 436
C-Shops	1 731 072	4 900 501	4 839 248	13 605 743	7 371 186	25 391 430	37 034 399	30 293 606	48 285 915	57 588 864	2 224 986	274 761	223 541 711
K-Sport	6 45 624	2 154 375	1 381 860	2 208 430	9 681 970	16 739 944	25 746 395	31 954 726	57 1436 525	49 575 087	3 064 330	415 177	201 004 443
T-Entertainment	140 476	405 788	360 694	249 003	360 137	551 356	828 287	663 479	2 512 020	1 694 595	41 535	278 386	8 085 756
G-Leisure, hotels and catering	1 052 336	2 257 499	1 843 106	1 235 534	3 830 906	13 879 749	16 973 921	19 426 949	22 701 321	21 667 250	1 375 757	1 237 116	107 481 444
Y-Health and welfare	661 849	1 538 747	1 707 308	1 926 984	2 931 571	4 080 888	7 987 640	5 358 000	7 730 524	13 775 331	228 533	204 597	48 131 972
E-Cultural	2 387 605	3 976 671	4 369 558	3 718 098	7 936 223	15 420 511	20 147 724	13 494 276	13 263 870	11 589 485	349 396	414 552	97 067 969
R-Religious	6 132 005	3 631 210	3 100 559	1 724 544	1 545 160	1 676 250	1 611 449	1 057 482	2 049 203	900 559	48 560	504 17	28 981 098
INDUSTRIAL													704 912 001
I-Industrial	17 323 488	37 910 600	23 518 968	21 194 673	34 053 056	81 031 926	127 376 064	84 414 671	128 095 844	138 366 661	2 691 221	8 933 085	701 912 001
STORAGE-PARKING													345 084 908
A-Storage-Parking	2 152 140	6 830 004	4 449 007	3 245 855	5 538 600	18 461 615	47 154 722	49 514 779	92 677 169	112 642 473	1 808 729	609 725	345 084 908
OTHERS													117 332 565
M-Landscaping work without building	1 025 091	2 094 942	1 086 389	584 783	1 697 876	4 139 426	4 201 986	2 402 618	7 509 297	7 484 575	305 896	2 398 792	34 913 671
P-Special building	1 723 968	3 717 351	2 883 505	2 916 047	2 551 657	2 187 536	4 272 021	4 112 510	5 761 938	4 646 045	331 635	240 707	35 344 920
B-Agricultural storage	29 247	113 833	60 776	56 951	363 509	191 158	429 612	879 909	513 579	1 617 516	729	68 623	4 325 437
J-Agroindustrial	275 649	1 124 103	1 295 398	860 469	1 584 219	4 461 986	9 861 286	6 122 215	8 756 482	6 122 312	11 642	2 254 776	42 730 537
Z-Agricultural													0

(*) Includes property built in 2012 or 2013.

(**) Property built in year zero or after 2013 is listed under 'Others'.

Figure 10. Total area of property by use and construction decades according to the Land Registry.

Source: Drawn up by the Ministry of Public Works based on the Directorate General for the Land Registry.

1.2.2. DISTRIBUTION OF ENERGY CONSUMPTION IN HOUSING STOCK

Energy consumption figures associated with different uses are shown in figure 11. The information has been limited to energy consumptions for uses involving significant demand that are not fundamentally linked to any industrial activities that may be covered. Similarly, energy consumption by buildings that are dependent on general government is also differentiated from other uses due to its special relationship with the specific needs established in Directive 2012/27/EU on Energy Performance.

USES ACCORDING TO LAND REGISTRY	Final energy consumption	
	KToe	
A - Storage-Parking		
V - Residential		
I - Industrial		
O - Offices		2 000
C-Shops	Small shops	4 800
	Shopping centres	1 000
K - Sports		200
T - Entertainment		
G - Leisure, hotels and catering		1 000
Y - Health and welfare		500
E - Cultural		400
R - Religious		
M - Town planning and landscaping works, land without building		
P - Special building		
B - Agricultural storage		
J - Agroindustrial		



Z - Agricultural	
	TOTAL 10 000

Figure 11. Final energy consumption in the non-residential sector according to segmentation by use carried out by the Land Registry.

Source: drawn up by Renovation Working Group (GTR) for the Ministry of Public Works.

To supplement these consumption figures, using information from the 2014 GTR [Renovation Working Group]² 2014 Report³ (drawn up in cooperation with energy service companies), Figure 12 shows a breakdown of consumption into different energy uses for the most significant uses by the non-residential sector in Spain.

USES	DISTRIBUTION OF ENERGY CONSUMPTION (in %)					
	Climate control	Cooling*	Lighting	DHW	Equipment and others	
Offices (Private)	55	25	20	5	20	
Shops	Small shops	40	20	20	5	15
	Shopping centres	40		45		15
Hotels	45		15	23	17	
Sports centres	36	10	19	6	39	
Hospitals	40		35	20	5	
Local government	55	25	20	5	20	
Public schools	75		20		5	
Public institutes	70		20		10	
Universities	40	10	30		30	

* Cooling is a sub-category of climate control and must not be considered in the sum of percentages.

Figure 12. Distribution of % consumption in the non-residential sector according to the segmentation by use carried out by the Land Registry

Source: drawn up by Renovation Working Group (GTR) for the Ministry of Public Works.

1.3 TIMELINE FOR THE DEVELOPMENT OF TECHNICAL LEGISLATION

Given that the main construction characteristics of the housing stock basically depend on the technical standards in force at the time when they were built, a timeline for the development of technical building standards is given below.

- The first technical standards that generally regulated the building sector in Spain during the second half of the twentieth century were known as 'MV [Ministry of Housing] Standards' and were approved by the Ministry of Housing set up in 1957. Most of these MV series standards approved between 1961 and 1976 regulated the safety of structures and none of them covered thermal insulation.

² GTR: Renovation Working Group coordinated by the Green Building Council Spain (GBCe) and the Fundación CONAMA

³ <http://www.gbce.es/archivos/ckfinderfiles/GTR/Informe%20GTR%202014.pdf>



- In 1969, provisional orders approved by a Ministry of Housing Order regulated certain characteristics for housing under official protection, including thermal insulation, which was set out in Order 32. This was a simple regulation that divided Spain into two climate zones based on winter and summer isotherms, which were used to limit the thermal transmittance (which was then referred to as conductivity) of roofs and facades. The maximum limits were 1.2 and 1.6 kcal/m² C, which meant that it was sufficient to add a cavity wall in order to achieve this transmittance. The standard covering for a facade became half a foot of brick, a cavity wall and a partition wall or backing wall.
- In 1977, the government approved a unified mark for building legislation consisting of Basic Building Standards (NBE), which were obligatory, and Technological Building Standards (NTE), which were not obligatory and served as an operational development of the NBEs. The first of these basic standards, laid down as a consequence of the second energy crisis of the 1970s was NBE-CT 79 on thermal conditions in buildings, the first modern standard requiring thermal insulation. This required an overall average insulation reflected by an overall K-factor that was dependent on the compactness of the building and the climate zone characterised by degrees-day and also maximum transmittance values for the various walls in order to guarantee minimum thermal comfort and the absence of surface condensation. The solutions involving half a foot of brick, a cavity wall and partition wall were not sufficient to meet these requirements, which remained in force from 1980 to 2006 and thermal insulation in facade cavity walls and roofs began to become the normal standard.
- In 1999, Law 38/1999 of 5 November 1999 on Building Regulations [Ley de Ordenación de la Edificación – LOE] was approved with the main aim of regulating the building sector in Spain. For regulatory purposes, it was necessary to update technical legislation that had become radically obsolete and the law called on and authorised the government to approve a technical building code by issuing a Royal Decree that established requirements to be met by buildings in terms of basic safety and habitability. This technical building code, CTE, was approved in March 2006 and entered into force some months afterwards.
- In 2006, the CTE Basic Document on energy-saving (DB-HE) led to the drawing up of specifications to meet the aims laid down in the LOE and the translation of these energy efficiency aspirations into technical language. At the same time, the code was used to transpose certain obligations enshrined in European legislation. In implementing the basic requirements of the LOE with regard to energy, the DB-HE basic document established certain requirements for limiting the energy supply (which involved improving passive aspects of the building) and also improving the efficiency of heating and lighting systems as well as a minimum contribution by renewable energies (solar) to the production of domestic hot water and electricity through solar collector panels and photovoltaic panels, respectively.

Compared to the 1979 requirements, the new Code led to significant progress estimated to amount to an improvement of between 25 and 35 % in demand and thus in insulation.

As stated below, these CTE energy performance requirements were updated and reviewed in 2013.

1.4 MAIN SECTOR NEEDS



Fifty-five percent of housing stock (13 759 266) dates back to before 1980 and almost 21 % (5 226 133) is more than 50 years old. Almost 58 % of Spanish buildings were built before the first standard introducing minimal energy efficiency criteria in Spain: basic building standard NBE-CT-79 on thermal conditions in buildings. There are approximately 25 million houses, half of which are more than 30 years old and almost six million of which are more than 50 years old. We must also consider the large gap between the Spanish housing stock and European requirements on the energy performance of buildings.

2 DEFINITION OF NEARLY ZERO-ENERGY BUILDING

Article 9(3)(a) of Directive 2010/31/EU refers to the need for each Member State to set out in the Plan the detailed application in practice of the definition of nearly zero-energy buildings, reflecting their national, regional or local conditions, and including a numerical indicator of primary energy use expressed in kWh/m² per year. Primary energy factors used for the determination of the primary energy use may be based on national or regional yearly average values and may take into account relevant European standards.

The detailed application of the definition of a nearly zero-energy building in the Spanish context must take into account the calculation procedure established in Commission Delegated Regulation No 244/2014 for calculating cost-optimal levels of minimum energy performance requirements for buildings as well as the results of the studies.

It is planned that this detailed definition will be implemented at a later stage (in accordance with plans set out below), with the aim of taking into account the Commission's evaluation of the cost-optimal studies submitted by the Spanish State in June 2013 since the energy performance of such buildings must in theory be better than that corresponding to the economic optimums. It should be indicated in this regard that the Spanish State is now reviewing these cost-optimal studies because unexpected results have been obtained in certain climate zones (certain zones with more severe winter weather obtain lower optimum values than other zones with a milder climate).

Several institutions are now also developing research, development and innovation programmes for nearly zero-energy building projects and their results will undoubtedly be useful for improving the application of nearly zero-energy building in Member States. The Ministry of Public Works is cooperating with and holding meetings with various bodies that take part in European projects on European nearly zero-energy building projects, such as the ENTRANZE project – Policies to Enforce the Transition to Nearly Zero-Energy Buildings in the EU-27, funded by the European Smart Energy programme or the POWERHOUSE EUROPE Nearly Zero-Energy Challenge.

Moreover, the Spanish State has responded to the obligations set out in Directive 2010/31/EU requiring the establishment of intermediate targets for improving the energy performance of new buildings in 2015 with the aim of successfully achieving the 2020 targets by implementing a significant programme of regulatory harmonisation to transpose the definition of nearly zero-energy buildings into Spanish law by updating its legislation⁴ on the energy performance of buildings.

⁴ Order FOM/1635/2013 of 10 September 2013 (Official State Gazette of 12 September 2013) updating the Basic Document on energy saving – DB-HE– of the Technical Building Code, approved by Royal Decree 314/2006 of 17 March 2006 and errata corrige (Official State Gazette of 8 November 2013) in Order FOM/1635/2013 of 10 September 2013 updating Basic Document on energy saving – DB-HE – of the Technical Building Code, approved by Royal Decree 314/2006 of 17 March 2006.



The plan drawn up (see Figure 13) for updating the legislation and incorporating a detailed definition of nearly zero-energy buildings includes **two stages**:

- **Stage I - Regulatory definition of certain intermediate targets for high energy performance by 2015:** updating of energy performance technical regulations by establishing requirements in terms of certain global indicators representing the energy performance of buildings (that will be used as a basis for establishing the definition of nearly zero-energy buildings) and a significant increase in requirements with regard to the above legislation (dating from 2006). This updated legislation was approved in September 2013 and it is obligatory for all buildings built or renovated after 13 March 2014.

Royal Decree 235/2013 of 5 April 2013 approving the basic procedure for certifying the energy performance of buildings also includes an obligation for all new buildings built after 31 December 2020 to be nearly zero-energy buildings and all new buildings for which construction starts after 31 December 2018 that will be occupied and owned by public authorities also to be nearly zero-energy buildings. This also establishes that the minimum requirements to be met by such buildings should be those laid down at that time in the Technical Building Code.

- **Phase II - Regulatory definition of nearly zero-energy buildings:** updating of technical regulations on energy performance before 2018, introducing the definition of nearly zero-energy buildings and establishing the obligation to comply with corresponding requirements in all buildings constructed from 31 December 2018 for buildings owned by public authorities and from 31 December 2020 for all other buildings, in accordance with the provisions of the Directive.

The aim is to approve a detailed definition of nearly zero-energy buildings between 2016 and 2017 in such a way that even though implementation will not become compulsory until December 2020 (or 2018, as applicable) it may be applied on a voluntary basis and will serve as a benchmark for the incentive and aid policy implemented through the public authorities. This definition will also make it possible to include the concept of nearly zero-energy buildings in energy performance certification as a factor for raising public awareness.

Existing legislation	2006	Basic Document on energy saving – DB-HE
	2007	Regulation on Heating Systems in Buildings (RITE)
	2007	Basic procedures for certifying the energy performance of new buildings
Intermediate targets by 2015	2013	Amendment of Regulation on Heating Systems in Buildings (RITE). Introduction of obligation to ensure that all new buildings are nearly zero-energy buildings by 2020 (2018 for public authority buildings)
	2013	Updating of Basic Document on energy saving – DB-HE
	2013	Basic procedure for certifying the energy performance of buildings (extended to existing buildings)
Regulatory definition of nearly zero-energy buildings	2016-17	Updating of Basic Document on energy saving – DB-HE: introduction of a detailed definition of nearly zero-energy buildings. Voluntary application

Royal Decree 238/2013 of 5 April 2013 amending certain Articles and technical instructions of the Regulation on Heating Systems in Buildings approved by Royal Decree 1027/2007 of 20 July 2007.



	2018	Compulsory application to new buildings owned by public authorities
	2020	Compulsory application to all new buildings

Figure 13. Plan laid down for updating of the regulation and incorporation of a detailed definition of nearly zero-energy buildings.

Source: Ministry of Public Works

The recently-approved regulation now in force already establishes the set of indicators to be used as a basis for defining nearly zero-energy buildings. Two global indicators (energy consumption and demand) have been established although the possible subsequent inclusion of a third indicator limiting building CO₂ emissions is also being considered. This will be supplemented by a set of specific requirements for some elements and systems, as shown below.

- Global indicators:
 - o consumption of primary non-renewable energy
 - o energy demand for heating and cooling

- Specific requirements relating to:
 - o maximum transmittance of elements of the thermal envelope and other elements separating different user units.
 - o energy efficiency of heating systems.
 - o energy efficiency of the lighting system and maximum installed power in the building.
 - o minimum energy contribution from renewable sources for the supply of DHW.
 - o minimum energy contribution percentage from renewable sources for electrical uses in the building.

For a rational gradual harmonisation toward nearly zero-energy buildings, the needs established in the current regulations limit the energy demand of buildings (in terms of heating and cooling) to values close to those that are likely to be included in the definition of nearly zero-energy buildings, taking into account that the time period elapsing before renovation of the envelope (generally more than 30 years) is much longer than that elapsing before renovation of systems (generally between 10 and 15 years). The fundamental adjustments that will therefore have to be introduced during Stage II, in the definition of nearly zero-energy buildings, basically amount to stricter limitation of primary non-renewable energy consumption and limitation of CO₂ emissions.

It should also be emphasised that exhaustive work has been carried out to update CO₂ emission factors and coefficients for transferring various final energy sources consumed in the building sector over to primary energy due to the importance of these factors for a realistic evaluation of building energy performance. The corresponding regulatory paper is currently being processed and its approval is planned before the end of 2014.

3 INTERMEDIATE TARGETS AS OF 2015 FOR IMPROVING THE ENERGY PERFORMANCE OF BUILDINGS

3.1 ENERGY EFFICIENCY REGULATORY REQUIREMENTS



As indicated in the previous point, during the process of implementing the regulations for defining nearly zero-energy buildings, an initial updating (Stage 1) was carried out of the technical regulations on building energy performance, approved in September 2013, the requirements of which are detailed below.

Minimum requirements are established for new buildings and extensions in terms of non-renewable primary energy consumption and energy demand in buildings, while the energy demand indicator is used for work done on existing buildings. Similarly, the use of a reference building has been abandoned in new buildings for private residential use, which means that the minimum requirements are set at an absolute value, in terms of kWh/m²/year. These requirements are also supplemented by others relating to the use of energy from renewable sources, since minimum contributions of thermal solar energy are established for DHW and for the use of photovoltaic energy.

Due to this increase in requirements and given that certain areas of the Spanish mainland have a mild climate, the limits established in certain climate zones could already be on a par with the levels that some European Union Member States are imposing for the detailed definition of nearly zero-energy buildings.

Figure 14 shows the winter climate zoning within Spain, based on a recent update of the regulations (zone E corresponds to the most severe winter weather and zone alpha (α) corresponds to the least severe winter weather).

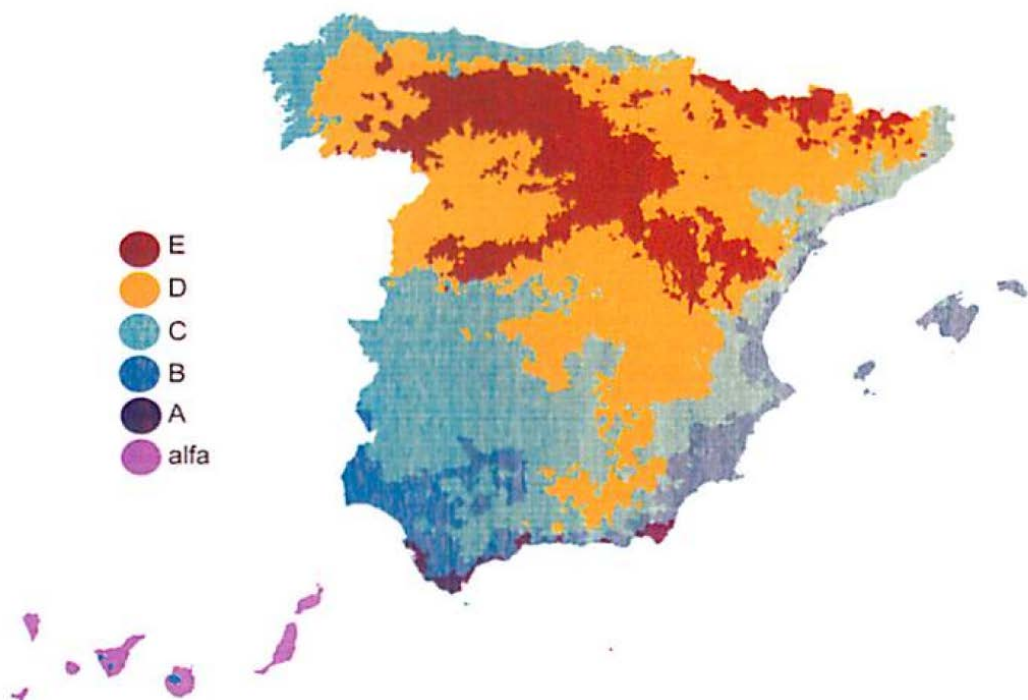


Figure 14. Winter climate zoning in Spain

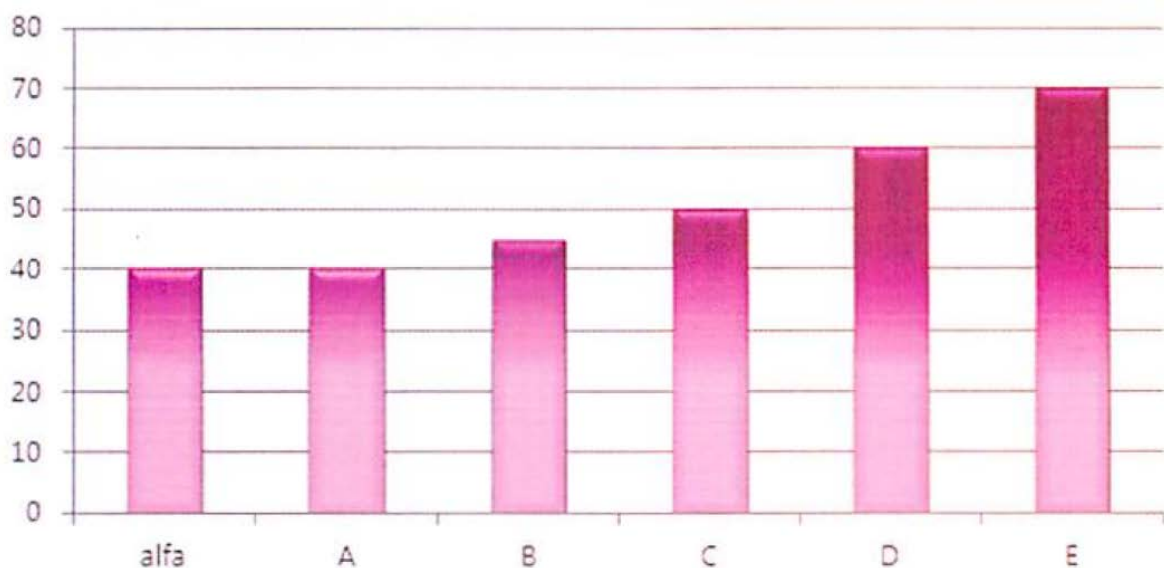
Source: AICIA [Andalusian association of industrial research and cooperation]

3.1.1. UPDATING STANDARDS FOR NEW BUILDINGS



- Needs relating to energy consumption

The new CTE Basic Document on energy saving – DB-HE – limits the energy consumption of non-renewable primary energy in new buildings for private residential use based on the climate zone in winter to a value that ranges from 40 kWh/m²-year for zones α and A, to 70 kWh/m²-year in climate zone E (see Figure 15). A correction factor is applied to these values that takes into account the building area so that higher values can be achieved when the area is smaller. In buildings for private residential use, the primary energy indicator includes energy consumption levels for heating, cooling and domestic hot water requirements.



□ Limit value for the consumption of primary non-renewable energy in kWh/m²-year

Figure 15. Limit of non-renewable primary energy power consumption for new buildings or extensions, according to DB-HE 2013

Source: Ministry of Public Works

Although Basic Document DB-HE 2006 did not lay down any requirements relating to energy consumption, using as its basis average statistical values for buildings that will strictly comply with this Basic Document⁵, the average reduction in primary energy consumption corresponding to the new Regulation was evaluated. This reduction depended on the climate zone but, as may be seen from Figure 16, for apartment blocks it achieved values of up to 44 % in climate zone E (where the winter weather is most severe). The reductions were higher in the case of single-family houses.

**Primary energy consumption limit. Apartment blocks
(kWh/m²)**

⁵ These values were obtained from statistical studies carried out to establish the building energy certification scales.

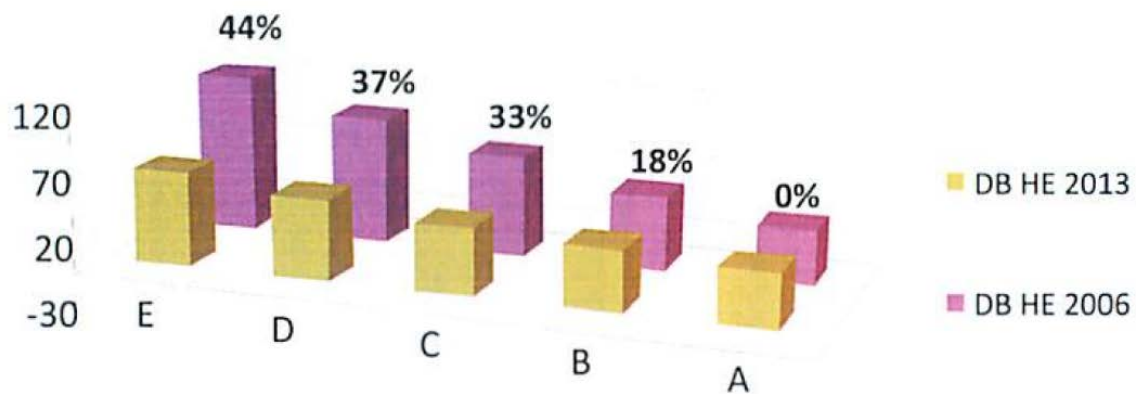


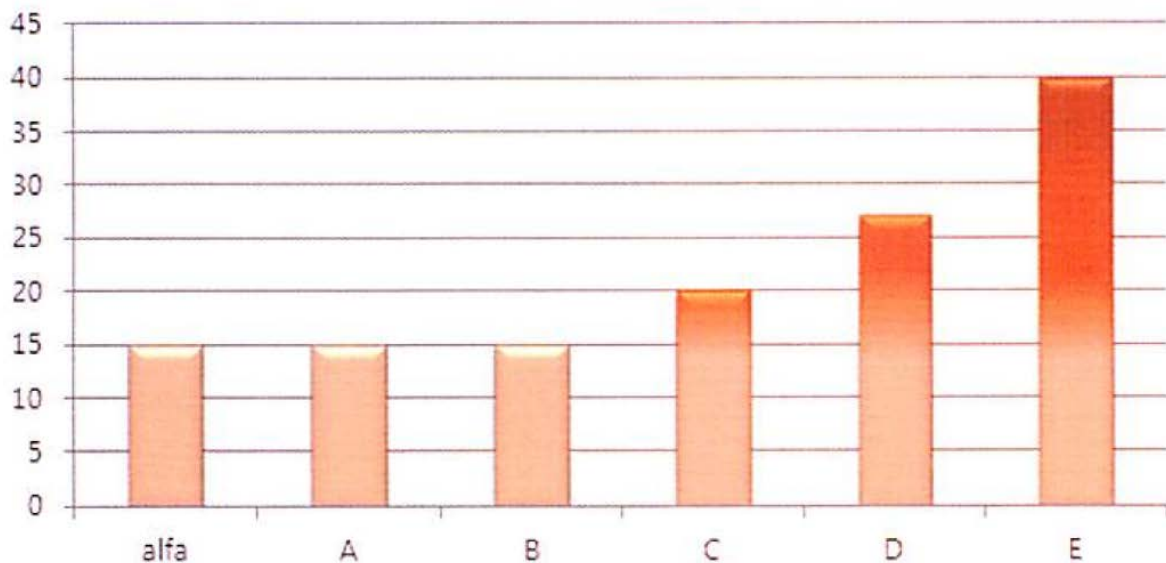
Figure 16. Reduction in the non-renewable primary energy power consumption limit in DB-HE 2013 compared to DB-HE 2006 for apartment blocks.

Source: Ministry of Public Works

In buildings used for purposes other than housing, the requirements of DB-HE 2013 are linked to the energy rating for the consumption of non-renewable primary energy. The performance in this case must be greater than or equal to class B according to the basic procedure for certifying building energy performance approved by Royal Decree 235/2013 of 5 April 2013. This requirement envisages a 35 % reduction compared to primary energy consumption values allowed by the 2006 technical regulations. The enormous variability in energy consumption for different applications made it necessary to maintain the requirement in self-referential terms (relating it to a reference building), although the intention is that progress can be made in this field in the future and absolute values can be defined for different applications.

- Needs relating to energy demand

Basic Document HE 2013 limits the energy demand for heating, based on the winter climate zone, to a value that ranges from 15 kWh/m²-year for climate zones α , A and B to 40 kWh/m²-year for climate zone E, subject to the application of a correction factor that takes into account the building area (see Figure 17). The energy demand limit for cooling is established based on the summer climate zone as 15 kWh/m²-year for summer climate severity zones 1, 2 and 3 and 20 kWh/m²-year for zone 4, which are demanding values considering the severity of summer climates in a significant proportion of Spain.



□ Energy demand limit value for heating in kWh/m²-year

Figure 17. Energy demand limit for heating for new buildings or extensions according to DB-HE 2013

Source: Ministry of Public Works

The maximum demand limit values for heating laid down in DB-HE 2013 are significantly more demanding than those required in 2006. Since the requirements were not laid down in absolute terms for the heating energy demand in DB-HE 2006, the 2006 and 2013 requirements can only be compared in approximate terms. Taking as a basis average statistical values for buildings that complied strictly with this Basic Document⁶, it has been possible to estimate that these new requirements will give rise to a considerable reduction in the heating demand limit, which will be in the region of 40-50 % throughout all winter climate zones, except in the mildest zones (A and alpha (α), the latter arising only in some areas of the Canary Islands). These reductions in the limit energy demand for heating arise both in collective housing and in single-family houses (see Figure 18).

Heating demand limit. Apartment blocks (kWh/m²)

Heating demand limit. Single-family houses (kWh/m²)

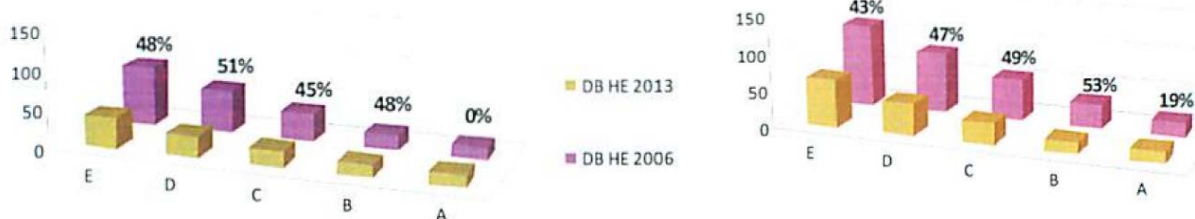


Figure 18. Reduction in the heating energy demand limit in DB-HE 2013 compared to DB-HE 2006 for apartment blocks and single-family housing

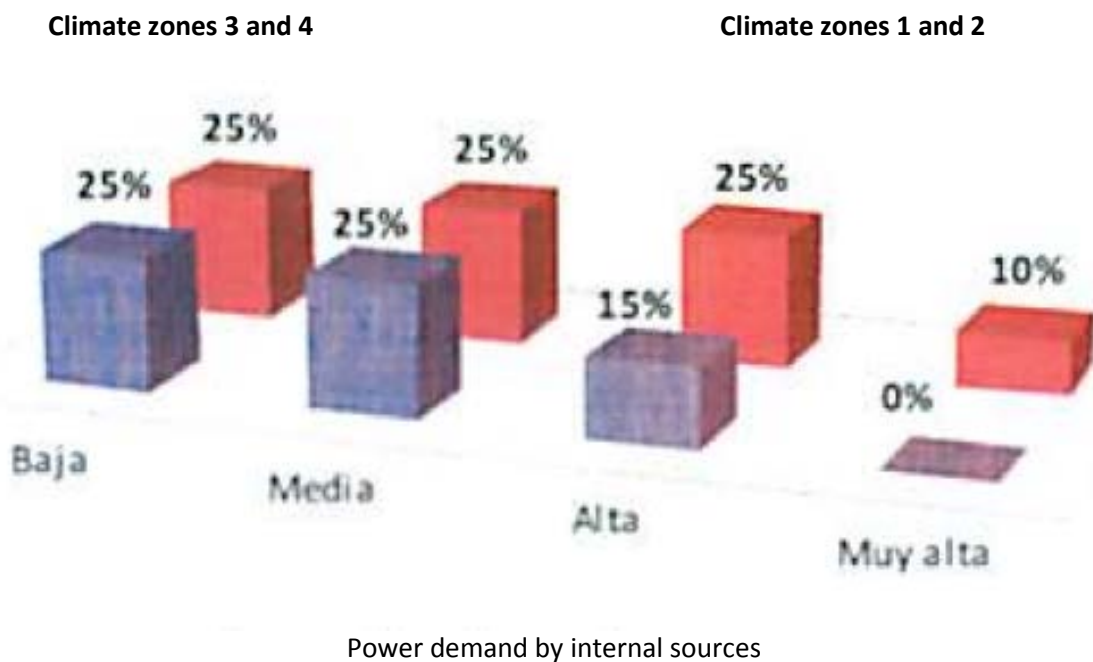
⁶ These values were obtained from statistical studies carried out to establish the building energy certification scales.



Source: Ministry of Public Works

In new buildings for uses other than housing and extensions of existing buildings, DB-HE 2013 establishes a minimum joint energy demand saving percentage for heating and cooling with regard to the reference building (this is the weighted demand for heating energy and cooling energy). In this case, the required percentage saving is up to 25 % based on the summer climate zone and the internal source load (see figure 19).

Minimum percentage saving in joint energy demand



Key

Spanish	English
Baja	Low
Media	Average
Alta	High
Muy alta	Very high

Figure 19. Minimum percentage saving in joint energy demand for buildings of third-party use

Source: Ministry of Public Works

Moreover, in order to avoid decompensation, maximum transmittances for thermal envelope elements were established for buildings used as housing. These limit values are stricter than those set out in the previous 2006 legislation (see Figure 20).



Parameter	Regulatory year	Winter climate zone					
		a	A	B	C	D	E
Thermal transmittance of walls and elements in contact with the ground ⁽¹⁾ (W/m ² -K)	2013	1.35	1.25	1	0.75	0.6	0.55
	2006	*	1.22	1.07	0.95	0.86	0.74
Thermal transmittance of floors (W/m ² -K)	2013	1.2	0.8	0.65	0.5	0.4	0.35
	2006	*	0.69	0.68	0.65	0.64	0.62
Thermal transmittance of roofs (W/m ² -K)	2013	1.2	0.8	0.65	0.5	0.4	0.35
	2006	*	0.65	0.59	0.53	0.49	0.46
Thermal transmittance of doors and windows ⁽²⁾ (W/m ² -K)	2013	5.7	5.7	4.2	3.1	2.7	2.5
	2006	*	5.7	5.7	4.4	3.5	3.1
Thermal transmittance of party walls (W/m ² -K)	2013	1.35	1.25	1.1	0.95	0.85	0.7
	2006	*	1.22	1.07	1	1	1

* This climate zone did not exist in 2006

⁽¹⁾ For elements in contact with the ground, the indicated value is required only for the first metre of wall underground, or the first metre of floor perimeter resting on the ground up to a depth of 0.50m

⁽²⁾ The combined performance of glass and frame is considered, including skylights and roof windows

Figure 20. Maximum comparative transmittances for thermal envelope elements between the 2006 and 2013 standards.

Source: Ministry of Public Works

- Requirements relating to the contribution of energy from renewable sources.

The use of energy from renewable sources is an important requirement for the achievement of nearly zero-energy buildings, particularly when this is produced on site or near the building. The DB-HE establishes specific requirements with regard to the inclusion of renewable energy sources (thermal solar energy for DHW and photovoltaic solar energy) and also steps up the use of such sources, albeit indirectly, by establishing the energy consumption requirement in terms of non-renewable primary energy consumption, meaning that these are not calculated for such purposes.

With regard to thermal solar energy for DHW, an annual minimum percentage is established for the contribution of solar energy based on the building's total demand for DHW and that of the corresponding climate zone according to solar radiation, which varies between 30 % and 70 % (see Figure 21).

Building's total demand for DHW (l/d)	Climate zone				
	I	II	III	IV	V
50 – 5 000	30	30	40	50	60
5 000 – 10 000	30	40	50	60	70
> 10 000	30	50	60	70	70

Figure 21. Annual minimum contribution of solar energy for DHW as a %, established in DB-HE 2013

Source: Ministry of Public Works

A minimum electrical energy contribution is also established for solar energy collector and processing systems using photovoltaic procedures, establishing the minimum power to be installed based on the building area. This requirement is applicable to hypermarkets, shopping malls and leisure centres, storage and distribution sheds, covered sports facilities, hospitals, clinics and care homes and trade fair halls.



In the DB-HE 2013 update, greater flexibility was introduced with regard to the manner of achieving a contribution from these energy sources, because it allows the total or partial replacement of the thermal or photovoltaic solar energy requirement with other sources of renewable or residual energy in order to obtain similar energy efficiency in a more flexible manner with more room for technological innovation. In the case of thermal solar energy, this replacement is nevertheless subject to the requirement that carbon dioxide emissions and non-renewable primary energy consumption by the alternative system and its auxiliary systems must be less than or equal to those that would apply using the corresponding thermal solar system and auxiliary support system.

3.1.2 UPDATING STANDARDS FOR WORK IN EXISTING BUILDINGS

The new DB-HE 2013 regulatory document is also applicable to work carried out on existing buildings, although the conditioning factors in such buildings (construction type, orientation and so on) are much more limiting than those found in new builds (or, naturally, extensions to existing buildings) and consequently their requirements are not as pressing.

The needs applicable to work in existing buildings depend on the scope of the work (see figure 22), meaning that in work affecting more than 25 % of the envelope or in work where the characteristic use of the building is changed, energy demand limitations are imposed, while in work with insulated elements, the work must comply with maximum thermal transmittance values (see figure 20).

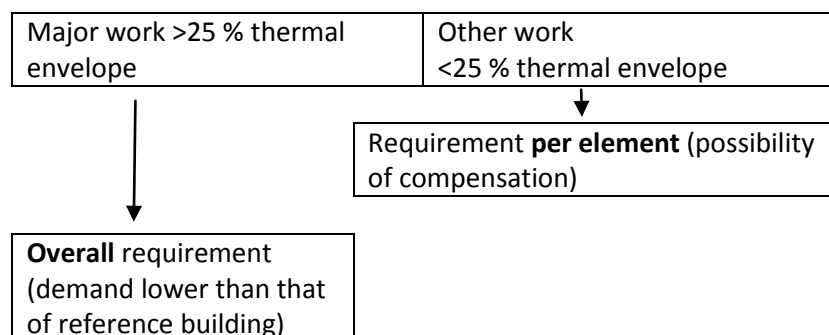


Figure 22. Minimum annual solar energy contribution for DHW established in DB-HE 2013.

Source: Ministry of Public Works

In work affecting more than 25 % of the envelope or in work where the building's characteristic use is changed, the requirement is that the building should be at least compliant with the energy demand needs established in 2006 for new buildings.

3.2 QUANTITATIVE TARGETS AS OF 2015 FOR NEW BUILDINGS

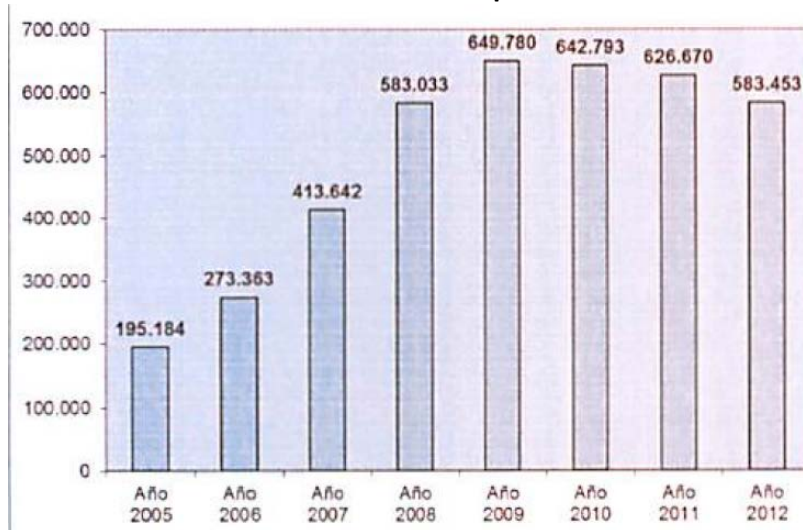
Because, as indicated previously, no definition has yet been provided for Spain's interpretation of nearly zero-energy buildings for regulatory purposes, it is not possible to make a quantitative assessment of the percentages of new buildings that will achieve this standard in 2015. In any case, it should be emphasised that the Spanish building stock currently includes a very high percentage of unsold housing stock, meaning that the number of new homes currently being built in Spain and those that it is predicted will be built in a few years is practically negligible. This means that the impact of regulatory changes introduced in 2013 is estimated to be relatively limited as of 2015.



According to the 2011 census, the number of empty homes in Spain was 3 443 365, while the number of unsold new homes was 626 670 as of 31 December 2011 according to Ministry of Public Works data. As the following graph shows, this stock has been undergoing a slow decline since 2009 (see figure 23).



Graph 1- Cumulative stock



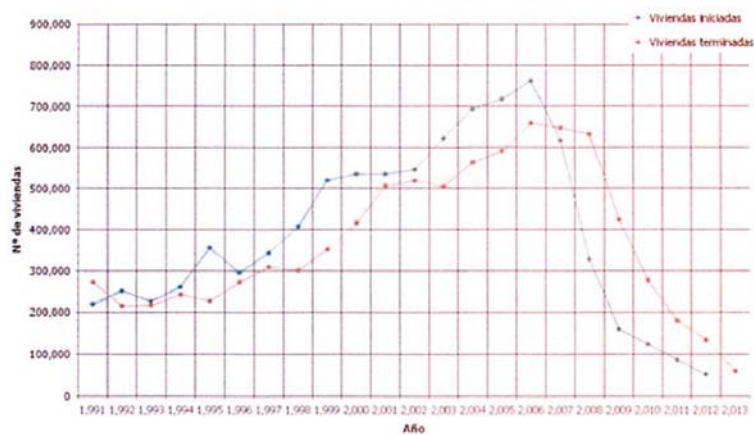
Key

Spanish	English
Año	Year

Figure 23. Cumulative unsold new homes.

Source: Ministry of Public Works

The number of new homes currently being built in Spain stands at less than 35 000 as of 2013 in the wake of the sudden decline experienced since 2006 (see figure 24). This stagnation has also affected the non-residential sector.



Key

Spanish	English
Año	Year
Viviendas iniciadas	Homes started
Viviendas terminadas	Homes completed
No de viviendas	No of homes

Figure 24. Total number of homes started and completed.

Source: Ministry of Public Works

4. STRATEGY



The implementation and development of nearly zero-energy buildings in Spain requires the adoption of a combination of regulatory, financial, training, educational and R&D&I promotion policies and measures, amongst others. With this in mind, numerous measures have already been implemented that directly or indirectly promote the energy efficiency of buildings and nearly zero-energy buildings. A description of those already adopted or in the process of development is given below.

4.1 LEGISLATIVE OR REGULATORY MEASURES

The legal and regulatory provisions mentioned below mainly focus on the reactivation and promotion of urban refurbishment, renovation and regeneration operations, in other words in the sector of existing buildings, which is where Spain must make the greatest progress. All the measures include elements for improving energy efficiency as an essential part of any work. These do not differentiate between whether the needs are public or private.

a. Law 8/2013 of 26 June 2013 on urban refurbishment, regeneration and renovation

This law focuses on established town planning and the existing building sector as strategic elements for necessary actions that are planned and must be stepped up in Spain now that the stage of urban expansion has run its course. The aim of the law is to generate an appropriate legal framework that will make it possible to carry out urban refurbishment, regeneration and renovation operations since it was noted that certain legal loopholes were present as well as obstacles that made it impossible to put operations into practice. The law is seen as a way to boost the generation of own resources in order to make it possible to pay for such actions.

The aim of this law is to regulate the basic conditions that guarantee sustainable, competitive and efficient development of the urban environment by driving and promoting actions that lead to the refurbishment of buildings and the regeneration and renovation of the existing urban fabric, when this is necessary to ensure the public an appropriate quality of life and allow them to exercise their right to enjoy dignified and appropriate housing.

The basic regulation established by this standard is set against a background of deep economic crisis, but also the need to work, in parallel, on the existing housing stock with the aim of contributing to energy saving (thus also relaunching the building materials industry as well as those relating to the remaining building systems and supplies as well as renewable energy technologies). This measure is intended to meet the energy challenges of the Spanish economy (which is dependent on external suppliers for primary energy sources and subject to the attendant cost increases and risks) while maintaining undertakings with regard to the European Union and its package of targets with regard to energy and combating climate change for 2020 (undertakings that include action on the existing housing stock because considerable energy saving can be made in this sector and changes made in this area are also crucial to combating climate change caused by greenhouse gases).

The fundamental aims of this law are as follows:

- to step up building refurbishment and urban regeneration and renovation, doing away with current hurdles and creating specific mechanisms that will make the work viable and possible.
- to offer an appropriate legal framework to allow conversion and reactivation of the building sector, finding new areas of operation, specifically within building refurbishment and urban regeneration and renovation.



- to promote quality, sustainability and competitiveness in building as well as in land, harmonising the Spanish legal framework with the European framework, particularly with regard to the targets of efficiency, energy saving and combating fuel poverty.

In order to achieve these targets, the law, which basically sets out to correct existing legal loopholes, has been supplemented by removing obstacles hindering the achievement of the proposed targets, which will involve amending the various existing standards.

One of the most important measures introduced by the law, with regard to promoting measures to renovate buildings in order to make them more energy efficient is the basic regulation set out in Title 1 of the Building Assessment Report. This report is applicable to owners of homes in collective buildings where the homes are of a certain age (over 50 years old) according to a timeline established in the law. In such cases the competent authority requires the owners to certify the current status of their homes. The building assessment report covers aspects relating to the building's state of preservation, universal accessibility and energy efficiency. The purpose of this measure is to ensure the quality and sustainability of the existing building stock as well as making it possible to obtain information to guide the implementation of government policies with regard to housing and energy.

With regard to energy efficiency, the building assessment report contains a specific section that must be completed with information on energy certification. This information refers to the building's energy rating (using bands A-G) as well as certain recommendations on energy improvements that could be carried out, analysed in terms of cost/benefit and classified based on technical, economic and functional viability as well as their repercussions on energy. Given that Directive 31/2010/EU on the energy performance of buildings requires that this certification should be included when a home is put up for sale or rent with a view to achieving greater market transparency, more information for owners and lower issue costs, the revised report sets out to achieve two things with a single action by including this certification in the building assessment report, irrespective of whether the property is being sold or rented.

Through this measure, it is hoped that the Building Assessment Report, plus compulsory energy certification for buildings being sold or rented, will provide incentives for carrying out voluntary operations to improve energy efficiency in cases where action is necessary to preserve the facade and/or roof, even in cases that do not affect more than 25 % of the envelope or where the building's characteristic use is unchanged, which are areas where the certification is still compulsory.

The law also extends facilities granted to neighbourhood communities, groups of owners and housing cooperatives to take action within the property market with full legal capacity to carry out all transactions, including credit operations, concerned with fulfilling their legal duty of preservation. It also introduces management tools and inter-administrative cooperation mechanisms that aim to strengthen the framework within which such actions are performed. These are supplemented by a search for mechanisms that are intended to ensure that funding for renovation is more accessible and more easily achievable by those involved. Other specific mechanisms are also established to facilitate the funding of such actions.

With regard to town planning conversion actions, the Law introduces various amendments, one of which concerns the addition of 'building actions', including actions carried out for new building work and the replacement of existing buildings as well as those carried out for building renovation, which means works and operations for maintenance or repairs on existing buildings and their systems and



communal spaces. This amendment is particularly relevant to energy renovation operations carried out on buildings, because it makes it possible to occupy the surfaces of free or public spaces created by existing works and hence reduce the building's annual heating or cooling energy demand by at least 30 % by means of actions including:

- a) installation of thermal insulation or ventilated facades on the building exterior or the enclosure or glazing of terraces with existing roofs.
- b) installation of bioclimatic devices behind facades or roofs.
- c) carrying out work and installing systems necessary for centralisation or installation of common energy systems and solar collectors or other renewable energy sources on facades or roofs when they can reduce the building's annual consumption of non-renewable primary energy by at least 30 %.

The law also amends Building Planning Law 38/1999 of 5 November 1999 and the Building Technical Code. Firstly, the application of the Building Technical Code is specifically linked to work carried out on existing buildings, consisting of extension, modification, renovation or refurbishment work that alters the architectural configuration of buildings, or work amounting to a wholesale intervention on listed buildings or those covered by some type of environmental or historical-artistic protection and partial works that affect elements or parts subject to protection. Irrespective of this, it is established that the Building Technical Code will also be applicable to all work on existing buildings where the purposes of completing such works can be justified in the design or in a report written by a competent technician, together with the need to apply for the licence or administrative authorisation that is a requirement for carrying out the work, thus overcoming the lack of any current control on compliance with this requirement in most refurbishment work.

Another measure refers to amendment of certain aspects of the Condominium Act, with the aim of preventing the majority systems established in property owners' associations from standing in the way of actions laid down in the law. It should be emphasised that until this amendment in the law, the system of property owners' associations made it necessary for decisions on refurbishment work to be adopted unanimously or by niche majorities, which made it impossible to carry out many actions.

b. Royal Decree 235/2013 of 5 April 2013 approving the basic procedure for certifying the energy performance of buildings

This provision partially transposes Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 with regard to certifying the energy performance of buildings, recasting Royal Decree 47/2007 of 19 January 2007 to incorporate the basic procedure for certifying the energy efficiency of existing buildings, also taking into consideration experience built up in applying the procedure over the past five years.

The Royal Decree establishes the obligation to make available to building buyers or users an energy performance certificate that must also include objective information on the energy performance of a building and reference values such as minimum energy performance requirements with the aim of ensuring that the owners or tenants of the building or of a unit in the building can compare and evaluate its energy performance. This Royal Decree also helps to standardise CO₂ emissions for the use of energy from emission-producing sources in the residential sector, which will facilitate the adoption of measures to reduce emissions and improve the energy rating of buildings.



A basic procedure is established to be met by the energy performance rating calculation procedure, considering factors with the greatest impact on energy consumption, as well as technical and administrative conditions for building energy performance certification. Terms are also established for adapting basic procedures to existing buildings, for obtaining the certificate and for the obligation to display an energy efficiency label in buildings providing public services. Competent bodies in the Autonomous Communities are also obliged to draw up a statistical inventory of actions related to certificates that they have registered, as a mechanism of vital importance for planning actions to improve the energy efficiency of the existing building stock and monitoring compliance with standards.

Use of the common label, known as the energy performance label, is also regulated throughout Spain and guarantees the specific features required in the various Autonomous Communities. It will be compulsory to display this label separately in the case of buildings providing public services to a significant number of people who thus habitually frequent the buildings.

Lastly, a penalty system is established with infringements and penalties, as provided for in current consumer and user protection law and the building energy performance certification process.

c. Order FOM/1635/2013 of 10 September 2013 updating Basic Document on Energy Saving DB-HE, of the Building Technical Code, approved by Royal Decree 314/2006 of 17 March 2006.

This provision updates the CTE Basic Document on energy saving – DB-HE – that has been in force since 2006 and partially transposes into Spanish law Directive 2010/31/EU of the European Union and of the Council of 19 May 2010 on the energy performance requirements of buildings, established in Articles 3, 4, 5, 6 and 7 thereof, as well as Article 13 of Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the need for minimum levels for the use of energy from renewable sources in buildings.

With a view to this aim, updating of the Basic Document on energy saving – DB-HE – and the needs established in the document (set out in detail in paragraph 3 of the document) constitutes the first step toward the target of achieving nearly zero-energy buildings before 31 December 2020 (2018 for public authority buildings) and represents considerable progress with regard to the building energy performance requirements in force until that date.

4.2 FINANCIAL MEASURES AND ECONOMIC INCENTIVES

a. Royal Decree 233/2013 of 5 April 2013 regulating the State Plan for promoting housing rental, building refurbishment and urban regeneration and renovation, 2013-2016

This State Plan involves a change in the Spanish government housing policy model, shifting the focus to the refurbishment of buildings and urban regeneration and renovation as a mechanism for stimulating the economic sector and converting Spanish urban housing stock to meet criteria of safety, accessibility and energy saving and performance while placing a decided emphasis on support for housing rental.

The percentage of refurbishment in Spain out of total building work is one of the lowest in the Eurozone, 15 percentage points below the European average and accounting for approximately 41 % of the building sector. In global terms, such activity tends to help ensure energy performance and



economic recovery targets while also making an active contribution to environmental sustainability, social cohesion and improving the quality of life of all citizens within urban spaces.

The State Plan is implemented in 11 chapters and the following are relevant to improving the energy performance of buildings:

- Chapter I of the Royal Decree describes the general aim and legal system, indicating eligible actions and situations within the framework of the State Plan, management and funding of the Plan, the beneficiaries as well as public-private cooperation or cooperating bodies.
- Chapter V regulates the building refurbishment promotion programme that can be used to fund operations carried out with the aim of performing maintenance and repair work and operations in predominantly residential buildings, building systems and communal private spaces, with some of the following aims: improving the state of preservation, guaranteeing universal accessibility or improving energy performance.
- Chapter VI regulates the urban regeneration and renovation promotion programme implemented with the aim of subsidising joint actions for building refurbishment work or the planning or re-planning of public spaces and, where applicable, building to replace demolished buildings.
- Chapter VIII contains regulations to support the implementation of the building assessment report which includes, *inter-alia*, information on building energy performance.
- Chapter IX regulates the programme for the promotion of sustainable and competitive cities, whose aim is to finance the drafting of designs that generate special visibility and impact.

The State Plan envisages an investment of EUR 840 million during the period 2013-2016, of which it is planned to allocate EUR 550 million to refurbishment and regeneration actions. With the aim of promoting renovation of the building stock to improve energy performance, the Plan provides financial incentives for developing refurbishment work that includes improving envelopes from an energy viewpoint. Eligible actions include those designed to achieve a reduction in overall annual energy demand for building heating and cooling, with a view to energy certification, of at least 30 % compared to the situation prior to these actions. Eligible actions include improving the building's thermal envelope, installing heating and cooling, domestic hot water production and ventilation systems or increasing the energy performance of existing systems, installing generation equipment or equipment permitting the use of renewable energies such as solar, biomass or geothermal energy, improving the energy performance of communal systems, lifts, lighting and so on.

Subsidies for this purpose are capped at 35 % of the eligible cost of the action per building. The aid amount is up to EUR 2 000 for each home or for each 100 m² of room space if the energy demand for building heating and cooling is reduced by an overall annual amount of 30 %, or up to EUR 5 000 if energy demand is reduced by at least 50 %.

The programme for promoting the implementation and general application of the Building Assessment Report provides for a subsidy that covers part of the professional fees for issuing the report, which constitutes an incentive for renovation to improve energy performance because it informs the owners of the building's energy performance and includes possible improvement measures.

More information is available at:

http://www.fomento.gob.es/MFOM/LANG-CASTELLANO/DIRECCIONES_GENERALES/ARQ_VIVIENDA/APOYO_EMANCIPACION/ and https://www.boe.es/diario_boe/txt.php?id=B0E-A-2013-3780



b. Aid programme for the energy renovation of existing buildings in the residential sector (PAREER programme) regulated by means of the Institute for Energy Diversification and Saving decision of 9 September 2013 (Official State Gazette of 25 September 2013), supplementing the Board of Directors' Decision of 25 June 2013

With the aim of promoting all-round actions that promote an improvement in energy performance and the use of renewable energy in the existing building stock within the residential sector used for housing and hotels as well as complying with Article 4 of Directive 2012/27/EU on energy performance, the Ministry of Industry, Energy and Tourism implemented a special programme for aid and funding with a budget of EUR 125 million, known as PAREER, through the Institute for Energy Diversification and Saving (IDAE).

The actions eligible for funding are included in one or more of the following types:

1. improving the energy performance of the thermal envelope.
2. improving the energy performance of heating and lighting systems.
3. replacing conventional energy by biomass in heating systems.
4. replacing conventional energy by geothermal energy in heating systems.

The actions eligible for aid must improve the total energy rating of the building by at least one band on the carbon dioxide emissions scale (kg CO₂/m² year), compared to the building's initial energy rating. This improvement in the energy rating may be achieved by carrying out one type of action or combining several types.

Aid beneficiaries under this Programme could be:

- a) natural and legal persons who own buildings for residential purposes (for use as hotels or housing).
- b) communities of owners or groups of owners of residential buildings used for housing.
- c) owners of single-family housing or individual owners of apartments in blocks.
- d) energy service companies.

More information is available at:

<http://www.boe.es/boe/dias/2013/10/01/pdfs/B0E-A-2013-10201.pdf>

<http://www.idae.es/index.php/id.745/mod.pags/mem.detalle>

c. Royal Decree 635/2013 of 2 August 2013 regulating the purchase of carbon offsets by the carbon fund for a sustainable economy during implementation of the 'Plan to Promote the Environment in the PIMA Sol hotel sector', for the renovation of systems to improve energy performance.

This provision covers the specific procedure by which the Carbon Fund for a Sustainable Economy will purchase CO₂ emission reductions, in the form of carbon offsets, achieved by tourist



accommodation as a result of refurbishment work that improves energy performance by two rating bands or achieves at least CO₂ emission band B.

The Plan to Promote the Environment PIMA SOL is a campaign designed to reduce greenhouse gas emissions (GGEs) in the Spanish tourist sector. It specifically promotes direct GGE reductions in hotel facilities achieved through renovation with a view to improving energy performance.

Through this plan, the Ministry of Agriculture, Food and Environment (MAGRAMA) purchases reductions in direct greenhouse gas emissions generated by hotels achieved through renovation projects, backed by a budget of EUR 5.21 million. The Plan is also funded by the European Investment Bank (EIB) which approved aid of EUR 200 million on 29 July 2013 through the Spanish banks, which will contribute an additional EUR 200 million under conditions with very advantageous interest rates and terms.

PIMA Sol beneficiaries are hotel facilities with renovation projects designed to improve energy performance that comply with the minimum conditions laid down in the Plan. Refurbishment projects must achieve a minimum energy improvement that translates into an increase of at least two energy rating bands or the attainment of at least band B.

The potential measures that can be introduced to achieve CO₂ emission reductions include actions on the envelope (facade and roof) and windows, improvements in insulation, introduction of climate control and lighting systems, systems for heating water using panels, passive climate control systems through architectural improvements, more efficient heating and cooling equipment, geothermal and biomass energy for climate control, efficient water-management systems and many other measures set out in the plan support documents.

For more information see:

<http://www.boe.es/boe/dias/2011/11/09/pdfs/BOE-A-2011-17631.pdf>

d. 'Climate Project' of the Ministry of Agriculture, Food and Environment (MAGRAMA)

The aim of the Climate Project is to promote a low carbon economy. The 2014 Climate Project call for proposals was launched on 15 February 2014, setting a deadline for the submission of project proposals due to enter into operation no later than 2015. This aid instrument was designed with the aim of reorienting economic activity toward low-carbon models while contributing to the achievement of international targets assumed by Spain with regard to greenhouse gas emission reduction.

More information is available at:

<http://www.boe.es/boe/dias/2011/11/09/pdfs/BOE-A-2011-17631.pdf>

<http://www.magrama.gob.es/es/cambio-climatico/temas/fondo-carbono/Convocatoria-2014-proyectos-clima.aspx>

e. 2013 and 2014 ICO aid line for the 'Refurbishment of housing and buildings', as part of the 2013 and 2014 'ICO enterprises and entrepreneurs' aid line.

The 2014 'ICO enterprises and entrepreneurs' aid line offers funding to the self-employed, enterprises and public and private entities, both Spanish and foreign, that implement productive investments within Spain. The part corresponding to refurbishment aims to meet the funding needs of individuals and property owners' associations, enabling them to undertake projects for the



refurbishment or renovation of their housing and buildings, communal spaces and housing. The operations are processed directly through Credit Institutes.

More information is available at:

<http://www.ico.es/web/ico/ico-empresas-y-emprendedores/-/lineasICO/view?tab=general>

4.3 EDUCATIONAL AND TRAINING MEASURES TO SUPPORT R&D&I

a. State plan for scientific and technical research and innovation 2013-2016

This Plan constitutes a framework for actions designed to promote and coordinate the process of R&D&I, ranging from the generation of ideas to their incorporation in the market in the form of new products and/or processes, improving quality of life, public welfare and contributing to economic development. This State Plan constitutes a Strategic Plan and is an instrument that allows the implementation of public policies introduced by general government for the promotion and coordination of R&D&I activities.

The drawing up of this Plan coincided with discussion over and drawing up of the future R&D&I action framework within the European Union, 'Horizon 2020', and thus with discussion over the great challenges and opportunities of EU and Member State R&D&I policies. The actions contained in the Plan are organised into four state programmes that in turn allow the development of special targets linked with the implementation and development of individual Plans. One such programme is the State R&D&I Programme aimed at the challenges of society, which in turn includes the challenges of 'Climate action, environment, resource efficiency and raw materials' and 'Secure, clean and efficient energy'.

One of the priority topics of R&D&I associated with the challenge of climate action, environment, resource efficiency and raw materials refers to the development of new products, technologies and processes that require lower energy consumption.

The specific target of the challenge for safe, efficient and clean energy is to promote the transition to an energy system that makes it possible to reduce dependency on fossil fuels within a scenario that simultaneously considers the scarcity of such fuels, the growth of demand at world level and the impact of that demand on the environment.

The priority R&D&I actions included in this challenge include those relating to sustainability for actively combating climate change, reducing greenhouse gas emissions and promoting the development of technologies for the geological collection and storage of CO₂ and energy sources – wind, solar, bioenergy, marine, geothermal, hydrogen and nuclear energy – and energy performance and a social and technological drive toward lower energy consumption patterns.

b. Cooperation in NZEB Congresses on nearly zero-energy buildings

In May 2012, the NZEB Congress on nearly zero-energy buildings organised by the Tecmared Group benefited from the support and active participation of the Ministry of Public Works as part of a package of government actions for the implementation and development of nearly zero-energy buildings in Spain.

More information is available at:



<http://www.construible.es/noticiasDetalle.aspx?id=9291&c=7&idm=11>

The Ministry of Public Works also cooperated in the preparation and development of the **Second NZEB Congress on nearly zero-energy buildings** that took place in Madrid on 6 and 7 May 2014 with the aim of serving as a means of education, cooperation and meeting between the various professionals concerned with building energy performance and thus promoting the implementation and development of nearly zero-energy buildings in Spain.

More information is available at:

<http://www.congreso-edificios-energia-casi-nula.es/>
<http://www.construible.es/articulos/ii-congreso-de-edificios-de-energja-casi-nula>

c. Nearly zero-energy building workshops

The Ministry of Public Works also participated in **Workshops I and II** organised by the Tecmared Group on 12 April 2013 and 13 September 2013 as part of a series of active and participative working events involving the most important professionals, institutions, associations, organisations and companies in various topics related to High Energy Performance Buildings. These events are organised in a format that allows delegates to work in an active and participative manner, discussing the current status of the concept of nearly zero-energy buildings in the sectors involved and analysing barriers and opportunities for their development.

More information is available at:

<http://www.construible.es/noticiasDetalle.aspx?id=11746&c=7&idm=11>
<http://www.construible.es/noticiasDetalle.aspx?id=14298&c=6&idm=10>

d. First World Meeting on Energy Performance in Buildings

This Congress took place on 21, 22 and 23 November 2013 and also involved the active participation of representatives of the Ministry of Public Works and the Ministry of Industry, Tourism and Trade and the support of the Institute for Energy Diversification and Saving (IDAE).

More information is available at:

<http://www.encuentroeme3.com/index.html>

e. Workshop for the European ENTRANZE project at the Madrid Official College of Architects

The Ministry of Public Works is cooperating actively in various activities with the Spanish member of the European ENTRANZE project, the National Centre for Renewable Energies, CENER. The aim of this project is to actively support the drawing up of policies by contributing data, analysis and guidelines in order to strengthen and accelerate the spread of NZEBs and RES-H/Cs throughout the existing building stock in all European countries and acting as a link between European experts in the field of research, those responsible for national energy policies and the main stakeholders involved with the aim of building an ambitious yet realistic roadmap toward this target.

The project therefore hinges around dialogue between responsible politicians and experts and focuses on nine countries, covering more than 60 % of buildings in EU-27. As part of this dialogue, various meetings have been held with CENER for this purpose and the Ministry of Public Works actively participated in the workshop organised by CENER entitled 'Development of policies to



promote the transition of Spanish property stock to nearly zero-energy buildings' that took place in November 2013 at the headquarters of the Madrid Official College of Architects.

f. Seminar to raise awareness of the new CTE DB-HE held by the Ministry of Public Works at CEDEX [Public Work Study and Research Centre] on 29 October 2013.

After the update to the CTE Basic Document on energy-saving – DB-HE – was approved by a Ministerial Order approved in September 2013, various dissemination and training actions were carried out, the most important of which was a seminar organised by the Ministry of Public Works at the CEDEX headquarters. The contents may be seen at the following link:

http://www.codigotecnico.org/web/actualidad/noticias/contenido/pie/texto_0039.html

g. Other seminars on the new energy requirements of the Building Technical Code

In the same way, the Ministry participated in seminars organised by professional Colleges such as the Madrid College of Architects (COAM) and the College of Technical Surveyors and Architects (COAT). Educational campaigns organised by the Institute for Energy Diversification and Saving (IDAE) should also be mentioned.



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**NATIONAL PLAN FOR INCREASING
THE NUMBER OF
NEARLY ZERO-ENERGY BUILDINGS IN SPAIN**

**Compliance with Article 9 of Directive 2012/31/EU
Report to the European Commission, June 2014**



Spanish government
Ministry of Public Works

1. Aim, motivation and contents

- **Aim**: to define legal and other types of measures (tax, incentives, support for R&D&I, training, etc.) that are being implemented in Spain to increase the number of nearly zero-energy buildings.
- **Motivation**: to meet the obligation established in Article 9 of Directive 2010/31/EU.
- **Contents**: (in line with the template sent by the Commission) the document contains:
 - current status of the building stock
 - definition of nearly zero-energy building
 - intermediate targets as of 2015 for improving the energy performance of buildings
 - regulatory energy performance requirements
 - quantitative targets
 - strategy adopted, with enumeration and description of measures (legislative or regulatory, financial, and economic incentives, support for R&D&I, education and training)



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2. Contents (I)

- **Current status of building stock**
- This includes:
 - **A description of the Spanish building stock**
 - **A timeline of technical regulations** relating to energy performance in buildings

Both of these were taken from information included in the long-term strategy for renovation with a view to energy saving in the Spanish building sector (Article 4 of Directive 2012/27/EU).



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2. Contents (II)

- **Definition of nearly zero-energy building**
 - It is noted that **Spain** (like most European countries) **has not yet issued a regulatory definition of the concept of nearly zero-energy buildings (NZEB).**
 - A plan was issued for the harmonising of regulations to the concept of the NZEB, which consists of two stages:
 - **intermediate stage to 2015:** updating of energy performance technical regulation (**already carried out in 2013** with updating of the Basic Document on energy-saving, the Regulation on Building Heating Systems and Building Energy Certification)
 - **final stage to 2018:** this will define the NZEB concept in the regulations and establish an obligation for all new buildings to be NZEB from 31 December 2020 (31 December 2018 for new public authority buildings). **Direct obligation stemming from Directive 2010/31/EU**



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2. Contents (III)

- **Intermediate objectives to 2015 for improving the energy performance of buildings**

- Energy performance regulatory requirements:

A **detailed description was drawn up of changes introduced with regard to energy performance in technical regulations approved during 2013**, mainly the Basic Document on energy-saving.

- Quantitative targets to 2015

The **stock of unsold housing** is reported to be currently **very high**, meaning that **the number of new homes currently being built in Spain** and those that it is predicted will be built in a few years is **practically negligible**. This means that the **impact of regulatory changes** introduced in 2013 **is estimated to be relatively limited as of 2015 and no quantitative estimate is provided**.



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2. Contents (VI)

- **Strategy**
- The **measures** (legislative or regulatory, financial, and economic incentives, support for R&D&I, educational and training) **implemented in recent years with the aim of improving the energy performance of buildings** in Spain are **set out and briefly described**.

This information was **taken from information included in the long-term strategy for renovation with a view to energy saving in the Spanish building sector** (Article 4 of Directive 2012/27/EU).



Spanish government Ministry of Public Works 3. Summary

- **The plan includes** (based on the template sent by the Commission):
 - Information on the **current status of the building stock, changes in the regulations and strategic measures adopted for energy performance, which has been taken from information included in the long-term strategy for renovation with a view to energy saving in the Spanish building sector** (Article 4 of Directive 2012/27/EU).
 - **Intermediate regulatory targets as of 2015 are those approved by the government during 2013, which entered into force between 2013 and 2014.**
 - a regulatory updating plan that does not include any binding commitment beyond that of defining the concept of NZEB in the regulations and establishing the obligation that all new buildings should be NZEB from 31 December 2020 (31 December 2018 for new buildings owned by public authorities), which is a **direct obligation specifically established in Directive 2010/31/EU (Article 9).**



Spanish government Ministry of Public Works 3. Conclusions

Conclusion:

The Plan meets an **obligation established in Directive 2010/31/EU** (Article 9) and is limited to reporting on the current situation and actions carried out in recent years with regard to energy performance (regulations and strategies) **not including any binding commitment beyond the direct obligations specifically established in the above Directive.**