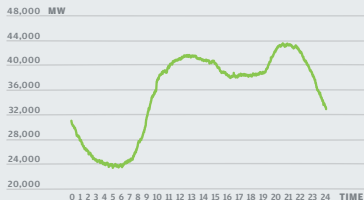


2012

The Spanish Electricity System Summary



RED ELÉCTRICA DE ESPAÑA

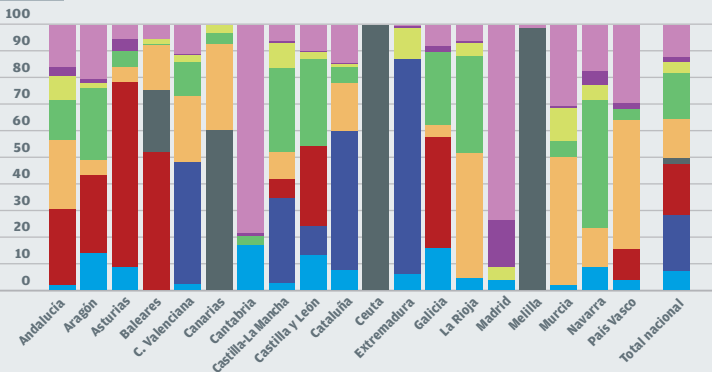
ELECTRICITY BALANCE (GWh)

	Andalucía	Aragón	Asturias	Baleares	C. Valenciana	Canarias	Cantabria	Castilla-La Mancha	Castilla y León	Cataluña
Hydroelectric	809	1,919	1,031	0	1,209	0	643	400	5,299	2,852
Nuclear	0	0	0	0	9,378	0	0	8,502	3,873	24,068
Coal (1)	11,529	5,303	10,836	2,941	0	0	0	2,004	11,195	0
Fuel / gas (2)	0	0	0	1,322	0	5,757	0	0	0	0
Combined Cycle	10,001	972	802	944	4,904	2,974	0	2,625	0	8,307
Ordinary regime	22,339	8,194	12,669	5,207	15,492	8,731	643	13,531	20,368	35,227
Generation consumption	-882	-523	-818	-349	-510	-466	-9	-892	-1,100	-1,514
Special regime	16,583	8,938	2,499	391	5,257	627	1,816	12,327	16,016	10,276
Net production	38,040	16,609	14,350	5,249	20,239	8,891	2,449	24,966	35,284	43,990
Pumped storage consumption	-435	-352	-52	0	-1,114	0	-796	-156	-1,401	-381
Energy exchange balance (3)	-1,067	-6,177	-4,195	570	6,991	0	2,930	-13,216	-19,700	5,876
Demand (b.c.) 2012 (4)	36,539	10,080	10,103	5,819	26,115	8,891	4,583	11,593	14,182	49,485
Demand (b.c.) 2011	37,409	10,170	10,577	5,743	26,730	8,870	4,687	12,501	14,357	49,506
% 12/11	-2.3	-0.9	-4.5	1.3	-2.3	0.2	-2.2	-7.3	-1.2	-0.04

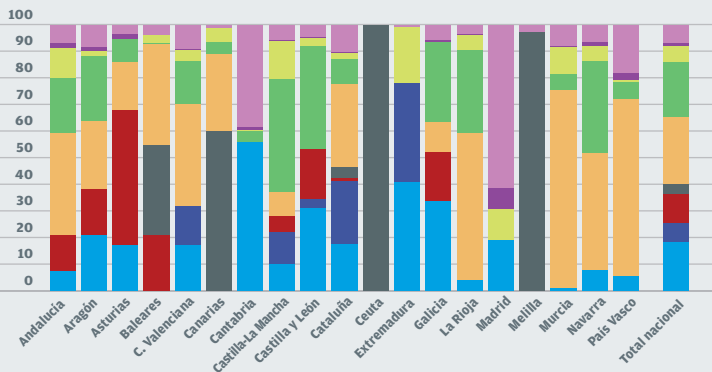
	Ceuta	Extremadura	Galicia	La Rioja	Madrid	Melilla	Murcia	Navarra	País Vasco	Total
Hydroelectric	0	1,107	3,730	65	24	0	73	93	200	19,455
Nuclear	0	15,649	0	0	0	0	0	0	0	61,470
Coal (1)	0	0	12,827	0	0	0	0	0	1,027	57,662
Fuel / gas (2)	232	0	0	0	0	230	0	0	0	7,541
Combined Cycle	0	0	1,343	1,342	0	0	3,185	863	4,248	42,510
Ordinary regime	232	16,756	17,900	1,407	24	230	3,258	956	5,475	188,638
Generation consumption	-20	-615	-683	-32	0	-15	-88	-31	-192	-8,739
Special regime	0	2,365	12,020	1,384	1,646	2	3,242	4,634	3,149	103,172
Net production	212	18,506	29,236	2,760	1,669	217	6,413	5,560	8,433	283,071
Pumped storage consumption	0	-15	-320	0	0	0	0	0	0	-5,023
Energy exchange balance (3)	0	-14,247	-8,914	-1,057	28,943	0	1,275	-610	11,399	-11,200
Demand (b.c.) 2012 (4)	212	4,244	20,002	1,703	30,612	217	7,687	4,949	19,832	266,849
Demand (b.c.) 2011	203	4,486	20,262	1,707	30,819	215	7,783	5,081	19,557	270,662
% 12/11	4.5	-5.4	-1.3	-0.3	-0.7	1.1	-1.2	-2.6	1.4	-1.4

(1) As of 1 January 2011, GICC (Elcogás) has been included in the National coal figures as, in accordance with Royal Decree 134/2010, this power station is obliged to participate, as a selling unit that uses local coal as fuel, in the process of resolving restrictions regarding the guarantee of supply. (2) Generation by auxiliary units is included in the Balearic Island electricity system. (3) Provisional value. Includes values corresponding to intra-national and international energy exchange balances. Positive values indicate an import exchange balance and negative values show an export exchange balance. (4) Measured at power station busbars.

STRUCTURE OF NET PRODUCTION BY POWER STATION TYPE (%)



STRUCTURE OF INSTALLED POWER BY POWER STATION TYPE (%)



■ Hydroelectric
 ■ Nuclear
 ■ Coal
 ■ Fuel/gas
 ■ Combined cycle
 ■ Wind
 ■ Solar (1)
 ■ Renewable thermal
 ■ Cogeneration and others

(1) Includes solar photovoltaic and thermoelectric.

INSTALLED POWER AS AT 31.12.2012. SPANISH PENINSULA ELECTRICITY SYSTEM

11.0 %

Coal

7.7 %

Nuclear

19.4 %

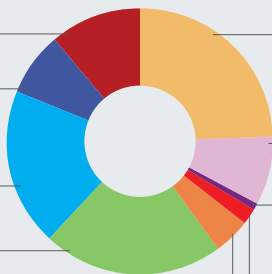
Hydroelectric (1)

22.2 %

Wind

4.2 %

Solar photovoltaic



24.9 %
Combined cycle

7.6 %
Cogeneration and others (2)

0.9 %
Renewable thermal

2.0 %
Solar thermolectric

(1) Includes power obtained from pumped storage (2,747 MW). (2) Includes non-renewable thermal and fuel/gas.

ANNUAL DEMAND COVERAGE OF PENINSULAR ELECTRICITY SYSTEM

19.3 %

Coal

22.1 %

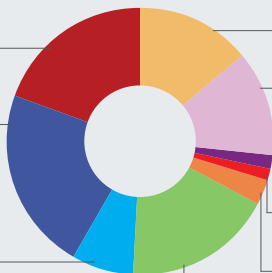
Nuclear

7.7 %

Hydroelectric (1)

18.1 %

Wind



14.1 %
Combined cycle

12.7 %
Cogeneration and others (2)

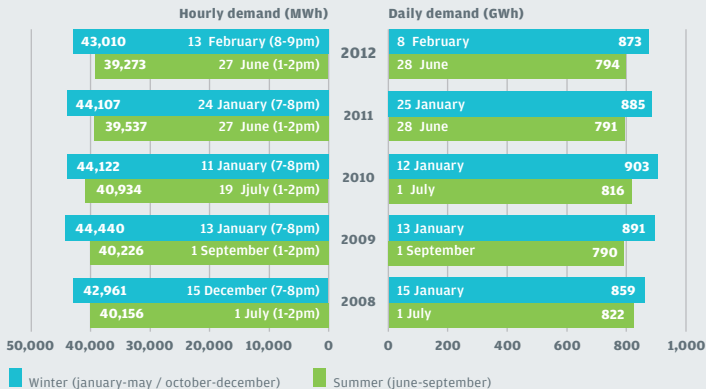
1.8 %
Renewable thermal

1.3 %
Solar thermolectric

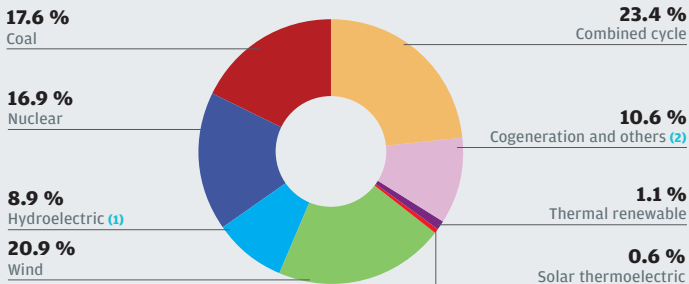
2.9 %
Solar photovoltaic

(1) Does not include pumped storage generation. (2) Includes non-renewable thermal and fuel/gas.

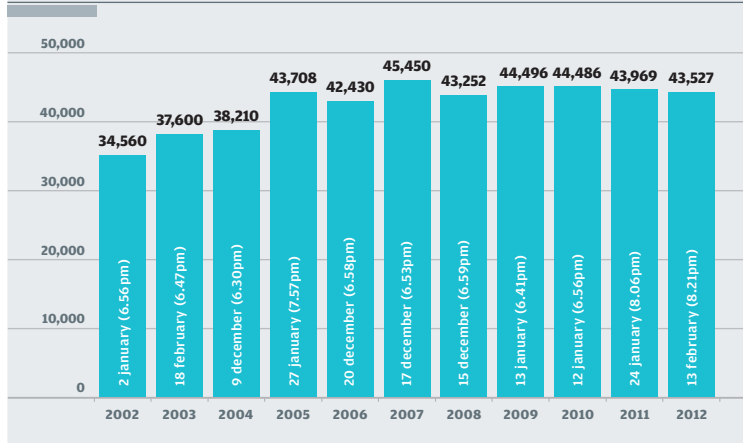
PENINSULAR MAXIMUM HOURLY AND DAILY ELECTRICITY DEMAND



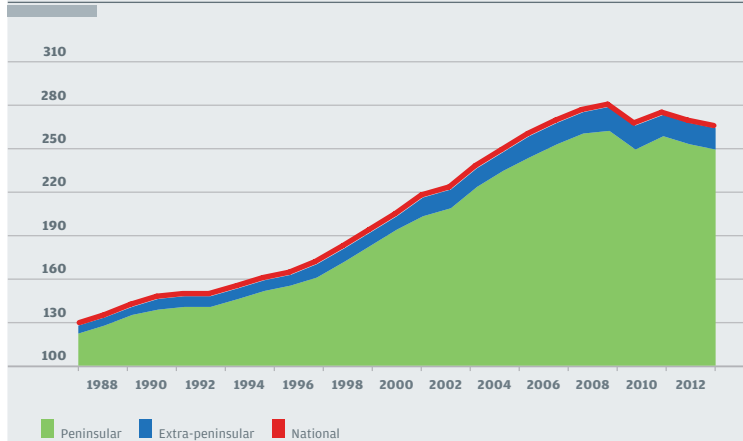
COVERAGE OF PENINSULAR MAXIMUM HOURLY DEMAND 43,010 MWh 13 february 2012 (8:00pm-9:00pm)



PENINSULAR INSTANTANEOUS PEAK POWER DEMAND (MW)



EVOLUTION OF ELECTRICAL ENERGY DEMAND (TWh)



ANNUAL EVOLUTION OF SPANISH PENINSULA ELECTRICAL ENERGY DEMAND AND GDP

	Demand			GDP
	GWh	Δ (%)	Δ by economic activity (%)	
2008	265,206	1.1	0.7	0.9
2009	252,660	-4.7	-4.7	-3.7
2010	260,530	3.1	2.7	-0.3
2011	255,631	-1.9	-1.0	0.4
2012	251,710	-1.5	-2.0	-1.4

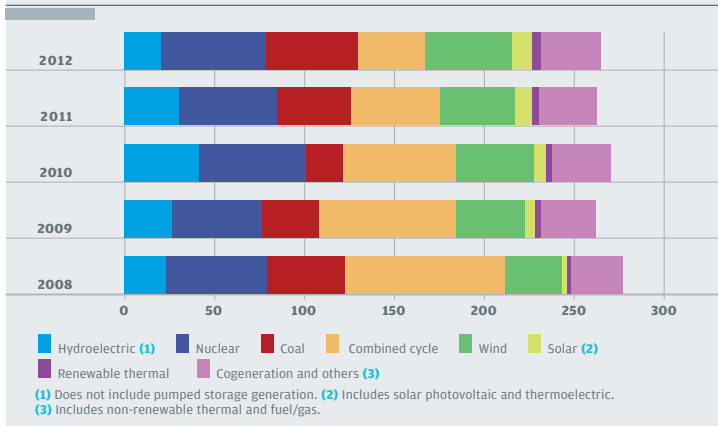
Δ Variation with respect to previous year.

ANNUAL EVOLUTION OF THE EXTRA-PENINSULAR ELECTRICAL ENERGY DEMAND

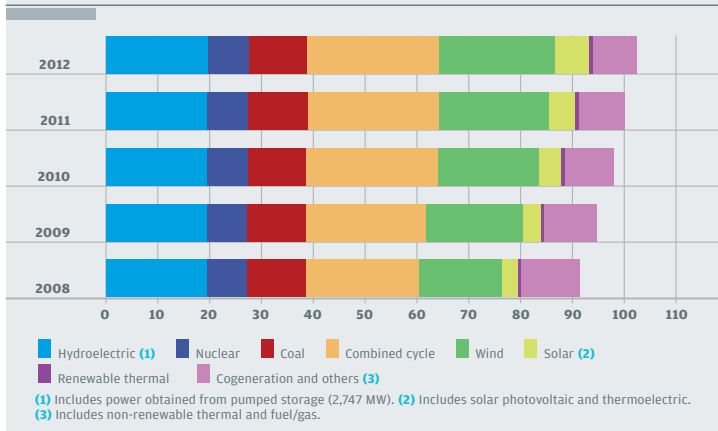
	Balearic Islands		Canary Islands		Ceuta		Melilla	
	GWh	Δ (%)	GWh	Δ (%)	GWh	Δ (%)	GWh	Δ (%)
2008	6,122	2.4	9,333	1.3	210	3.5	201	4.2
2009	5,993	-2.1	9,107	-2.4	212	0.9	206	2.4
2010	5,840	-2.5	8,895	-2.3	218	2.8	213	3.6
2011	5,743	-1.7	8,870	-0.3	203	-6.7	215	0.7
2012	5,819	1.3	8,891	0.2	212	4.5	217	1.1

Δ Variation with respect to previous year.

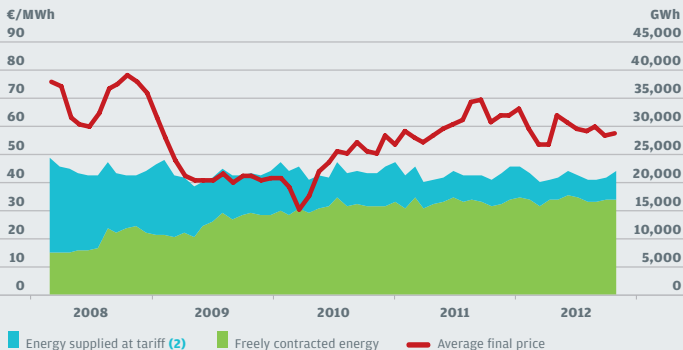
ANNUAL EVOLUTION OF THE PENINSULAR NET PRODUCTION STRUCTURE (TWh)



ANNUAL EVOLUTION OF PENINSULAR INSTALLED POWER (GW)

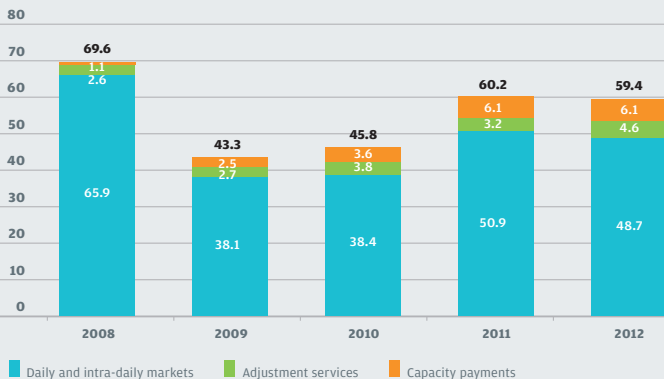


EVOLUTION OF MONTHLY ENERGY AND PRICES IN THE ELECTRICITY MARKET (1)



(1) National demand data. (2) Royal Decree 485/2009, of 3 April, determines the suspension of integral tariffs as of 1 July 2009 and the introduction of a last resort tariff.

EVOLUTION OF THE COMPONENTS OF THE AVERAGE FINAL PRICE IN THE ELECTRICITY MARKET (€/MWh)



ENERGY MANAGED IN THE PENINSULAR SYSTEM ADJUSTMENT SERVICES (GWh)

	2011		2012		% 12/11	
	Increase	Decrease	Increase	Decrease	Increase	Decrease
Supply guarantee restrictions (1)	12,773	-	12,008	-	-6.0	-
Technical restrictions (DBFP) (2)	9,998	228	6,162	61	-38.4	-73.3
Reserve power (3)	-	-	1,635	-	-	-
Secondary control band (4)	716	526	709	522	-1.0	-0.8
Secondary control	1,213	1,514	1,510	1,262	24.6	-16.6
Tertiary control	2,694	2,591	2,992	2,330	11.1	-10.1
Deviation management	1,775	2,046	2,658	1,232	49.8	-39.8
Restrictions in real time (5)	657	509	633	484	-3.7	-5.0

(1) Increased energy in phase 1 of the supply guarantee restrictions (RD 134/2010 modified by RD 1221/2010) (P.O.3.10). (2) Increased or reduced energy in phase 1 of the technical resolution restrictions of the DBFP (Daily Basic Functioning Program) (P.O.3.2). (3) Total annual reserve (GW). (4) Average hourly power band (MW).

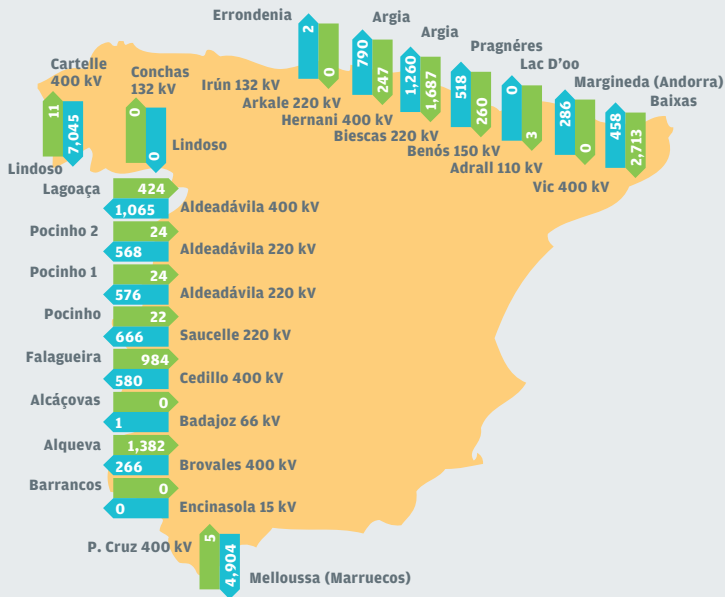
(5) Does not include redispatching of energy from the Peninsular power system - Balearic power system interconnection.

AVERAGE WEIGHTED PRICE IN THE SYSTEM ADJUSTMENT SERVICES (€/MWh)

	2011		2012		% 12/11	
	Increase	Decrease	Increase	Decrease	Increase	Decrease
Supply guarantee restrictions (1)	83.1	-	89.4	-	7.6	-
Technical restrictions (DBFP) (2)	94.1	58.4	129.9	54.9	38.0	-6.0
Reserve power (3)	-	-	39.7	-	-	-
Secondary control band (3)	15.9		28.1		76.8	
Secondary control	51.6	33.3	51.0	32.9	-1.2	-1.4
Tertiary control	58.0	24.5	59.7	22.2	3.0	-9.4
Deviation management	54.3	29.8	60.2	27.4	11.0	-8.2
Restrictions in real time (4)	130.0	23.0	231.3	22.2	78.0	-3.4

(1) Increased energy in phase 1 of the supply guarantee restrictions (RD 134/2010 modified by RD 1221/2010) (P.O.3.10). (2) Increased or reduced energy in phase 1 of the technical resolution restrictions of the DBFP (Daily Basic Functioning Program) (P.O.3.2). (3) Total annual reserve (GW). (4) Does not include redispatching of energy from the Peninsular power system - Balearic power system interconnection.

MAP OF INTERNATIONAL PHYSICAL ENERGY EXCHANGES (GWh)

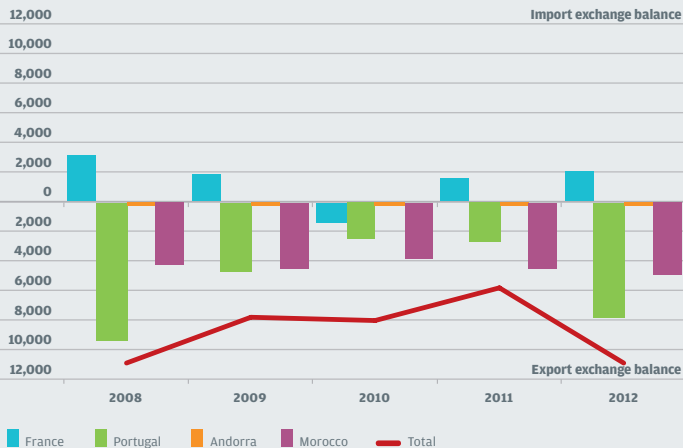


INTERNATIONAL PHYSICAL ENERGY EXCHANGES BY INTERCONNECTION (GWh)

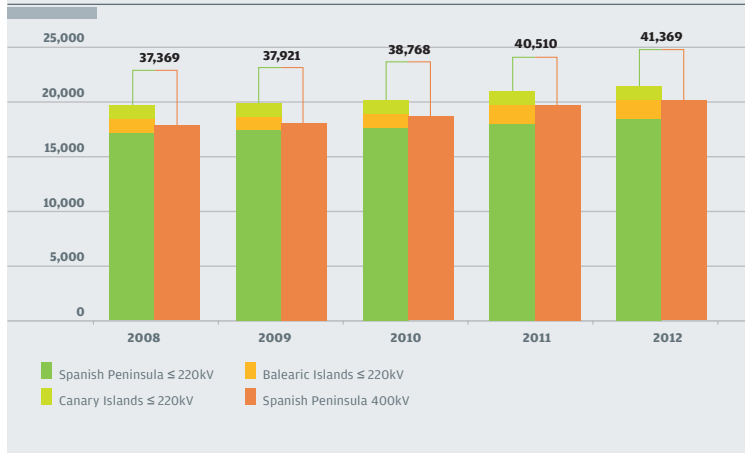
	Input		Output		Balance (1)	
	2011	2012	2011	2012	2011	2012
France	3,987	4,911	2,463	3,028	1,524	1,883
Portugal	3,930	2,871	6,744	10,768	-2,814	-7,897
Andorra	0	0	306	286	-306	-286
Morocco	16	5	4,510	4,904	-4,495	-4,900
Total	7,932	7,786	14,023	18,986	-6,090	-11,200

(1) Positive values indicate an import exchange balance and negative values indicate an export exchange balance.

EVOLUTION OF THE INTERNATIONAL PHYSICAL ENERGY EXCHANGES BALANCE (GWh)



TRANSMISSION GRID EVOLUTION IN SPAIN (km)

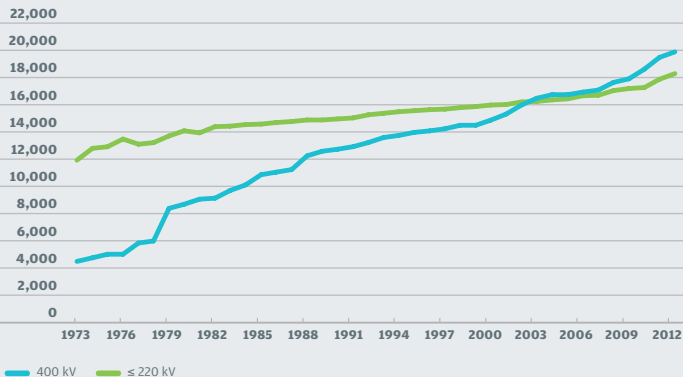


TRANSMISSION GRID FACILITIES IN SPAIN

	400 kV		≤ 220 kV		Total
	Spanish Peninsula	Spanish Peninsula	Balearic Islands	Canary Islands	
Total lines (km)	20,104	18,429	1,544	1,293	41,369
Overhead lines (km)	20,049	17,757	1,089	1,023	39,918
Submarine cable (km)	29	236	306	30	601
Underground cable (km)	26	436	149	240	850
Transformer capacity (MVA)	73,834	63	2,498	1,625	78,020

Data regarding km of circuit and transformer capacity accumulated as at 31 December 2012.

GRAPH SHOWING THE EVOLUTION OF THE PENINSULAR 400 KV AND ≤ 220 KV TRANSMISSION GRID (km)

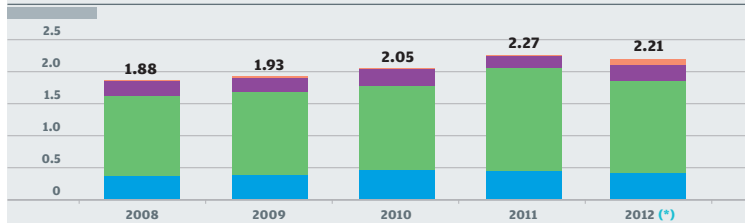


TRANSMISSION GRID QUALITY

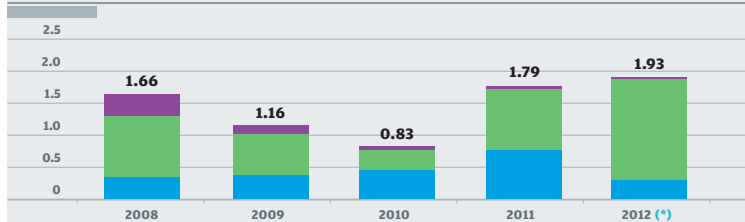
	ENS (MWh)			AIT (minutes)		
	Spanish Peninsula	Balearic Islands	Canary Islands	Spanish Peninsula	Balearic Islands	Canary Islands
2008	574	7	1,043	1.15	0.64	58.94
2009	437	39	1,679	0.91	3.41	96.89
2010	1,571	9	4,090	3.17	0.77	241.68
2011	280	39	17	0.58	3.54	1.02
2012	133	7	10	0.28	0.62	0.61

ENS: Energy not supplied. **AIT:** Average interruption time.

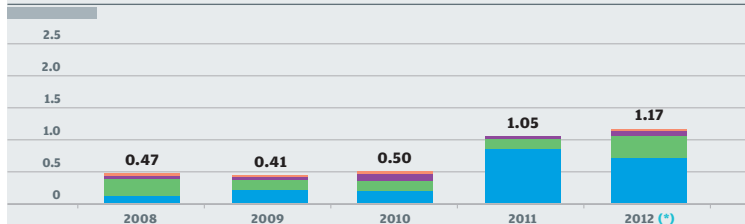
NON-AVAILABILITY RATE OF THE PENINSULAR TRANSMISSION GRID (%)



NON-AVAILABILITY RATE OF THE BALEARIC ISLANDS' TRANSMISSION GRID (%)



NON-AVAILABILITY RATE OF THE CANARY ISLANDS' TRANSMISSION GRID (%)



■ Programmable for causes not due to maintenance.
■ Non-programmable due to corrective maintenance.

■ Programmable for predictive and preventative maintenance.
■ Non-programmable due to fortuitous circumstances.

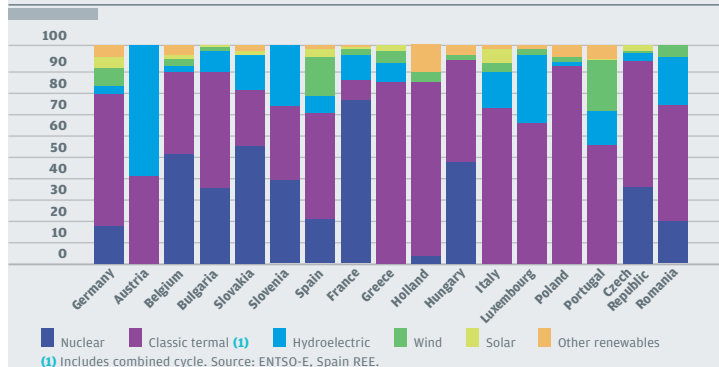
Note: Classification in accordance with RD 1955/2000. (*) Provisional data pending audit.

ELECTRICAL ENERGY DEMAND AND CONSUMPTION PER CAPITA OF THE COUNTRIES OF THE EUROPEAN UNION MEMBERS OF THE CONTINENTAL EUROPE (ENTSO-E)

	Demand (TWh)		Consumption per capita (kWh/hab.)	
	2012	% 12/11	2012	% 12/11
Germany	539.9	-0.8	6,596	-0.9
Austria	69.3	1.0	8,203	0.5
Belgium	84.9	-2.5	7,648	-3.3
Bulgaria	32.5	-2.3	4,430	-1.8
Slovakia	26.8	0.2	4,967	0.0
Slovenia	12.6	0.6	6,149	0.4
Spain	266.8	-1.4	5,776	-1.5
France	489.5	2.1	7,493	1.6
Greece	52.1	-1.6	4,611	-1.4
Holland	115.9	-1.6	6,929	-2.1
Hungary	39.9	-0.6	4,007	-0.3
Italy	324.0	-3.2	5,327	-3.5
Luxembourg	6.3	-4.4	11,940	-6.8
Poland	144.9	-0.6	3,759	-0.6
Portugal	49.1	-2.9	4,654	-2.6
Czech Republic	63.0	0.0	6,000	-0.2
Romania	54.4	-0.9	2,549	-0.6
Total	2,371.8	-0.7	5,814	-0.9

Source: ENTSO-E. Consumption per capita = Total consumption / n° inhabitants. Population data: Eurostat.

STRUCTURE OF THE NET TOTAL PRODUCTION OF THE COUNTRIES OF THE EUROPEAN UNION MEMBERS OF THE CONTINENTAL EUROPE (ENTSO-E) (%)





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