

1 ENTSO-E Net generation, exchanges and consumption 2010

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ENTSO-E Net generation, exchanges and consumption 2010

Generation

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Overview ENTSO-E in figures 2010 - Electricity system data of member TSOs' countries

Countries		AT ¹	BA	BE ²	BG	CH ^{3,4}	CY	CZ	DE ⁵	DK	EE
Net generation "All values are calculated to represent 100% of the national values"											
Nuclear power	GWh	0	0	45729	14181	25205	0	26441	133373	0	0
Fossil fuels	GWh	24638	7684	35845	21084	2208	5202	48713	344278	26294	10465
Hydro power	GWh	36496	7870	1659	5431	37450	0	3380	21698	23	27
Other renewable net generation	GWh	n.a.	0	6631	331	1389	33	948	73801	10445	836
- of which wind	GWh	n.a.	0	1260	331	24	33	334	36665	7813	276
- of which solar	GWh	n.a.	0	237	0	0	0	604	10874	0	0
Non-identifiable	GWh	9551	0	0	0	0	0	0	0	0	0
Total net generation	GWh	70685	15554	89864	41027	66252	5235	79482	573150⁶	36762	11328

Consumption "All values are calculated to represent 100% of the national values"											
Consumption	GWh	68324	11725	88619	31537	65709	5235	63736	547422	35640	8011
Variation (compared with 2009)	%	4,1	6,6	5,7	-3,2	4,3	4,4	3,5	4,1	2,4	12,6
Transmission network losses percentage consumption	%										

Net generation capacity as of 31 December 2010											
"All values are identical with the national values and their representativity"											
NGC Nuclear	MW	0	0	5945	2000	3220	0	3666	20300	0	0
NGC Fossil fuels	MW	7389	1506	8668	6451	355	1385	10892	69300	8867	2324
NGC Hydro power	MW	12665	1971	1421	3108	13464	0	2203	10700	9	4
NGC Renewable energy sources	MW	1031	0	2659	513	328	82	2177	47400	3802	156
- of which wind	MW	1002	0	888	488	12	82	218	26600	3802	156
- of which solar	MW	0	0	766	25	34	0	1959	16600	0	0
NGC Other sources	MW	0	0	0	0	212	0	0	4500	697	0
NGC Total	MW	21085	3477	18693	12072	17579	1467	18938	152200	13375	2484
Representativity of the values	%	100	100	100	99	100	100	100	100	100	100

Countries		PL ^{9,10}	PT	RO	RS	SE	SI	SK	ENTSO-E	UA	W ¹¹
Net generation "All values are calculated to represent 100% of the national values"											
Nuclear power	GWh	0	0	10686	0	55626	5377	13577	896054	0	
Fossil fuels	GWh	140270	22315	25284	28508	7803	4794	5620	1660307	5358	
Hydro power	GWh	3405	16247	20174	12453	66215	4249	5525	585015	152	
Other renewable net generation	GWh	2108	11530	402	0	15386	0	476	255236	0	
- of which wind	GWh	1843	9023	290	0	3479	0	7	141496	0	
- of which solar		0	207	0	0	0	0	9	21220	0	
Non-identifiable	GWh	0	0	0	0	0	0	930	11818	0	
Total net generation	GWh	145783	50092	56546	40961	145030	14420	26128	3408428	5510	

Consumption "All values are calculated to represent 100% of the national values"											
Consumption	GWh	143591	52206	53362	39525	147090	12248	26641	3380485	4352	
Variation (compared with 2009)	%	4,9	1,6	5,4	-3,3	6,3	8,0	4,7	4,4	9,8	
Transmission network losses percentage consumption	%								1,5		

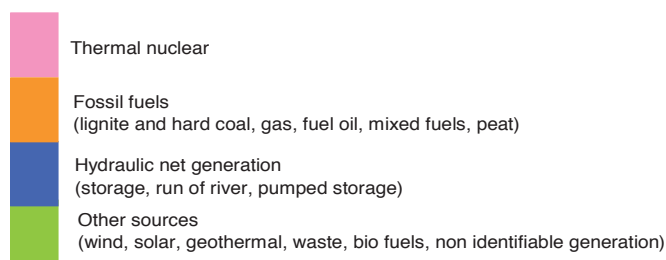
Net generation capacity as of 31 December 2010											
"All values are identical with the national values and their representativity"											
NGC Nuclear	MW	0	0	1300	0	9151	696	1820	134379	0	
NGC Fossil fuels	MW	29612	8547	9166	5475	5035	1282	2614	451988	2225	
NGC Hydro power	MW	2331	4988	6087	2884	16200	1063	2478	197270	27	
NGC Renewable energy sources	MW	1366	4370	501	0	5315	0	143	125417	0	
- of which wind	MW	1274	3705	479	0	2163	0	3	81143	0	
- of which solar	MW	0	122	0	0	0	0	82	28172	0	
NGC Other sources	MW	0	0	0	0	0	0	725	6576	0	
NGC Total	MW	33309	17905	17054	8359	35701	3041	7780	915630	2252	
Representativity of the values	%	100	97	100	100	100	100	100		100	

ES	FI	FR	GB	GR	HR	HU	IE	IS ⁷	IT	LT	LU	LV	ME	MK	NI ⁸	NL	NO
59310	21884	407877	58203	0	0	14830	0	0	0	0	0	0	0	0	0	3755	0
117579	30961	59453	261758	37920	4801	16503	23025	12	220938	3690	2879	2847	1267	4282	6581	99539	5267
44617	12765	67995	5794	7457	8313	181	726	12484	53798	1281	1458	3496	2738	2316	8	0	117286
57955	10646	14984	6814	2503	135	2267	2820	4183	15970	357	178	101	0	0	724	10391	892
43357	293	9603	6523	2062	117	503	2820	0	9047	223	55	47	0	0	666	3995	808
6718	0	562	0	133	1	0	0	0	1875	0	0	0	0	0	0	0	0
364	711	0	0	0	2	0	248	0	0	0	0	0	0	0	12	0	0
279825	76967	550309	332569	47880	13251	33781	26819	16679	290706	5328	4515	6444	4005	6598	7325	113685	123445
267034	87467	513292	335709	53551	17594	38976	27001	16679	330455	10276	6690	7316	4044	8328	9180	116460	129792
3.1	7.6	5.5	6.7	0.1	0.5	2.5	2.9	2.3	3.2	7.6	8.0	4.1	11.0	6.8	4.1	3.1	6.7
7525	2646	63130	10608	0	0	1892	0	0	0	0	0	0	0	0	0	480	0
44753	9004	27403	62535	9396	1781	6181	6219	121	74976	2539	509	848	210	1157	2317	22005	1166
19040	3133	25418	3887	3215	2113	50	508	1883	21521	875	1128	1555	660	503	4	37	30164
24860	2254	7559	2630	1322	116	630	1538	575	9992	193	95	59	0	0	358	2943	450
19821	197	5603	2630	1039	79	240	1538	0	5814	161	43	37	0	0	346	2273	450
4104	0	762	0	153	0	0	0	0	3470	0	27	0	0	0	0	68	0
131	44	0	45	0	0	0	208	0	0	0	0	0	0	0	14	0	0
96309	17081	123510	79705	13933	4010	8753	8473	2579	106489	3607	1732	2462	870	1660	2693	25465	31780
100	100	100	89	100	100	100	100	100	100	99	100	100	100	100	100	100	100

- 1 Other renewable net generation is included in non-identifiable net generation.
- 2 The reported figures are best estimates based on actual measurements and extrapolations.
- 3 Calculations of net generation and consumption based on the ENTSO-E database differ from the official values from the Swiss Federal Office of Energy.
- 4 NGC values as of 31 December 2009
- 5 Common, public supply
- 6 Electricity generation and consumption also comprise shares of generation from industry's own power stations and feed-in from private generators (total of 12 monthly values). The part of net electricity generation relevant to primary control power amounts to 545,077 TWh.
- 7 Other renewable net production = geothermal
- 8 9 Generating Units (1805MW) are capable of running on mixed fuels - The data has identified which fuel type these have been run on and been added into the appropriate fuel typ.
- 9 Operational data
- 10 NGC fossil fuel and renewable: Energy from co-firing (biomass combustion in lignite/hard coal power stations) is classified as energy from fossil fuels installations.
- 11 UA_W represents the so-called Burshtyn Island synchronously interconnected with ENTSO-E area.

Net electricity generation¹ and its structure

Overview generation mix in ENTSO-E member TSOs' countries



Country	Nuclear thermal		Fossil fuels		Hydro power		Other renewable		of which wind	of which solar	Non-identifiable		Total TWh
	TWh	%	TWh	%	TWh	%	TWh	%	TWh	TWh	TWh	%	
AT ³	0	0	24,6	34,9	36,5	51,6	n.a.	n.a.	n.a.	n.a.	9,6	13,5	69,0
BA	0	0	7,7	49,4	7,9	50,6	0	0	0	0	0	0	15,6
BE ⁴	45,7	50,9	35,8	39,9	1,7	1,8	6,6	7,3	1,3	0,2	0	0	89,7 ²
BG	14,2	34,6	21,1	51,4	5,4	13,2	0,3	0,8	0,3	0	0	0	41,0
CH	25,2	38,0	2,2	3,3	37,4	56,5	1,3	2,1	0,02	0	0	0	66,2 ²
CY	0	0	5,2	99,4	0	0	0,1	0,3	0	0	0	0	5,2
CZ	26,4	33,3	48,7	61,3	3,4	4,2	1,0	1,2	0,3	0,6	0	0	79,5 ²
DE ⁵	133,4	23,3	344,3	60,1	21,7	3,8	73,8	12,9	36,7	10,9	0	0	573,2 ^{2,6}
DK	0	0	26,3	71,5	0,02	0,1	10,4	28,4	7,8	0	0	0	36,8 ²
EE	0	0	10,5	92,4	0,03	0,2	0,8	7,4	0,3	0	0	0	11,3
ES	59,3	21,2	117,6	42,1	44,4	15,9	58,0	20,7	43,4	6,7	0,4	0,1	279,8
FI	21,9	28,4	31,0	40,2	12,8	16,6	10,6	13,8	0,3	0	0,7	1,0	77,0
FR	407,9	74,1	59,4	10,8	68,0	12,4	15,0	2,7	9,6	0,6	0	0	550,3
GB	58,2	17,5	261,8	78,7	5,8	1,7	6,8	2,1	6,5	0	0	0	332,6
GR	0	0	37,9	79,2	7,4	15,6	2,5	5,2	2,0	0,1	0	0	47,9 ²
HR	0	0	4,8	36,2	8,3	62,7	0,1	1,0	0,01	1,0	2	0,02	13,2
HU	14,8	43,9	16,5	48,9	0,2	0,5	2,3	6,7	0,5	0	0	0	33,8
IE	0	0	23,0	85,8	0,7	2,7	2,8	10,5	2,8	0	0,3	1,0	26,8 ²
IS	0	0	0,01	0,1	12,5	74,8	4,2	25,1	0	0	0	0	16,7
IT	0	0	220,9	76,0	53,9	18,5	16,0	5,5	9,1	1,9	0	0	209,7
LT	0	0	3,7	69,2	1,3	24,0	0,4	6,7	0,2	0	0	0	5,3 ²
LU	0	0	2,9	63,8	1,5	32,3	0,2	3,9	0,1	0	0	0	4,5
LV	0	0	2,8	44,2	3,5	54,2	0,1	1,6	0,05	0	0	0	6,4
ME	0	0	1,3	31,6	2,7	68,4	0	0	0	0	0	0	4,0
MK	0	0	4,2	64,9	2,3	35,1	0	0	0	0	0	0	6,6
NI	0	0	6,6	89,8	0,01	1,0	0,7	9,9	0,7	0	0,01	0,2	7,3
NL	3,8	3,3	99,5	87,6	0	0	10,4	9,1	4,0	0	0	0	113,7
NO	0	0	5,3	4,3	117,3	95,0	0,9	0,7	0,8	0	0	0	123,4 ²
PL ⁷	0	0	140,3	96,2	3,4	2,3	2,1	1,4	1,8	0	0	0	145,8 ²
PT	0	0	22,3	44,6	16,2	32,4	11,5	23,0	9,0	0,2	0	0	51,7 ²
RO	10,6	18,9	25,3	44,7	20,2	35,7	0,4	0,7	0,3	0	0	0	56,6
RS	0	0	28,5	69,6	12,4	30,4	0	0	0	0	0	0	41,0
SE	55,6	38,4	7,8	5,4	66,2	45,7	15,4	10,6	3,5	0	0	0	145,3 ²
SI	5,4	37,3	4,8	33,2	4,2	29,5	0	0	0	0	0	0	14,4
SK	13,6	52,0	5,6	21,5	5,5	21,1	0,5	1,8	0,01	0,01	0,9	3,6	26,1 ²
Sum ⁸	896,0	26,3	1660,3	48,7	585,0	17,2	255,2	7,4	141,5	21,2	11,8	0,4	3408,4 ²
UA_W	0	0	5,4	97,2	0,1	2,8	0	0	0	0	0	0	5,5

¹ All net generation values are calculated to represent 100% of the national values.

² Including deliveries from industry.

³ Other renewable net generation is included in non-identifiable net generation.

⁴ The reported figures are best estimates based on actual measurements and extrapolations.

⁵ 100% available as of 12 monthly values.

⁶ Electricity generation and consumption also comprise shares of generation from industry's own power stations and feed-in from private generators (total of 12 monthly values).

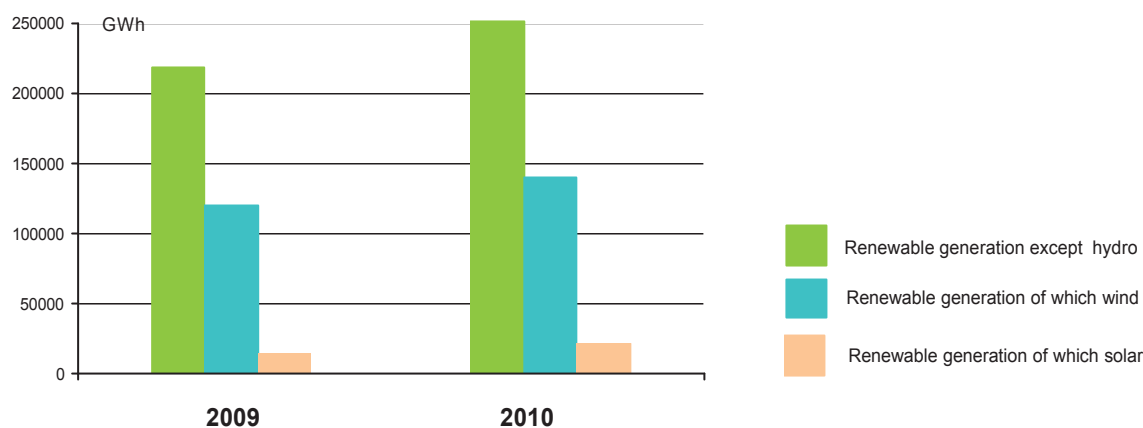
The part of net electricity generation relevant to primary control power amounts to 545,077 TWh.

⁷ Operational data

⁸ ENTSO-E calculated sum of the member TSOs' countries

Other renewable generation ¹ including wind and solar power 2009 and 2010

Renewable generation except hydro of which wind and of which solar in ENTSO-E member TSOs' countries ¹



month	other renew ²	of which wind ²	of which solar ²	other renew	of which wind	of which solar	
	2009 GWh	2009 GWh	2009 GWh	2010 GWh	2010 GWh	2010 GWh	
January				21286	12406	583	
February				21616	13067	842	
March				24143	14365	1491	
April				19362	9655	2051	
May				20500	10596	2261	
June				17241	7911	2431	
July				18548	8557	3005	
August				19402	9327	2640	
September				19425	10282	2193	
October				24338	14563	1900	
November				24715	15483	1040	
December				24660	15284	783	
Sum 2009	219566	121763	14921	Sum 2010	255236	141496	21200

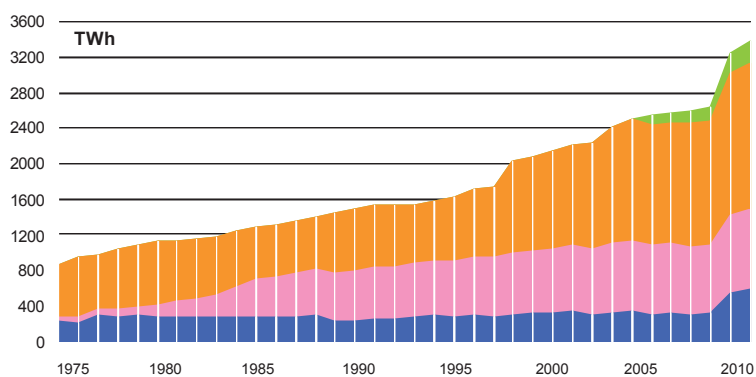
¹ All values are calculated to represent 100% of the national values.

Calculation based on the ENTSO-E statistical database.

² Monthly data of the year 2009 of all member TSOs' countries are not available.

The monthly statistical data collection is entered from January 2010 on.

Development of net electricity generation ¹



Year	Hydro power	Thermal nuclear	Fossil fuels	Other sources ²	Total
	TWh	TWh	TWh	TWh	TWh
1975	222,9	50,0	585,4		858,3
1976	191,2	69,5	669,1		929,8
1977	276,2	82,2	610,4		968,8
1978	266,1	97,4	659,9		1023,4
1979	275,4	110,6	691,3		1077,3
1980	263,4	133,9	712,1		1109,4
1981	256,4	191,0	678,4		1125,8
1982	258,0	211,2	665,5		1134,7
1983	255,9	258,8	653,3		1168,0
1984	257,0	348,5	617,3		1222,8
1985	255,2	426,3	597,3		1278,8
1986	253,3	464,4	593,6		1311,3
1987	264,9	483,0	607,7		1442,1
1988	282,9	514,6	597,0		1483,5
1989	216,2	551,6	669,2		1528,7
1990	222,8	558,5	690,6		1565,9
1991	246,2	579,6	701,7		1625,0
1992	240,2	591,2	689,5		1618,0
1993	251,2	616,9	664,9		1630,0
1994	278,8	606,1	674,7		1657,5
1995 ³	265,8	627,7	732,8		1740,2
1996	284,6	657,2	770,1		1841,4
1997	272,0	665,2	792,1		1861,3
1998 ⁴	284,4	689,5	1057,7		2172,3
1999	292,5	707,0	1035,9		2128,7
2000	305,1	733,8	1093,4		2246,4
2001	331,6	744,4	1129,8		2291,0
2002	276,1	757,6	1187,6		2303,8
2003 ⁵	307,4	787,4	1305,7		2484,6
2004	319,8	798,6	1386,3		2525,2
2005	292,4	792,6	1349,1	98,2	2540,4
2006	305,4	801,9	1354,3	115,8	2584,9
2007 ⁶	294,2	759,4	1402,3	143,3	2607,1
2008	306,5	774,8	1384,1	170,0	2643,8
2009 ⁷	540,2	877,0	1595,1	223,8	3236,2
2010	585,0	896,0	1660,3	267,0	3408,4

¹ Values of detailed generation are national values; total net generation data are calculated to represent 100% of the national values.

² Before 2005, the information on other renewable energy sources was collected in a different manner. Some countries added them to fossil fuels, some considered them as the part of not represented in the figures (through the factor "representativity").

³ As of September 1995 total German values

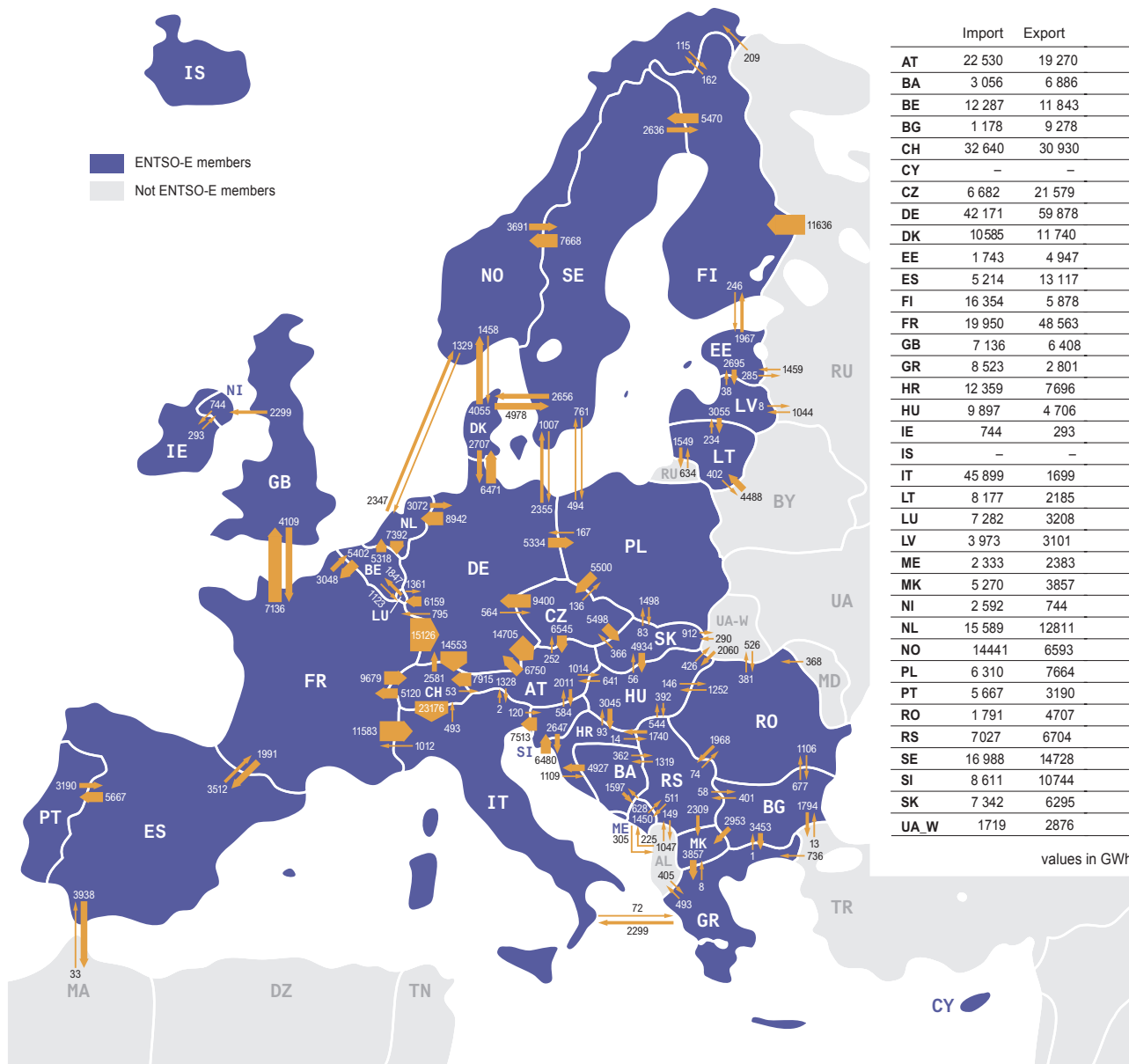
⁴ Including values of CZ, HU, PL, SK as of 1998

⁵ Including values of RO, BG as of 2003

⁶ Including values of DK_W as of June 2007

⁷ All yearly data from 1975 to 2008 are statistical data from the Regional Group Continental Europe (former UCTE). From year 2009 on calculated statistical data of ENTSO-E.

Physical energy flows 2010 - Graphical overview in GWh



Sum of physical energy flows between ENTSO-E countries = 347172 GWh²

Total physical energy flows = 381594 GWh²

¹ Consolidated yearly values might differ from detailed flow data from the ENTSO-E database due to ex-post consolidation taking into account national statistical resources.

² Calculation based on the detailed physical energy flows in the table on page 16

Physical energy flows 2010 - Detailed imports and exports between the countries in GWh¹

Exporting countries	Importing countries																																							
	AT	BA	BE	BG	CH	CZ	DE	DK	EE	ES	FI	FR	GB	GR	HR	HU	IE	IT	LT	LU	LV	ME	MK	NI	NL	NO	PL	PT	RO	RS	SE	SI	SK	UA ²	UA ²					
AT					7915	252	6750								1014		1328																							
BA															4927																									
BE																																								
BG																																								
CH																																								
CZ																																								
DE																																								
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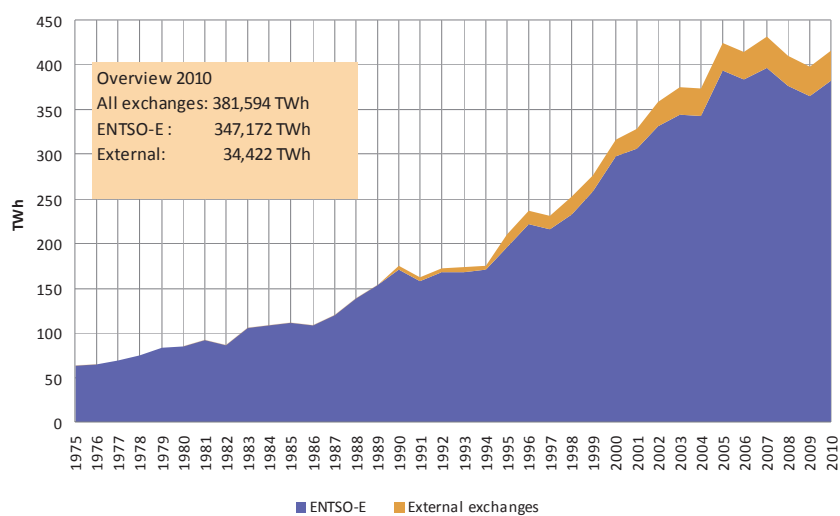
¹ Detailed harmonized values from the ENTSO-E statistical database.

² In synchronous operation with ENTSO-E countries (not ENTSO-E members):

Albania (AL), Belarus (BY), Morocco (MA), Republic of Moldavia (MD), Russia (RU), Republic of Turkey (TR), Ukraine (UA)

Development of physical exchanges on tie lines

Development of overall cross-border border exchanges of ENTSO-E member TSOs' countries since 1975



Year	Sum of total electricity exchanges		Year	Sum of total electricity exchanges	
	TWh	External exchanges TWh		TWh	External exchanges TWh
1975	62,8	0,0	1993	168,3	4,7
1976	65,4	0,0	1994	170,2	5,0
1977	68,8	0,0	1995 ^{2,3}	195,4	14,9
1978	74,3	0,0	1996	221,7	15,8
1979	82,7	0,0	1997	215,6	15,7
1980	84,1	0,0	1998	232,7	20,2
1981	91,6	0,0	1999	257,6	19,4
1982	85,7	0,0	2000	297,3	18,4
1983	105,9	0,0	2001	306,0	22,6
1984	108,9	0,0	2002	332,0	26,3
1985	111,2	0,0	2003	344,1	31,1
1986	108,8	0,0	2004	342,5	31,6
1987	119,3	0,0	2005	393,1	31,5
1988	138,6	0,0	2006	383,2	31,0
1989	154,2	0,0	2007	395,9	35,5
1990 ¹	170,9	4,6	2008	376,4	33,6
1991	157,8	5,1	2009 ⁴	364,7	33,8
1992	168,2	4,4	2010	381,6	34,4

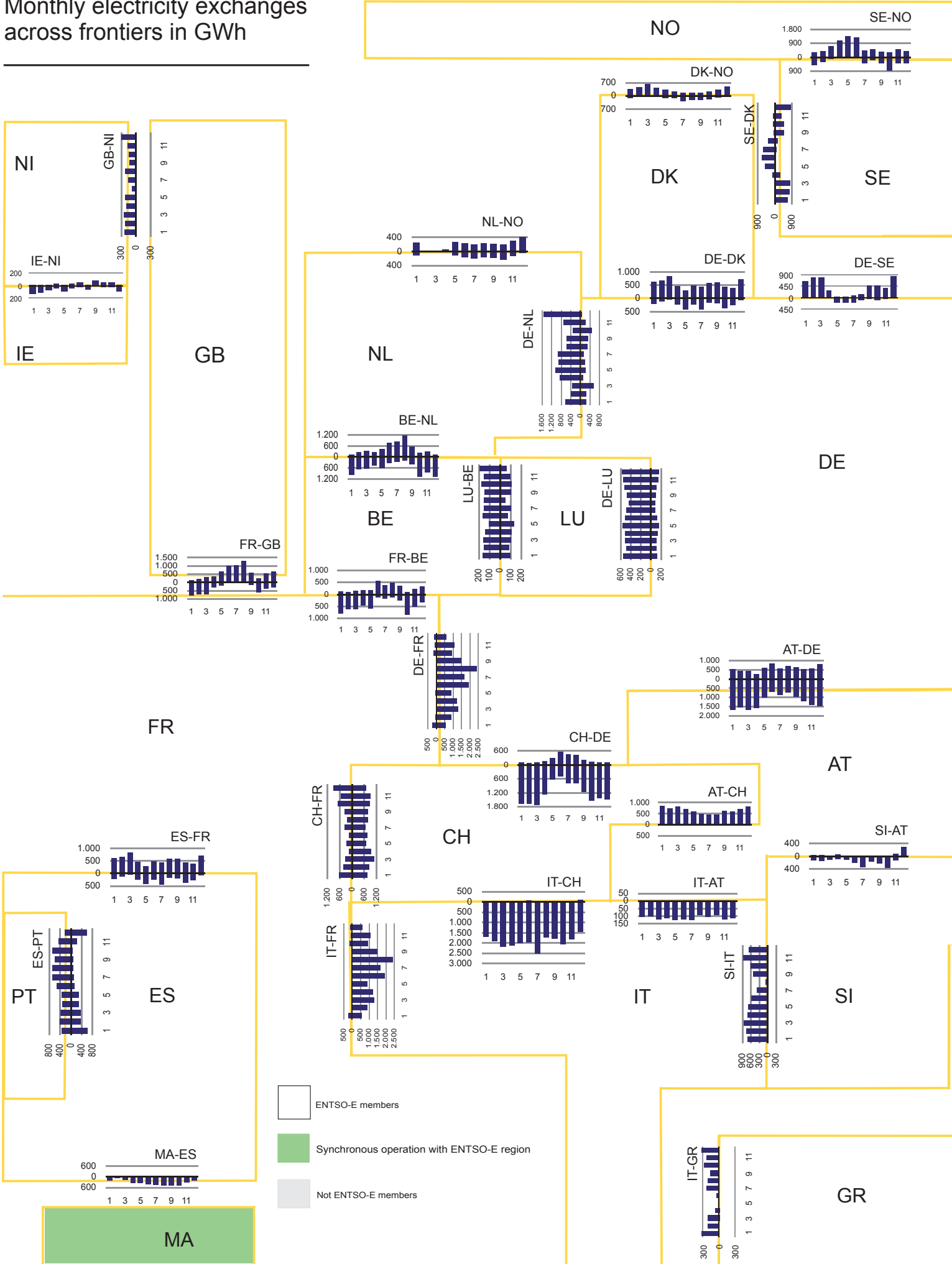
¹ External exchanges of the Nordic countries are reliable since 1990

² Reliable Baltic data is available since 1995

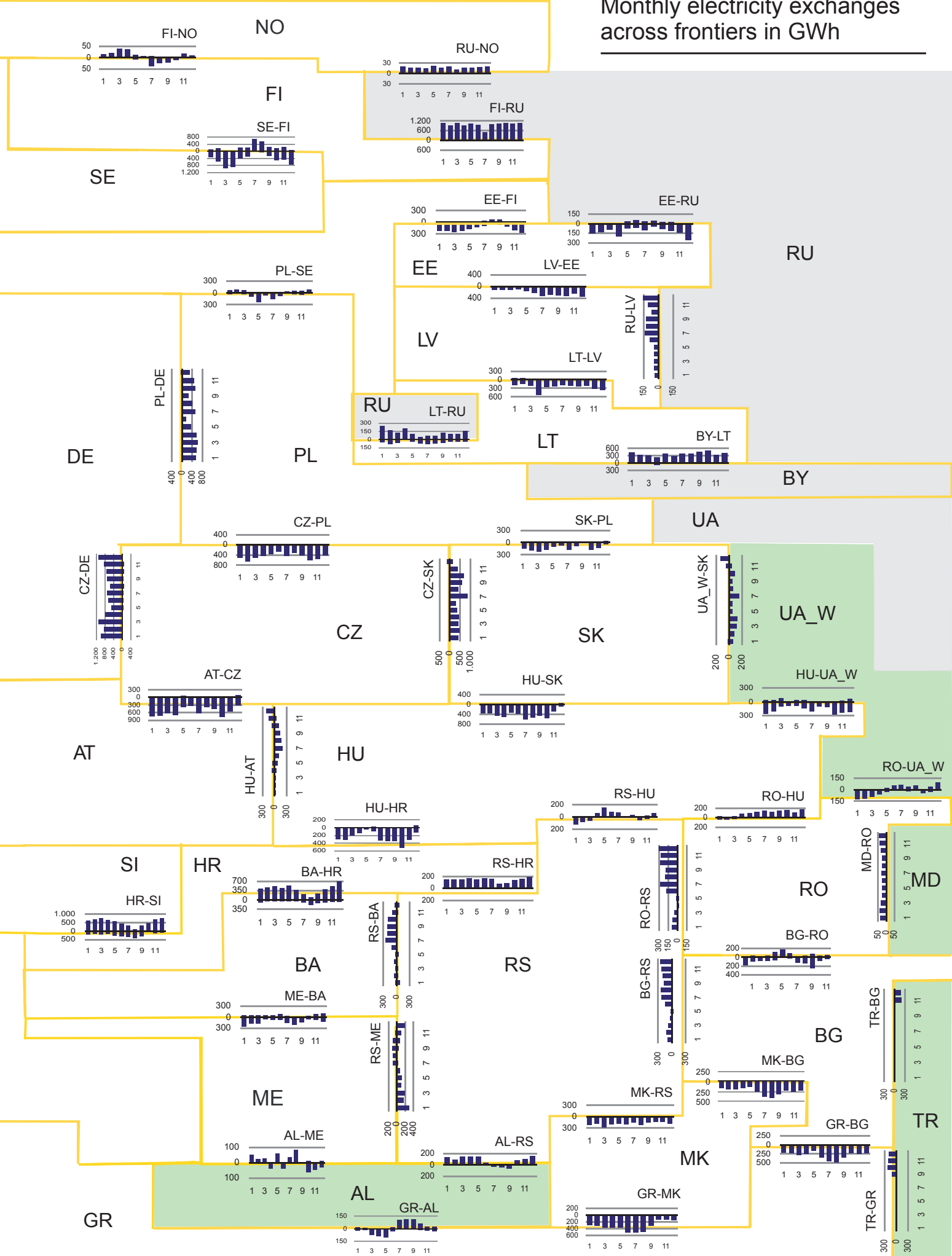
³ There were no exchanges between Republic of Ireland and Northern Ireland before 1995

⁴ External exchanges include Albania, Belarus, Moldavia, Morocco, Russia, Turkey and Ukraine-West since 2009

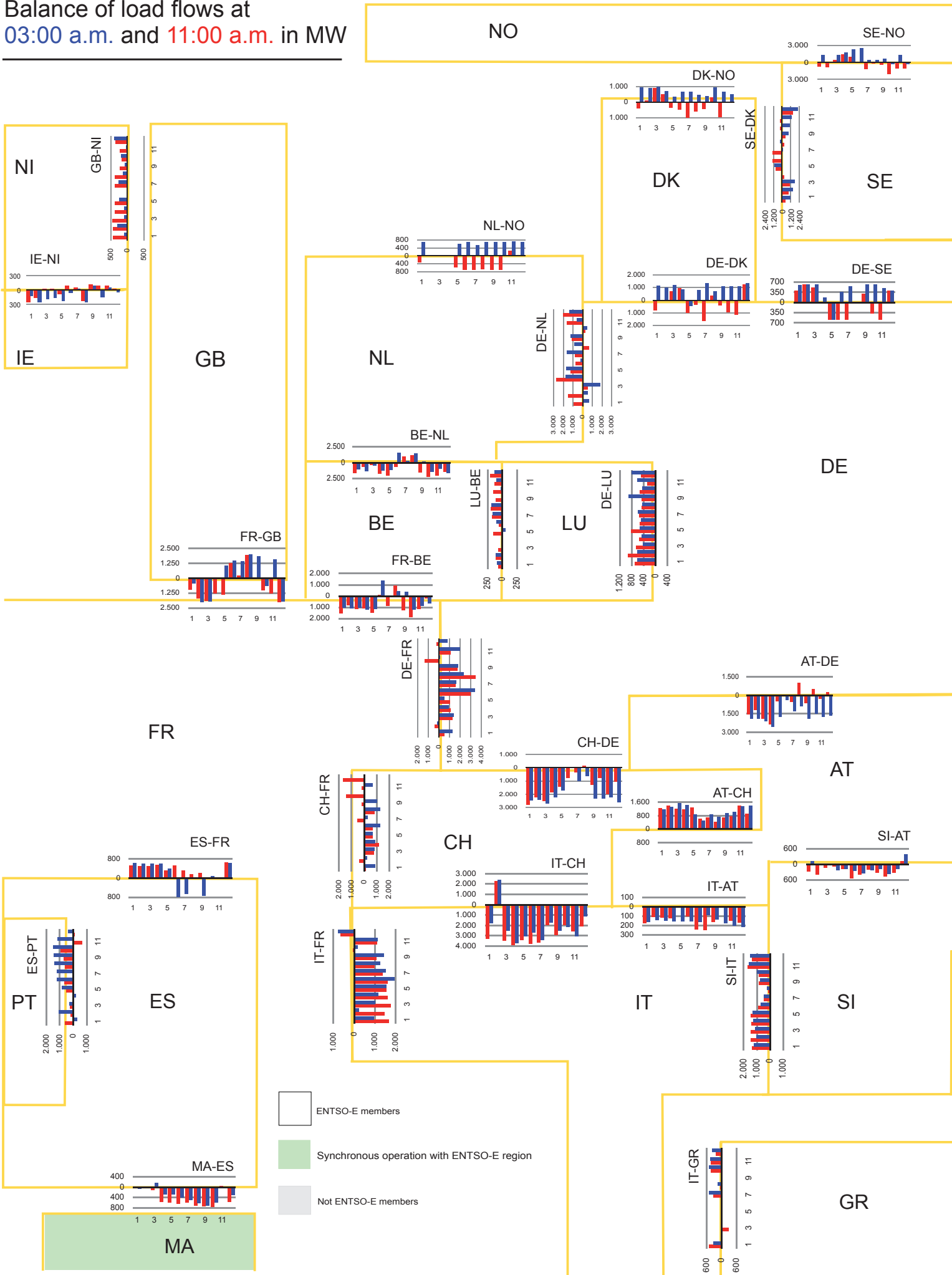
Monthly electricity exchanges across frontiers in GWh



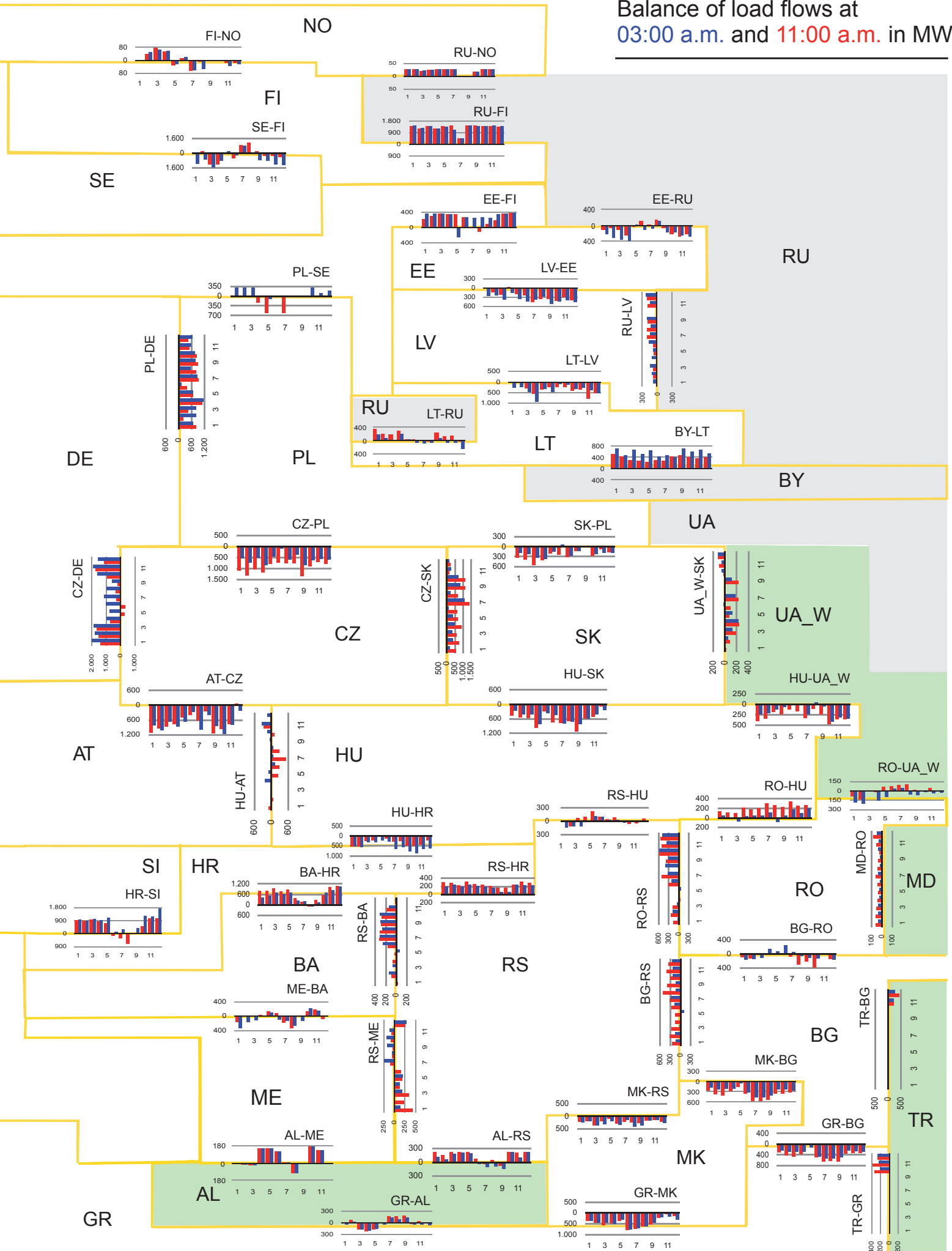
Monthly electricity exchanges across frontiers in GWh



Balance of load flows at
03:00 a.m. and 11:00 a.m. in MW



Balance of load flows at
03:00 a.m. and 11:00 a.m. in MW



Annual maximum load in each country 2010

National annual maximum load in each country ¹

Country	Date	Day	Time	MW	Δ % ²
AT ³	15 December	Wednesday	05:00 p.m.	10755	n.a.
BA	31 December	Friday	05:30 p.m.	2173	7,0
BE	01 December	Wednesday	05:45 p.m.	14166	2,4
BG	26 January	Tuesday	06:30 p.m.	7270	1,1
CH	15 December	Wednesday	07:15 p.m.	10749	4,8
CY	03 August	Tuesday	01:15 p.m.	1148	3,9
CZ	27 January	Wednesday	05:00 p.m.	10384	1,2
DE	01 December	Wednesday	06:00 p.m.	79900	9,5
DK	01 December	Wednesday	06:00 p.m.	6348	1,0
EE	28 January	Thursday	04:45 p.m.	1587	4,6
ES	12 January	Tuesday	07:00 p.m.	44486	0,0
FI ⁴	28 January	Thursday	07:00 a.m.	14588	3,2
FR	15 December	Wednesday	07:00 p.m.	96710	4,7
GB	07 December	Tuesday	06:30 p.m.	60100	1,6
GR ⁵	15 July	Thursday	12:00 a.m.	9793	0,3
HR	16 December	Thursday	06:00 p.m.	3121	0,0
HU	01 December	Wednesday	04:45 p.m.	6064	1,1
IE	21 December	Tuesday	07:00 p.m.	5090	4,7
IS	21 December	Tuesday	09:00 p.m.	2010	- 4,3
IT	16 July	Friday	12:00 a.m.	56425	8,8
LT	22 December	Wednesday	04:00 p.m.	1707	0,4
LU	02 December	Thursday	07:00 p.m.	1107	6,7
LV	27 January	Wednesday	05:00 p.m.	1323	- 1,3
ME	17 December	Friday	06:00 p.m.	712	n.a.
MK	18 December	Saturday	03:00 p.m.	1627	1,1
NI ⁶	22 December	Wednesday	07:00 p.m.	1777	7,1
NL	13 December	Monday	05:30 p.m.	17728	1,0
NO	06 January	Wednesday	08:00 a.m.	23994	9,0
PL ⁷	26 January	Tuesday	05:30 p.m.	23583	3,2
PT	11 January	Monday	07:45 p.m.	9403	2,0
RO	13 December	Monday	05:00 p.m.	8464	2,6
RS	31 December	Friday	06:00 p.m.	7656	2,8
SE	22 December	Wednesday	05:30 p.m.	26690	6,8
SI	16 December	Thursday	06:00 p.m.	1970	1,8
SK	17 December	Friday	05:00 p.m.	4342	5,1
UA_W	16 December	Thursday	06:00 p.m.	1118	10,9

¹ The maximum load values of each country are specified in the System Adequacy Retrospect 2010 published on 30 June 2011 under www.entsoe.eu/resources/publications/system_development.

² As compared to the last year.

³ Peak load is not available. Therefore peak load at 3rd Wednesdays was taken.

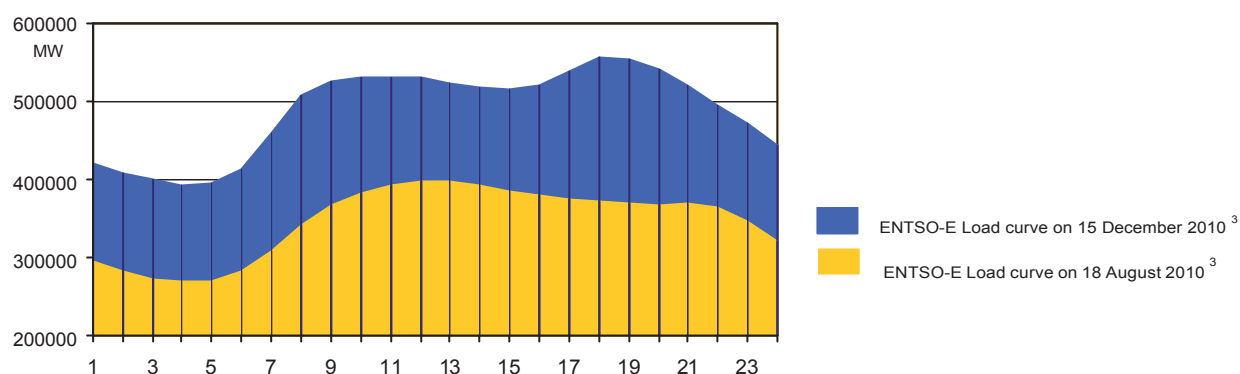
⁴ One hour average values

⁵ There is a reduction up to 200 MW to the annual peak load.

⁶ Extreme cold weather conditions experienced during November & December 2010.

⁷ Measuring step: 15minutes

Highest and lowest load in each country on 3rd Wednesday in 2010



Highest load 3rd Wednesday of each country ¹

Country	MW	Date	Time
AT	10755	15 December	05:00 p.m.
BA	2051	15 December	06:00 p.m.
BE ²	13810	15 December	07:00 p.m.
BG	6640	15 December	07:00 p.m.
CH	10835	15 December	06:00 p.m.
CY	983	18 August	02:00 p.m.
CZ	10307	15 December	05:00 p.m.
DE	83090	15 December	06:00 p.m.
DK	6312	15 December	06:00 p.m.
EE	1495	20 January	05:00 p.m.
ES	42301	15 December	08:00 p.m.
FI	13923	15 December	04:00 p.m.
FR	96710	15 December	07:00 p.m.
GB	59008	15 December	07:00 p.m.
GR	9698	21 July	01:00 p.m.
HR	3116	15 December	07:00 p.m.
HU	5937	15 December	05:00 p.m.
IE	4664	15 December	07:00 p.m.
IS	2113	15 December	07:00 p.m.
IT	54927	15 December	06:00 p.m.
LT	1787	15 December	05:00 p.m.
LU	1047	20 January	07:00 p.m.
LV	1257	20 January	05:00 p.m.
ME	589	20 January	07:00 p.m.
MK	1535	15 December	06:00 p.m.
NI	1684	15 December	07:00 p.m.
NL	18187	15 December	06:00 p.m.
NO	21852	15 December	10:00 a.m.
PL	23081	15 December	05:00 p.m.
PT	8800	17 February	09:00 p.m.
RO	8313	15 December	06:00 p.m.
RS	7034	15 December	06:00 p.m.
SE	25807	15 December	06:00 p.m.
SI	1919	15 December	07:00 p.m.
SK	4326	15 December	05:00 p.m.
ENTSO-E³	557280	15 December	06:00 p.m.
UA_W	1087	15 December	06:00 p.m.

Lowest load 3rd Wednesday of each country ¹

Country	MW	Date	Time
AT	5520	18 August	03:00 a.m.
BA	941	16 June	04:00 a.m.
BE ²	6924	21 July	07:00 a.m.
BG	2868	19 May	05:00 a.m.
CH	5016	18 August	04:00 a.m.
CY	337	21 April	04:00 a.m.
CZ	5361	21 July	04:00 a.m.
DE	47117	16 June	03:00 a.m.
DK	2556	21 July	05:00 a.m.
EE	490	21 July	04:00 a.m.
ES	18991	21 April	03:00 a.m.
FI	6970	21 July	04:00 a.m.
FR	36206	18 August	04:00 a.m.
GB	23081	15 September	05:00 a.m.
GR	3941	20 October	04:00 a.m.
HR	1289	19 May	04:00 a.m.
HU	3284	18 August	04:00 a.m.
IE	1850	18 August	05:00 a.m.
IS	1668	21 April	03:00 a.m.
IT	23288	18 August	05:00 a.m.
LT	751	16 June	04:00 a.m.
LU	545	18 August	04:00 a.m.
LV	455	16 June	04:00 a.m.
ME	322	15 September	04:00 a.m.
MK	587	16 June	06:00 a.m.
NI	603	21 July	07:00 a.m.
NL	9125	16 June	05:00 a.m.
NO	8816	21 July	06:00 a.m.
PL	12043	16 June	05:00 a.m.
PT	4340	18 August	05:00 a.m.
RO	4768	15 September	03:00 a.m.
RS	2691	15 September	04:00 a.m.
SE	9172	21 July	04:00 a.m.
SI	1014	15 September	04:00 a.m.
SK	2491	18 August	03:00 a.m.
ENTSO-E³	268918	18 August	04.00 a.m.
UA_W	348	21 July	04:00 a.m.

¹ All values are calculated to represent 100% of the national values.

² The reported figures are best estimated based on actual measurements.

³ Calculated load values as sum of the ENTSO-E member TSOs' countries

Net generating capacity on 31 December 2009 and 2010 in MW

Country	NGC Nuclear		NGC Fossil fuels		NGC Hydro power		NGC Renewable		of which wind		of which solar		NGC Other resources		NGC Sum		Representativity ¹	
	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009
AT	0	0	7389	7250	12665	12469	1031	1014	1002	993	0	0	0	0	21085	20733	100	100
BA	0	0	1506	1957	1971	2064	0	0	0	0	0	0	0	0	3477	4021	100	100
BE	5945	5902	8668	8590	1421	1413	2659	1758	888	500	766	339	0	0	18693	17663	100	100
BG	2000	2000	6451	6523	3108	2993	513	361	488	360	25	1	0	0	12072	11877	99.8	99
CH ²	3220	3220	355	355	13464	13464	328	328	12	12	34	34	212	212	17579	17579	100	100
CY	0	0	1385	1335	0	0	82	0	82	0	0	0	0	0	1467	1335	100	100
CZ	3666	3597	10892	10647	2203	2180	2177	658	218	193	1959	465	0	0	18938	17082	100	100
DE	20300	20300	69300	71300	10700	10400	47400	37500	26600	24900	16600	7900	4500	0	152200	139500	100	100
DK	0	0	8867	9159	9	9	3802	4151	3802	3482	0	0	697	44	13375	13363	100	100
EE	0	0	2324	2252	4	4	156	167	156	167	0	0	0	0	2484	2423	100	100
ES	7525	7465	44753	42603	19040	19032	24860	23329	19821	18879	4104	3550	131	131	96309	92560	100	100
FI	2646	2646	9004	8815	3133	3074	2254	2054	197	147	0	0	44	85	17081	16674	100	100
FR	63130	63130	27403	26158	25418	25341	7559	5606	5603	4396	762	185	0	0	123510	120235	100	100
GB	10608	10612	62535	59918	3887	4044	2630	1553	2630	1553	0	0	45	45	79705	76172	89	89
GR	0	0	9396	8284	3215	3200	1322	1144	1039	917	153	46	0	0	13933	12628	100	100
HR	0	0	1781	1810	2113	2086	116	107	79	70	0	0	0	0	4010	4003	100	100
HU	1892	1822	6181	6154	50	50	630	549	240	169	0	0	0	0	8753	8575	100	100
IE	0	0	6219	5461	508	512	1538	1260	1538	1260	0	0	208	186	8473	7419	100	100
IS	0	0	121	121	1883	1883	575	575	0	0	0	0	0	0	2579	2579	100	100
IT	0	0	74976	73360	21521	21371	9992	6716	5814	4879	3370	1142	0	0	106489	101447	100	100
LT	0	1183	2539	2539	875	850	193	89	161	89	0	0	0	62	3607	4723	99	98
LU	0	0	509	498	1128	1128	95	80	43	43	27	25	0	0	1732	1706	100	100
LV	0	0	848	867	1555	1543	59	41	37	0	0	0	0	0	2462	2451	100	100
ME	0	0	210	210	660	660	0	0	0	0	0	0	0	0	870	870	100	100
MK	0	0	1157	907	503	503	0	0	0	0	0	0	0	0	1660	1410	100	100
NL	0	0	2317	2286	4	4	358	320	346	310	0	0	14	12	2693	2622	100	100
NL	480	480	22005	22902	37	37	2943	3031	2273	2220	68	55	0	0	25465	26450	100	100
NO	0	0	1166	900	30164	29617	450	442	450	442	0	0	0	0	31780	30959	100	100
PL	0	0	29612	29728	2331	2327	1366	719	1274	649	0	0	0	0	33309	32774	100	100
PT	0	0	8547	7743	4988	4973	4370	3945	3705	3357	122	95	0	0	17905	16661	97	97
RO	1300	1300	9166	8773	6087	5904	501	22	479	14	0	0	0	0	17054	15999	100	100
RS	0	0	5475	5240	2884	2880	0	0	0	0	0	0	0	0	8359	8120	100	100
SE	9151	9342	5035	5502	16200	16203	5315	4666	2163	1560	0	0	0	0	35701	35713	100	100
SI	696	700	1282	1315	1063	879	0	0	0	0	0	0	0	0	3041	2894	100	100
SK	1820	1820	2614	2742	2478	2478	143	61	3	3	82	0	725	0	7780	7101	100	100
ENTSOE ³	134379	135519	451988	444204	197270	195575	125417	102246	81143	71397	28172	13837	6576	565	915630	878321		
UA_W	0	0	2225	2225	27	27	0	0	0	0	0	0	0	0	2252	2252	100	100

¹ Percentage as referred to the total values of a country
(The total values of a country are defined as the synchronously interconnected system plus the areas directly connected via AC or DC to the mainland system.).

² Year 2010 NGC capacity as of 31 December 2009

³ Calculated sum of ENTSO-E member TSOs' countries

Inventory of thermal units \geq 10MW as of 31 December 2010

Country	Reported year	Fossil fuels power units						Nuclear power units			
		10 MW \leq x < 200 MW		200 MW \leq x < 400 MW		\geq 400 MW		Total			
		Number	MW	Number	MW	Number	MW	Number	MW		
AT	2008	62	3146	8	2735	0	0	70	5881	0	0
BA	2010	6	810	3	696	0	0	9	1506	0	0
BE	2010	69	3159	12	3586	3	1380	84	8125	7	5945
BG	2010	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
CH	2008	20	332	0	0	0	0	20	332	5	3220
CY	2010	28	1385	0	0	0	0	28	1385	0	0
CZ	2010	n.a.	10661	0	0	1	460	n.a.	11121	6	3666 ²
DE	2000	403	23572	66	20178	47	27749	516	71499	17 ²	20300
DK	2010	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
EE	2010	19	2303	0	0	0	0	19	2303	0	0
ES	2010	191	5243	49	16816	37	20413	277	42472	8	7525
FI	2010	110	5500	10	2355	1	565	121	8420	4	2671
FR	2010	185	6454	20	4698	26	13090	231	24242	58	63130
GB	2010	51	2184	26	8405	89	51946	166	62535	22	10608
GR	2010	23	2585	19	5566	3	1244	45	9395	0	0
HR	2004	24	1137	2	508	0	0	26	1645	0	0
HU	2010	58	2966	13	2715	0	0	71	5681	4	1892
IE	2010	24	1771	8	2313	4	2135	36	6219	0	0
IS	2010	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
IT	2010	1488	18832	106	31630	38	22706	1632	73168	0	0
LT	2010	15	1387	4	1200	0	0	19	2587	0	0
LU	2010	0	0	1	385	0	0	1	385	0	0
LV	2010	8	540	1	291	0	0	9	831	0	0
ME	2007	1	190	0	0	0	0	1	190	0	0
MK	2010	2	301	4	856	0	0	6	1157	0	0
NI	2010	12	940	4	966	1	402	17	2308	0	0
NL	2010	123	4539	19	5623	19	10154	161	20316	1	480
NO	2010	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
PL	2010	n.a.	13014	60	14715	4	1883	n.a.	29612	0	0
PT	2010	49	1991	16	4888	4	1707	69	8586	0	0
RO	2010	82	5559	12	3366	0	0	94	8925	2	1300
RS	2010	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
SE	2010	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
SI	2007	2	276	1	312	1	672	4	1260	1	696
SK	2010	39	2296	1	288	0	0	40	2584	4	1820
ENTSO-E ⁴		3094	123073	465	135091	278	156506	3772	414670	139	123253
UA_W	2010	16	2347	0	0	0	0	16	2347	0	0

¹ Fossil fuels \geq 5MW

² Reported year of thermal nuclear units 2010

³ Units with the capacity $<$ 10MW are included in the range 10 MW-200 MW. No precise information about number of units with the capacity $<$ 50MW.

⁴ Calculated sum except BG, DK, IS, NO, RS and SE

Inventory of hydro power units \geq 1MW as of 31 December 2010

Inventory of hydro power units											
Country	Reported year	1 MW \leq x < 10 MW		10 MW \leq x < 50 MW		50 MW \leq x < 100 MW		\geq 100 MW		Total	
		Number	MW	Number	MW	Number	MW	Number	MW	Number	MW
AT	2008	582	910	100	2496	19	1473	27	6918	728	11797
BA	2010	n.a.	n.a.	13	343	12	765	6	863	31	1971
BE	2010	28	97	4	144	0	0	6	1164	38	1405
BG	2010	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
CH	2008	185	650	101	2475	40	2705	36	7508	362	13338
CY	2010	0	0	0	0	0	0	0	0	0	0
CZ	2010	n.a.	280	10	239	6	484	6	1100	n.a.	2103
DE	2000	234	898	78	1648	14	1026	15	4841	341	8413
DK	2010	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
EE	2010	n.a.	4	0	0	0	0	0	0	n.a.	4
ES	2010	518	1740	137	3122	43	2942	38	11038	736	18842
FI	2010	94	351	65	2328	7	434	0	0	166	3113
FR	2010	542	1712	175	4321	39	2876	59	16048	815	24957
GB	2010	4	33	25	577	10	835	11	2442	50	3887
GR	2010	95	165	5	84	2	120	11	2845	113	3214
HR	2004	22	69	21	576	6	453	8	978	57	20756
HU	2010	10	44	0	0	0	0	0	0	10	44
IE	2010	5	20	11	196	4	292	0	0	20	508
IS	2010	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
IT	2010	700	2210	238	5575	29	1964	42	11620	1009	21369
LT	2010	4	8	4	101	0	0	4	900	12	1009
LU	2010	3	20	1	11	1	1	1	1096	6	1128
LV	2010	1	1	4	72	21	1455	0	0	26	1528
ME	2007	3	8	0	0	0	0	2	649	5	657
MK	2010	12	15	3	73	3	265	1	150	19	503
NI	2010	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
NL	2010	3	12	2	25	0	0	0	0	5	37
NO	2010	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
PL ¹	2010	74	151	21	504	5	292	8	1256	108	2203
PT	2010	114	396	4	903	33	2199	8	1395	159	4893
RO	2010	191	985	97	2118	17	1175	9	1670	314	5948
RS	2010	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
SE	2010	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
SI	2007	1	8	11	314	5	319	2	230	19	871
SK	2010	29	190	36	734	10	820	6	734	81	2478
ENTSO-E²		3454	10977	1166	28979	326	22895	306	75445	5230	156972
UA_W	2010	5	27	0	0	0	0	0	0	5	27

¹ Additionally 129 MW in 840 Hydro power units with the capacity <1MW.

² Calculated sum except BG, DK, IS, NI, NO, RS and SE