

Statistical Factsheet 2014

provisional values as of 27 April 2015



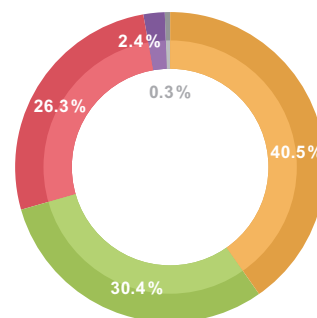
Generation

Footnotes for table on the left

- ¹ All values are calculated to represent 100% of the national values
- ² All hydro power plants are considered as renewable as also pump storage plants have natural inflow
700MW of Fossil Fuels NGC not attributable
- ³ The reported figures are best estimates based on actual measurements and extrapolations
- ⁴ Calculation based on the ENTSO-E database differs from the official values from the Swiss Federal Office of Energy
- ⁵ NGC values as of 31 December 2013
- ⁶ Hydraulic-pumps
- ⁷ DSO is responsible for the 4.3% of installed capacity
- ⁸ Wind, PV and biomass from TSO data, rest from official statistics
- ⁹ The rest of the fossil fuels is from oil shale
- ¹⁰ All data with the country code GB represents monthly statistical data as sum of England, Scotland and Wales
- ¹¹ Cogeneration
- ¹² All data with the country code NI represents the monthly statistical data of GB Northern Ireland
- ¹³ Net generation: operational data available to TSO. Other fossil fuel subcategory represents industry generation (different types of fossil fuel). Biomass subcategory includes energy from biogas and from biomass co-fired in conventional thermal units. Therefore energy in this category does not correspond with NGC of biomass
- ¹⁴ NGC: operational data available to TSO. Fossil fuel category includes 2326 MW (not listed separately as there is no other fossil fuel subcategory) coming from industry (different types of fossil fuel). Biomass subcategory includes 148MW from biogas
- ¹⁵ NGC other sources: geothermal energy
- ¹⁶ Value of the renewable hydro generation is taken into account hydro generations connected to the distribution network in the amount of 112.9MW but mentioned value applies to 31.12.2013. Data for 31.12.2014 are not yet available.
The value of hard coal by thermal power plant Trbovlje is also taken into account in the amount of 110MW, which is in the liquidation process.
All generations of the renewables (other than hydro) are connected to the distribution network and value applies to 31.12.2013. Data for 31.12.2014 are not yet available.
- ¹⁷ Calculated sum of the ENTSO-E member TSOs' countries

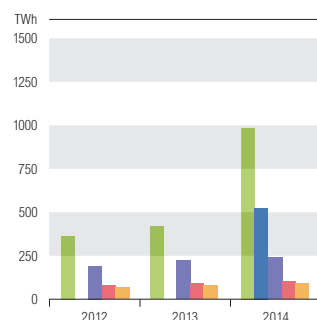
Generation mix in ENTSO-E member TSOs' countries in 2014¹

	TWh
Fossil fuels (lignite and hard coal, gas, oil, mixed fuels, peat)	1321.57
Renewable generation (wind, solar, biomass, geothermal, hydro)	991.18
Thermal nuclear	859.00
Hydraulic generation	79,71
Non-identifiable generation	9.66



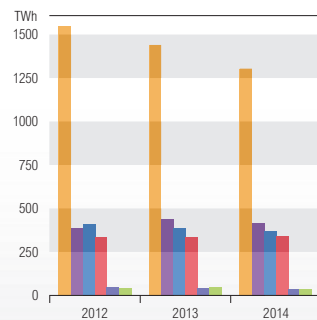
ENTSO-E renewable generation¹

	year	TWh
Renewable net generation	2012	365.63
	2013	417.72
	2014	991.18
of which hydro	2012	n.a.
	2013	n.a.
	2014	523.26
of which wind	2012	191.95
	2013	222.80
	2014	240.28
of which biomass	2012	79.95
	2013	88.87
	2014	102.73
of which solar	2012	67.95
	2013	80.94
	2014	90.89

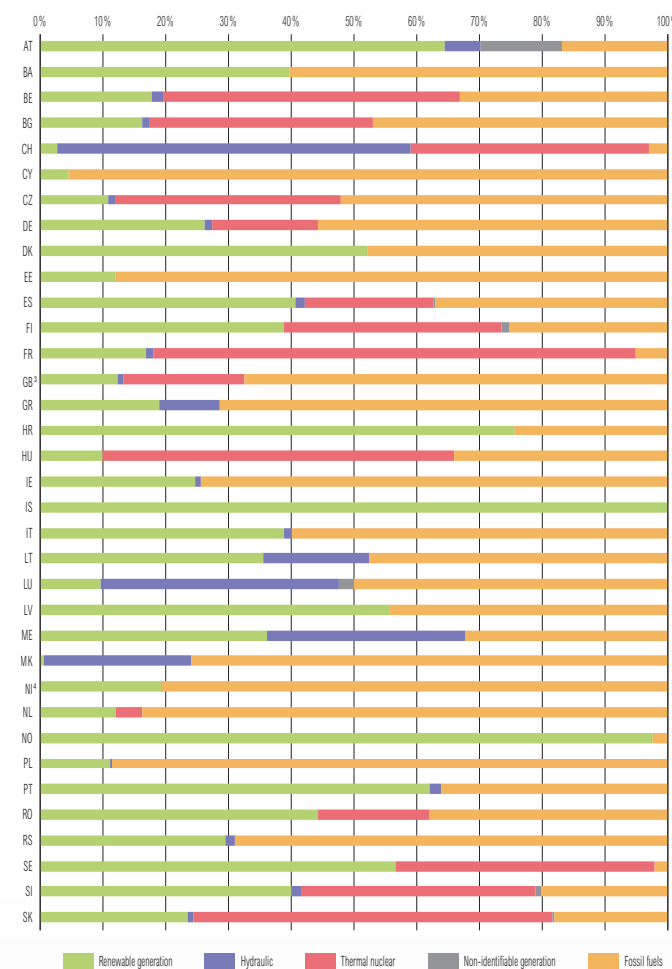


ENTSO-E fossil fuels generation¹

	year	TWh
Fossil fuels net generation	2012	1546.77
	2013	1437.78
	2014	1321.57
of which hard coal	2012	385.12
	2013	441.08
	2014	413.93
of which gas	2012	411.31
	2013	386.12
	2014	365.49
of which lignite	2012	334.40
	2013	329.65
	2014	338.39
of which oil	2012	46.99
	2013	42.78
	2014	38.16
of which mixed fuels	2012	43.92
	2013	45.45
	2014	37.82



Share of energy produced of each member TSOs' country 2014 in %²



- ¹ All values are calculated to represent 100% of the national values.
- ² Share of energy produced, based on the net generation for each TSO as a member of ENTSO-E per the table "ENTSO-E in figures" on page 2-4.
- ³ All data with the country code GB represents monthly statistical data as sum of England, Scotland and Wales.
- ⁴ All data with the country code NI represents the monthly statistical data of GB Northern Ireland.

Physical energy flows



	Sum of imports ¹	Sum of exports ¹	Balance (imp-exp)
AT	28044	18791	9253
BA	3163	5998	-2835
BE	21698	4190	17508
BG	4323	13774	-9451
CH	28116	32439	-4323
CY ²	-	-	-
CZ	11832	28138	-16306
DE	38894	74588	-35694
DK	12785	9801	2984
EE	3712	6530	-2818
FI	12308	15481	-3173
FR	7799	73575	-65776
GB ³	23169	3704	19465
GR	9565	684	8881
HR	10905	6228	4677
HU	19083	5695	13388
IE	2813	672	2141
IS ²	-	-	-
IT	46756	3008	43748
LT	8520	898	7622
LU	6971	2052	4919
LV	5338	3023	2315
ME	4027	3640	387
MK	5598	2637	2961
NI ⁴	1613	314	1299
NL	32853	17899	14954
NO	6148	20879	-14731
PL	13509	11342	2167
PT	7247	6343	904
RO	1363	8493	-7130
RS	7330	5049	2281
SE	16148	32513	-16365
SI	7249	9962	-2713
SK	12964	11861	1103
ENTSO-E	443 809	444 059	-250

Physical flow values in GWh

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.

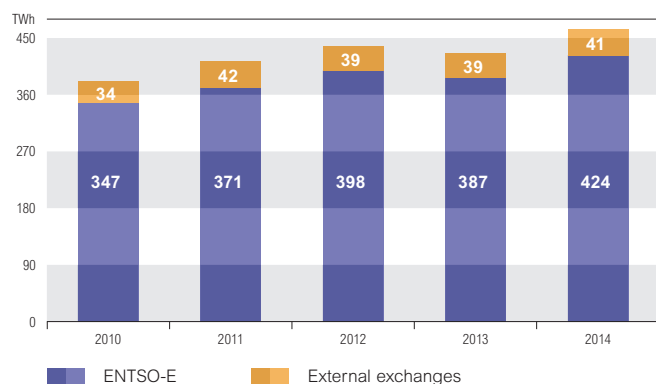
² Isolated system; therefore no exchange data.

³ All data with the country code GB represents monthly statistical data as sum of England, Scotland and Wales.

⁴ All data with the country code NI represents the monthly statistical data of GB Northern Ireland.

Development of exchanges

Development of overall cross-border exchanges of ENTSO-E member TSOs' countries during the past 5 years



Overview electricity exchanges for the past 5 years in GWh

	All Exchanges	ENTSO-E	External ¹
2010	381 589	347 167	34 422
2011	413 047	370 787	42 260
2012	437 841	398 367	39 474
2013	426 148	387 251	38 897
2014	464 280	423 586	40 694

¹ External exchanges include Albania, Belarus, Moldavia, Morocco, Russia, Turkey, Ukraine and Ukraine-West.

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Highest and lowest hourly load values of each country 2014¹

	Highest load date	time	value (in MW)	Lowest load date	time	value (in MW)
AT	10.12	17:00	11 471	17.08	04:00	4 673
BA	31.12	18:00	2 207	05.08	06:00	833
BE ²	03.12	18:00	13 110	27.07	07:00	6 623
BG	31.12	19:00	7 106	22.06	06:00	2 656
CH	07.02	12:00	7 721	26.07	06:00	2 843
CY	25.08	15:00	871	20.10	03:00	248
CZ	10.12	17:00	10 058	10.08	06:00	4 290
DE	03.12	18:00	81 738	21.04	04:00	36 709
DK	30.01	18:00	6 002	08.06	06:00	2 296
EE	30.01	17:00	1 490	20.07	05:00	492
ES	04.02	20:00	38 666	20.04	05:00	18 176
FI	20.01	08:00	14 367	22.06	05:00	5 901
FR	09.12	19:00	82 538	17.08	07:00	29 493
GB ³	06.02	19:00	58 023	17.08	07:00	19 955
GR	31.12	18:00	9 092	20.04	14:00	2 343
HR	31.12	18:00	2 974	11.05	06:00	1 166
HU	01.12	17:00	6 002	21.08	04:00	2 822
IE	16.12	18:00	4 572	06.07	07:00	1 684
IS	04.12	19:00	2 278	14.05	12:00	1 337
IT	18.07	12:00	51 587	26.12	05:00	18 738
LT	23.01	10:00	1 835	06.07	05:00	755
LU	13.12	18:00	878	28.03	00:00	368
LV	30.01	17:00	1 331	24.06	04:00	453
ME	31.12	20:00	638	18.05	06:00	217
MK	31.12	18:00	1 507	21.09	07:00	555
NI ⁴	10.12	19:00	1 745	13.07	07:00	500
NL	03.12	18:00	18 460	29.11	05:00	6 233
NO	13.01	09:00	22 957	20.07	06:00	8 633
PL ⁵	29.01	18:00	23 715	21.04	06:00	9 761
PT	04.02	21:00	8 295	20.04	08:00	3 317
RO	09.12	18:00	8 522	21.04	14:00	3 704
RS	31.12	18:00	7 399	22.06	06:00	2 423
SE	13.01	17:00	24 872	20.07	06:00	8 754
SI	12.12	18:00	2 233	02.05	01:00	965
SK	27.11	18:00	4 119	03.08	06:00	2 119
ENTSO-E⁶	29.01	19:00	522 043	17.08	07:00	230 343

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

² The reported figures are best estimates based on actual measurements and extrapolations.

³ All data with the country code GB represents monthly statistical data as sum of England, Scotland and Wales.

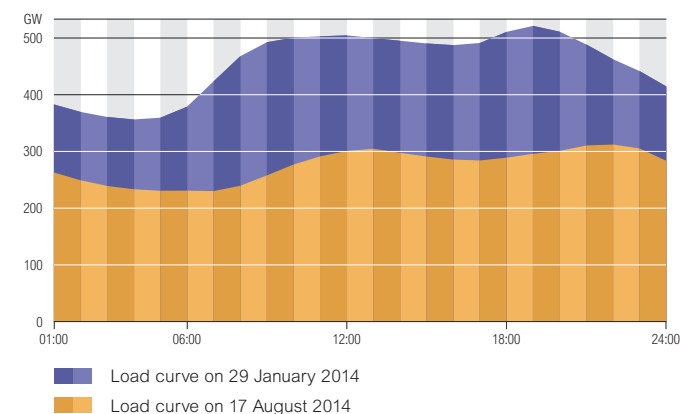
⁴ All data with the country code NI represents the monthly statistical data of GB Northern Ireland.

⁵ Operational data.

⁶ Calculated as sum of the ENTSO-E member TSOs' monthly hourly load values.

ENTSO-E peak load 2014

ENTSO-E load diagram on the days of the highest and lowest load values^{1,2}



Country values in MW on the days of highest and lowest ENTSO-E load values^{1,2}

	29.01.14 at 19:00	17.08.14 at 07:00	29.01.14 at 19:00	17.08.14 at 07:00	29.01.14 at 19:00	17.08.14 at 07:00		
AT	11 021	5 013	FR	82 463	29 493	MK	1 335	619
BA	1 908	941	GB ³	56 865	19 955	NI ⁴	1 568	529
BE	12 729	6 836	GR	7 585	4 657	NL	17 270	8 457
BG	6 796	2 927	HR	2 746	1 525	NO	20 991	9 755
CH	7 445	3 500	HU	5 735	3 092	PL	23 297	10 912
CY	610	483	IE	4 255	1 830	PT	7 231	3 950
CZ	9 868	4 560	IS	2 131	1 869	RO	8 006	4 129
DE	80 660	37 470	IT	49 930	19 758	RS	6 663	2 660
DK	5 837	2 523	LT	1 740	872	SE	23 938	10 185
EE	1 447	711	LU	779	377	SI	2 129	1 257
ES	37 540	19 487	LV	1 240	577	SK	4 005	2 237
FI	13 733	6 905	ME	547	292	*	522 043	230 343

*ENTSO-E

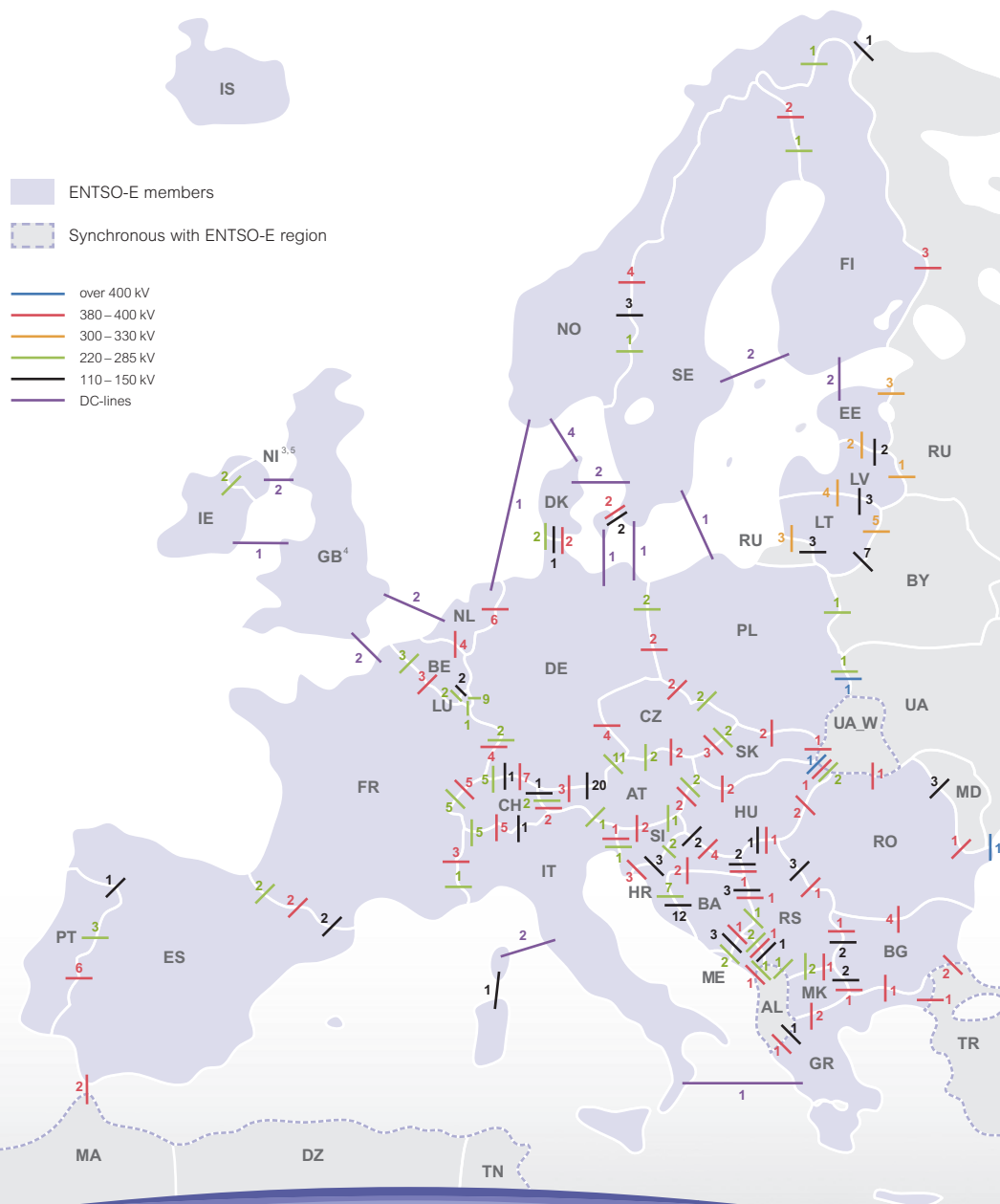
¹ Calculated load values as sum of the ENTSO-E member TSOs' countries.

² All values are calculated to represent 100% of the national values.

³ All data with the country code GB represents monthly statistical data as sum of England, Scotland and Wales.

⁴ All data with the country code NI represents the monthly statistical data of GB Northern Ireland.

Grid information



Number of circuits on cross-frontier transmission lines as of 31 December 2014 in the ENTSO-E area^{1,2}

ENTSO-E Overview circuit length in km

	Length of AC circuits	of which AC cable	Sum of DC cable
220–285 kV	141 096	3 203	2 233
330 kV	9 859	113	
380–400 kV	155 548	1 796	1 047
750 kV	471	0	
Sum	306 974	5 112	5 719

Number of cross frontier lines in the ENTSO-E area

	AC	DC
Over 400 kV	8	8
380–400 kV	119	4
300–330 kV	18	
200–285 kV	93	10
110–150 kV	88	1
Under 110 kV	1	
Sum	327	23

¹ Non geographic location of lines.

² Only lines operated by TSOs are taken into account.

³ Between IE and NI, 275 kV instead 220 kV.

⁴ All data with the country code GB represents statistical data as sum of England, Scotland and Wales.

⁵ All data with the country code NI represents statistical data GB Northern Ireland.

Members of ENTSO-E

AT	Austria	APG VUN	Austrian Power Grid AG Vorarlberger Übertragungsnetz GmbH
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GB	United Kingdom	National Grid SONI (NI) SHE Transmission SPTransmission	National Grid Electricity Transmission plc System Operator for Northern Ireland Ltd Scottish Hydro Electric Transmission Ltd Scottish Power Transmission plc
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IS	Iceland	Landsnet	Landsnet hf
IT	Italy	Terna	Terna – Rete Elettrica Nazionale SpA
LT	Lithuania	Litgrid	Litgrid AB
LU	Luxembourg	Creos Luxembourg	Creos Luxembourg S.A.
LV	Latvia	Augstsprieguma tikls	AS Augstsprieguma tikls
ME	Montenegro	CGES AD	Crnogorski elektroprenosni sistem AD
MK	FYROM	MEPSO	Macedonian Transmission System Operator AD
NL	The Netherlands	TenneT NL	TenneT TSO B.V.
NO	Norway	Slatnett	Statnett SF
PL	Poland	PSE	PSE S.A.
PT	Portugal	REN	Rede Eléctrica Nacional, S.A.
RO	Romania	Transelectrica	C.N. Transelectrica S.A.
RS	Serbia	EMS	JP Elektroreža Srbije
SE	Sweden	Svenska Kraftnat	Svenska Kraftnat
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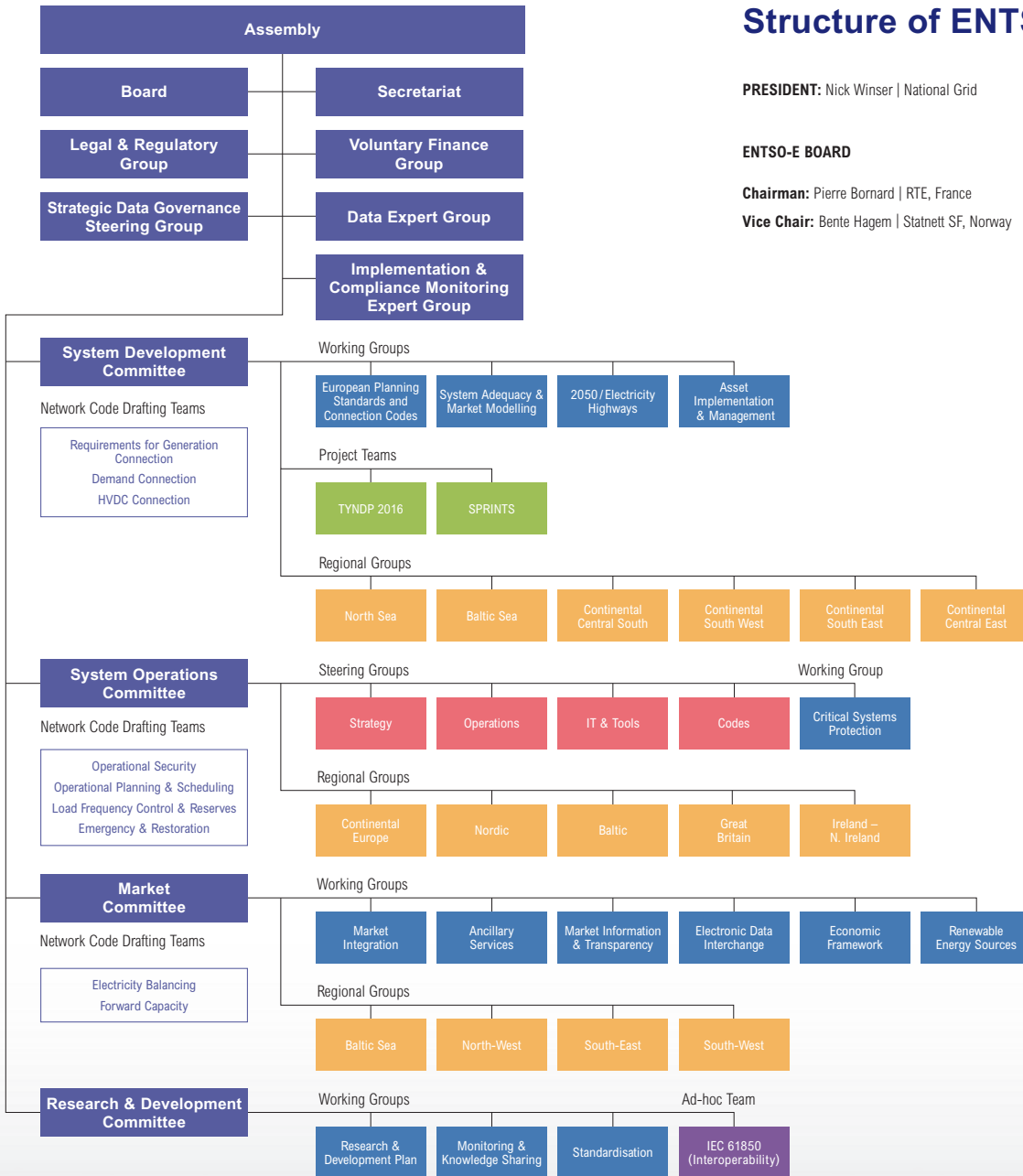
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ENTSO-E at a Glance

ENTSO-E, the European Network of Transmission System Operators, represents 41 electricity transmission system operators (TSOs) from 34 countries across Europe. ENTSO-E was established and given legal mandates by the EU legislation.

ENTSO-E promotes closer cooperation across Europe's TSOs to support the implementation of EU energy policy and achieve Europe's energy & climate policy objectives, which are changing the very nature of the power system.

Reliable. Sustainable. Connected.

ENTSO-E contributes to the achievement of these objectives mainly through:

- the drafting and implementation of network codes;
- the development of pan-European network plans (TYNDPs);
- the technical cooperation between TSOs and between TSOs and DSOs;
- the publication of outlook reports for electricity generation;
- the publication of fundamental data on the EU electricity markets;
- the coordination of R&D plans.

ENTSO-E is the focal point for all technical, market and policy issues relating to TSOs and the European network, interfacing with power system users, EU institutions, regulators and national governments. **Through its work, ENTSO-E is helping to build the world's largest electricity market, the benefits of which will not only be felt by all those in the energy sector but also by Europe's overall economy, today and into the future.**

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