Piraeus, 19 November 2014



# 2011 POPULATION AND HOUSING CENSUS

## Amenities of Dwellings / Households

After having completed the processing and checking of all the variables included in the questionnaires of the 2011 Population and Housing Census, the Hellenic Statistical Authority announces further information on the amenities of dwellings/households.

It should be noted that ELSTAT has already announced in relevant press releases data on dwellings (number, type, occupancy status, period of construction, useful floor space, number of rooms, water supply system, type of heating) and households (type, size, number of nuclear families, occupancy status of the dwelling).

It should be stressed that during the 2011 Population and Housing Census, ELSTAT collected for the first time and it is publishing data on the variables that are presented below.

## A. DWELLINGS

## Insulation of dwellings

Available data deriving form the 2011 Population and Housing Census indicate that out of the total of conventional dwellings of Greece, 3.468.307 dwellings (54,4%) have some type of insulation, while 2.903.594 dwellings (45,6%) have no insulation at all.

Table 1 below presents the dwellings of Greece by type of building and insulation.

## Table 1. Conventional dwellings by type of building and type of insulation

		Type of building where the dwelling is located										
Type of insulation	Total	One-dwelling building		Two-dwelling	building	Multi-dwo buildii		Non-residential building				
		Total	%	Total	%	Total	Total %		%			
GREECE TOTAL	6.371.901	2.457.437	100,0	1.049.001	100,0	2.846.083	100,0	19.380	100,0			
1. Insulation	3.468.307	1.138.794	46,3	613.046	58,4	1.705.694	59,9	10.773	55,6			
Double glazed windows	1.655.254	468.935	41,2	292.515	47,7	889.118	52,1	4.686	43,5			
External wall insulation	401.875	146.722	12,9	73.399	12,0	180.537	10,6	1.217	11,3			
Other	321.709	191.728	16,8	50.688	8,3	77.989	4,6	1.304	12,1			
Double glazed windows and external walls insulation	918.601	261.670	23,0	162.504	26,5	491.474	28,8	2.953	27,4			
Double glazed windows and other type of insulation	62.799	27.773	2,4	13.121	2,1	21.692	1,3	213	2,0			

			-	Type of buildir	ng where	the dwelling is	s located		
Type of insulation	Total	One-dwelling building		Two-dwelling building		Multi-dwelling building		Non-residential building	
		Total	%	Total	%	Total	%	Total	%
External walls insulation and other type of insulation	21.706	9.610	0,8	4.155	0,7	7.855	0,5	86	0,8
Double glazed windows, external walls insulation and other type of insulation	86.363	32.356	2,8	16.664	2,7	37.029	2,2	314	2,9
2. No insulation	2.903.594	1.318.643	53,7	435.955	41,6	1.140.389	40,1	8.607	44,4

Note: data refer to thermal insulation

By further analyzing the available data, it is observed that 59,2% of the occupied conventional dwellings have some type of insulation, while 40,8% have no insulation at all.

In contrast, as regards vacant conventional dwellings, the biggest share of them, 54,3%, has no insulation and 45,7% of them has some type of insulation.

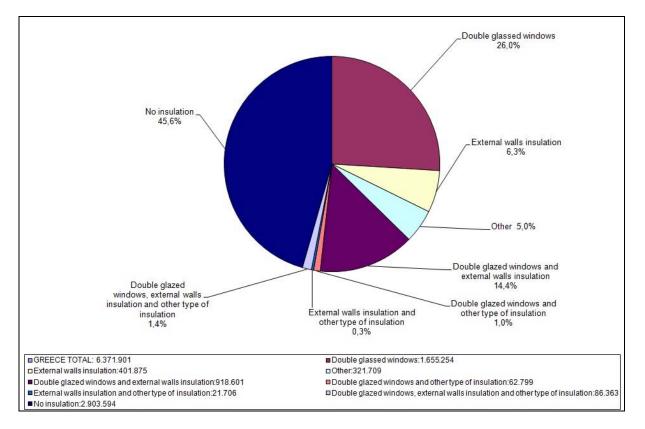
Table 2 depicts the percentage distribution of conventional dwellings by type of insulation and Region (NUTS 2).

Table 2. Conventional dwellings by type of insulation and by Region										
					Type of ir	sulation (	(in percen	t)		
Region (NUTS 2)	Total of dwellings	Double glazed windows	External walls insulation	Other	Double glazed windows and external walls insulation	Double glazed windows and other type of insulation	External walls insulation and other type of insulation	Double glazed windows, external walls insulation and other type of insulation	No insulation	All types of insulation
GREECE TOTAL	6.371.901	26,0	6,3	5,0	14,4	1,0	0,3	1,4	45,6	100,0
ANATOLIKI MAKEDONIA, THRAKI	340.085	32,5	3,9	4,8	15,3	1,2	0,3	1,4	40,5	100,0
KENTRIKI MAKEDONIA	1.074.242	36,4	4,1	5,1	14,3	1,9	0,4	1,8	36,1	100,0
DYTIKI MAKEDONIA	159.230	28,8	5,8	5,1	18,7	1,5	0,4	2,2	37,7	100,0
IPEIROS	204.577	26,2	5,6	7,1	12,9	1,2	0,3	1,3	45,3	100,0
THESSALIA	395.842	25,9	5,9	6,1	14,1	0,8	0,2	0,9	46,0	100,0
STEREA ELLADA	357.934	22,7	7,5	7,2	13,8	1,0	0,5	1,2	46,1	100,0
IONIA NISIA	160.106	17,8	7,9	6,2	10,9	0,4	0,3	0,5	55,9	100,0
DYTIKI ELLADA	388.791	21,1	7,8	6,9	11,2	0,5	0,4	1,0	51,0	100,0
PELOPONNISOS	410.109	19,6	6,8	7,0	11,4	0,5	0,3	0,7	53,6	100,0
ΑΤΤΙΚΙ	2.118.743	24,4	7,2	3,4	17,3	0,8	0,3	1,6	45,0	100,0
VOREIO AIGAIO	151.332	20,4	6,7	6,2	8,2	0,5	0,2	0,4	57,4	100,0
NOTIO AIGAIO	229.667	19,2	7,9	5,5	8,5	0,5	0,4	0,8	57,1	100,0
KRITI	381.243	23,1	6,1	4,6	11,9	0,8	0,3	1,1	52,1	100,0

Table 2. Conventional dwellings by type of insulation and by Region

Furthermore, as regards the breakdown of data by Regional Unit, it is observed that the Regional Unit with the biggest share of dwellings having some type of insulation is Pieria, with 71,5%, while Karpathos accounts for the biggest share of dwellings with no insulation, with 78,8%.

The following graph 1 illustrates the percentage distribution of types of thermal insulation of conventional dwellings.



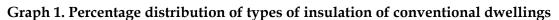


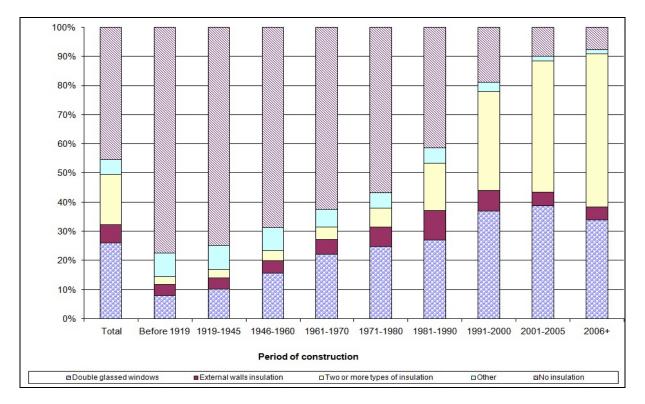
Table 3 below presents the type of insulation of conventional dwellings by period of construction.

Type of insulation	Total	Before 1919	1919-1945	1946-1960	1961-1970	1971-1980	1981-1990	1991-2000	2001-2005	2006+
GREECE TOTAL	6.371.901	163.759	318.372	605.693	1.002.902	1.437.424	1.049.931	806.977	539.009	447.834
Double glazed windows	1.655.254	12.926	32.445	93.885	221.390	354.369	282.683	298.083	208.013	151.460
External wall insulation	401.875	6.326	12.238	26.334	50.735	97.875	106.821	55.988	25.926	19.632
Other	321.709	13.027	26.637	47.006	60.511	77.522	56.116	25.141	9.492	6.257
Double glazed windows and external walls insulation Double glazed windows and	918.601	2.563	4.957	12.800	27.369	66.325	138.544	240.343	216.058	209.642
other type of insulation	62.799	817	1.801	5.152	9.687	13.736	11.051	10.008	5.915	4.632
External walls insulation and other type of insulation	21.706	637	933	1.574	2.440	4.742	6.227	2.831	1.236	1.086
Double glazed windows, external walls insulation and other type of insulation	86.363	389	877	1.704	3.364	6.624	13.238	21.208	18.774	20.185
No insulation	2.903.594	127.074	238.484	417.238	627.406	816.231	435.251	153.375	53.595	34.940

#### Table 3. Conventional dwellings by type of insulation and period of construction

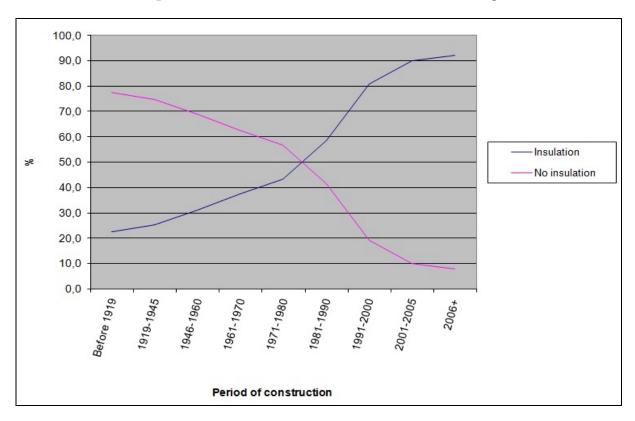
**Note:** The period of construction refers to the period of initial construction or radical reconstruction of the dwelling. *Radical reconstruction* shall mostly mean the reconstruction of the carcass, walls or roof, which significantly adds to the stability and usefulness of the dwelling. Simple coatings, external or internal, are not considered as radical reconstruction. In cases of successive additions in volume or surface in one dwelling, the year of construction is the year of the first construction, if the addition is smallest in surface area or volume than the existing built parts. Otherwise, the year of construction is the year of the addition. For example, as regards a dwelling at ground level, built in 1958 to which a floor was added in 1974, the year of construction is considered the year 1958. Yet, if two floors were added, the period of construction is considered the year 1974.

The following graph 2 illustrates the types of insulation used by period of construction of conventional dwellings.



Graph 2. Percentage distribution of types of insulation of conventional dwellings

Graph 3 below depicts the evolution of the use of insulation with regard to the period of construction of conventional dwellings in Greece.



Graph 3. Evolution of the use of insulation in dwellings

On the basis of the information provided in the above graph, the biggest share of dwellings (56,8%) which were built before 1981 have no insulation. From 1981 onwards, an opposite trend is observed and the vast majority of conventional dwellings built after 2006 (92,2%) have some type of insulation.

#### **B. HOUSEHOLDS**

#### 1. Energy sources

Available Census data indicate that: 3.842.325 households (92,9%) reported using electricity for cooking, 2.756.083 households (66,7%) reported using heating oil for heating and 2.047.645 households (49,5%) use electricity for hot water.

The following table 4 presents the percentage distribution of the main energy source which is used by households for cooking, heating and hot water.

Source of energy used	Percentage distribution of households by source of energy used for :						
	Cooking	Heating	Hot water				
Greece total	100,0	100,0	100,0				
Electricity	92,9	8,7	49,5				
Natural gas	0,6	8,5	4,1				
Heating oil	0,1	66,7	10,1				
Solar energy	0,0	0,2	32,7				
Biomass	0,8	5,7	1,0				
Other	5,3	5,5	2,4				
No source of energy	0,3	4,8	0,1				

## Table 4. Percentage distribution of households by main source of energy used

## 2. Cars and car parking spaces available to the household

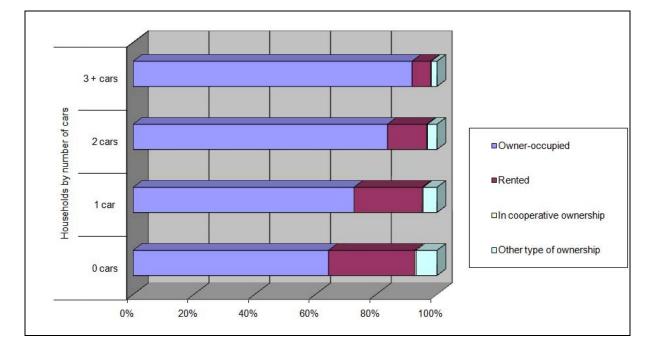
As already announced by ELSTAT, the total number of households in Greece is 4.134.540. Out of these households, 1.255.683 (30,4%) have no car, 1.881.231 (45,5%) households have one (1) car, 839.035 (20,3%)households have two (2) cars and 158.591 (3,8%) households have more than two (2) cars.

As regards the car parking spaces available to the households, out of the total number of households 2.727.304 (66,0%), households have no car parking spaces, 1.066.490 (25,8%) households have one (1) car parking place, 288.186 (7,0%) households have two (2) car parking spaces, while 52.560 (1,3%) households have more than three (3) car parking spaces.

4,6% of households with no car have at least one parking place available to them, while 46,9% of households with one or more cars have at least one car parking place available to them. 53,1% of households with at least one car have no car parking place.

The smallest average number of cars per household is recoded in the Regional Unit of Sporades, with 0,7 cars/household, while the biggest one is recorded in Anatoliki Attiki, with 1,4 cars/household.

Graph 4 below presents the number of cars available to the households according to the tenure status of their dwelling.





#### 3. Internet access

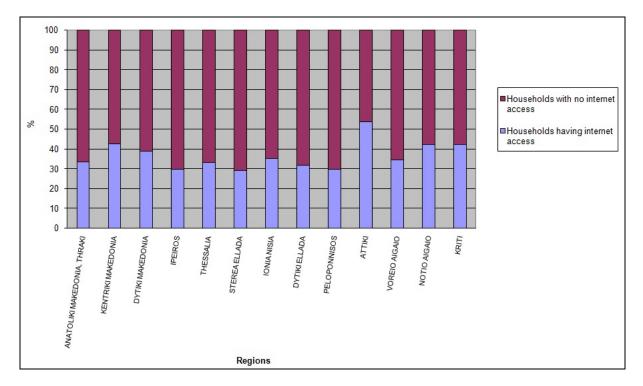
Table 5 below presents internet access of households in relation with the type of household and the type of family nucleus.

		% of household:			
Type of household and family nucleus	Total of households	having internet access	no internet access		
GREECE TOTAL	4.134.540	42,9	57,1		
Households with one family nucleus	2.835.987	48,4	51,6		
Married couple without children	845.925	23,7	76,3		
Married couple with child/children	1.502.871	62,3	37,7		
Partners without children	57.444	61,2	38,8		
Partners with child/children	10.884	49,1	50,9		
Lone father with child/children	63.519	42,5	57,5		
Lone mother with child/children	355.344	47,4	52,6		
Households with two or more family nuclei	91.303	40,4	59,6		
Households without any family nuclei (1)	1.207.250		69,9		

 Table 5. Internet access by type of household and type of family nucleus

 one-person households, or households whose members are not related as husband and wife, as partners in a consensual union, or as parent and child, e.g., two friends living together

Graph 5 below depicts internet access of households by Region (NUTS2).



Graph 5. Internet access of households by Region

Furthermore, as regards the breakdown of data by Regional Unit, it is observed that North Section of Athens accounts for the biggest share of households with internet access (65,2%),

while the smallest share of households with internet access is recoded in Evrytania (only 13,4%).

#### 4. Recycling

51% of the total of households recycles their waste. The average rate of recycling per household in Greece amounts to 16,8%.

According to the Environmental Data Centre on Waste of Eurostat, for 2011, high recycling rates are recorded in Germany (45%), Ireland (37%) and Belgium (36%). Italy with 21%, and Greece and Spain with 15% are ranked approximately in the middle, while low recycling rates are observed in Romania (1%), Bulgaria (3%) and Malta (7%). These data refer to recycling of municipal waste, i.e., waste generated mostly by households, but they may also include waste generated by small enterprises. For this reason, these data are not fully comparable with the corresponding data of the 2011 Population and Housing Census.

The biggest share of recycling, 22,5%, is recorded in households with members whose average age is 20-29 years old. The smallest share of recycling, 11,3%, is observed in household with members whose average age is 60-69 years old.

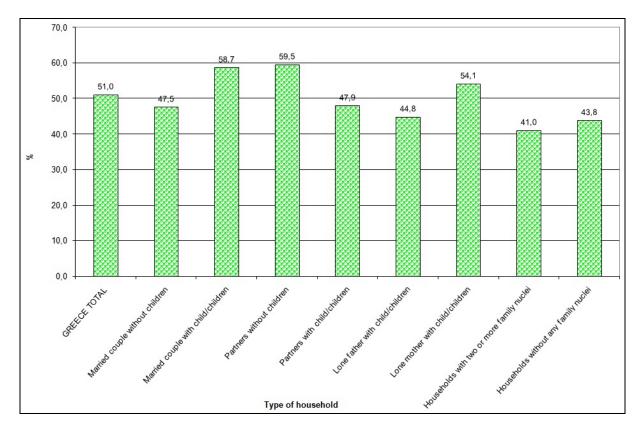
Table 6 below presents data on the recycling of waste according to the average age of household members.

	Tatal of	Households th wa	Households that do		
Average age of household members	Total of households	households	Average recycling(%)	not recycle their waste	
GREECE TOTAL	4.134.540	2.110.306	33	2.024.234	
Aged less than 20 years old	208.196	101.669	33,3	106.527	
20-29	820.168	474.667	33,9	345.501	
30-39	771.982	458.196	34	313.786	
40-49	576.732	325.807	33,4	250.925	
50-59	497.382	254.924	32,5	242.458	
60-69	514.631	239.026	31,8	275.605	
70+	745.449	256.017	30,4	489.432	

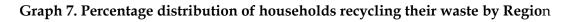
#### Table 6. Recycling of waste by average age of household members

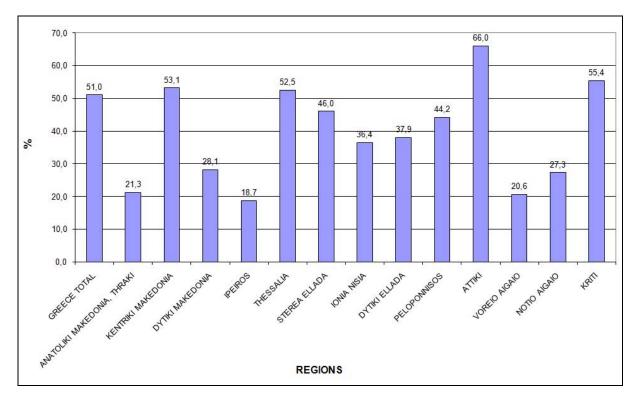
The following graph depicts the distribution of households that recycle their waste by type of household.

# Graph 6. Percentage distribution of households that recycle their waste by type of household



Graph 7 depicts the share of households that recycle their waste by Region (NUTS2).





Furthermore, as regards the breakdown of data by Regional Unit, the largest share of households recycling their waste is recorded in the Regional Unit of North Section of Athens with 81,1%, followed by Syros and South Section of Athens with 75,3%. The lowest shares of households recycling their waste are recorded in Karpathos, with 1,5%, and in Thasos, with 1,6%.

More detailed data on the amenities of dwellings and households, at the level of the Region, are available on the website of ELSTAT, at the following link: http://www.statistics.gr/portal/page/portal/ESYE/PAGE-cencus2011tables

Moreover, users can submit an electronic request for statistical data through the website of ELSTAT to the following address:

http://www.statistics.gr/pls/apex/f?p=106:1030:2187882931022369::NO:::

## METHODOLOGICAL NOTE

## 1. Legal framework

The conduct of the General Censuses of Population-Housing and Buildings is provided for in article 10 of the Law 3832/2010 "*Hellenic Statistical System (ELSS) Establishment of the Hellenic Statistical Authority (ELSTAT) as an independent authority*".

In particular, the 2011 Censuses of Buildings and of Population – Housing were conducted on the basis of Presidential Decree 168 (Government Gazette 223, issue A/2008) and in compliance with the methodological principles of Regulation (EC) 763/2008 of the European Parliament and of the Council and its implementing Regulations related to Population and Housing Censuses, the Joint Ministerial Decision 1524/ $\Gamma$ 5-473 (Government Gazette 425, issue B/2011) and its amendment (Government Gazette 783, issue B/2011), and with the Legislative Act relating to the Conduct of the Population-Housing Census (Government Gazette 106 issue A/2011), as it was ratified by the Law 3995/2011 (Government Gazette 166 issue A/2011).

#### 2. Purpose

The purpose of the General Censuses is to collect data on the Resident Population of the Country, the demographic, economic and social characteristics of the population, their housing conditions and the characteristics of their dwellings, along with data on the stock of buildings of the Country.

## 3. Useful concepts -basic definitions

- **3.1 Conventional dwelling**: it is a permanent and independent structure that consists of at least one regular room and it is intended to be used as a dwelling of a household for at least one year.
- **3.2 Household:** is defined as the total number of persons permanently residing in a dwelling, conventional or not, irrespective of whether they are relatives or not.
- **3.3 Nuclear Family:** A nuclear family is defined as two or more persons who live in the same household and who are related as husband and wife, as cohabiting partners, or as parent and child. Thus, a nuclear family comprises a couple without children, or a couple with one or more children, or a lone parent with one or more children.