
STATISTICAL FACTSHEET 2015

PROVISIONAL VALUES AS OF 4 MAY 2016

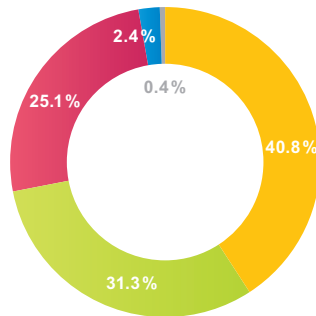
European Network of
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Reliable Sustainable Connected

Generation

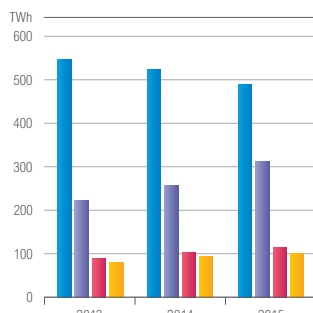
Generation mix in ENTSO-E member TSOs' countries in 2015¹

	TWh
Fossil fuels net generation (lignite and hard coal, gas, oil, mixed fuels, peat)	1360.60
Renewable net generation (hydro, wind, solar, biomass, geothermal)	1042.45
Thermal nuclear net generation	836.04
Hydraulic net generation (except renewable part)	79.82
Non-identifiable net generation	11.69



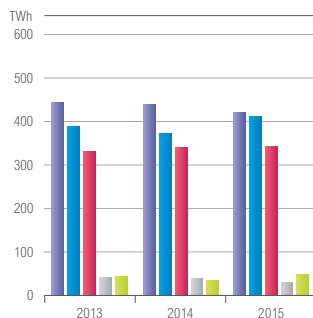
ENTSO-E renewable generation¹

	year	TWh
Renewable net generation	2013	962.31
	2014	997.16
	2015	1042.45
of which hydro	2013	545.83
	2014	522.48
of which wind	2014	222.81
	2015	310.59
of which biomass	2013	87.97
	2014	103.65
of which solar	2013	80.95
	2014	95.91
	2015	101.96

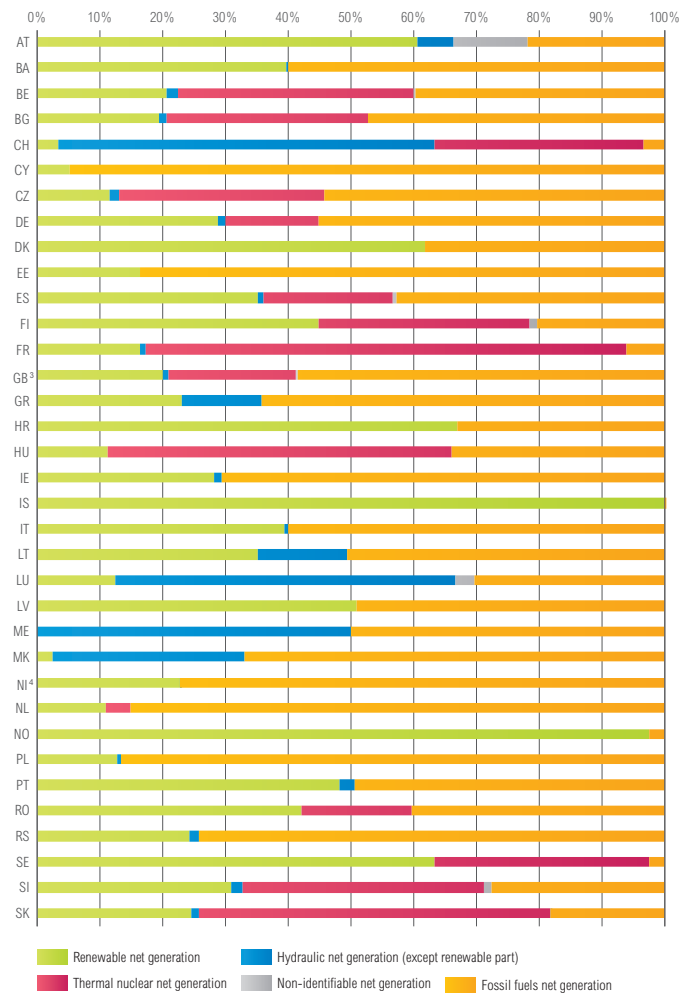


ENTSO-E fossil fuels generation¹

	year	TWh
Fossil fuels net generation	2013	1437.83
	2014	1332.26
	2015	1360.60
of which hard coal	2013	441.08
	2014	437.00
of which gas	2013	386.16
	2014	371.68
of which lignite	2013	329.65
	2014	338.53
of which oil	2013	42.78
	2014	40.45
of which mixed fuels	2013	45.45
	2014	37.84
	2015	48.80



Share of energy produced of each member TSOs' country 2015 in %²



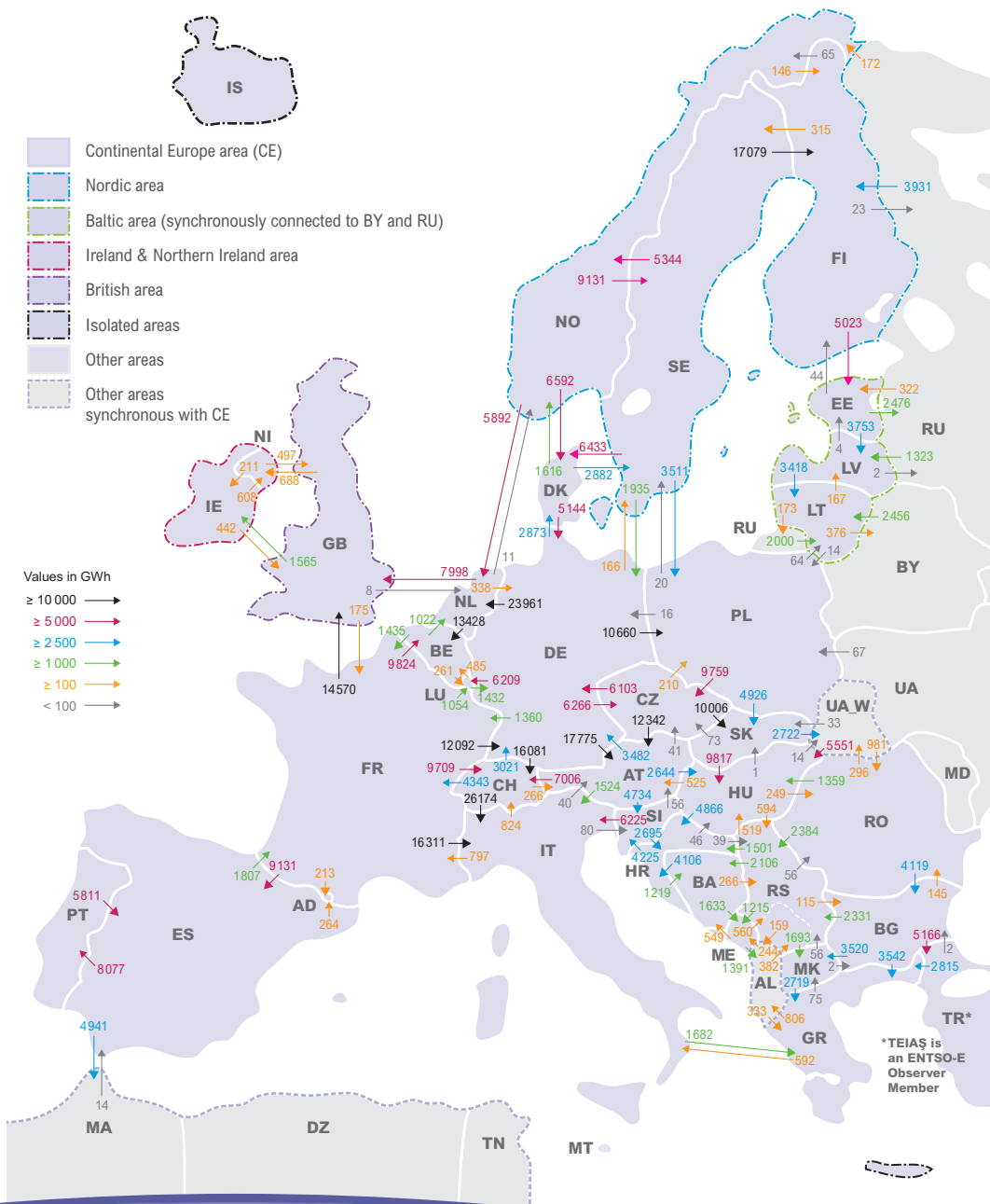
¹ All values are calculated to represent 100% of the national values.

² Share of energy produced, based on the net generation for each TSO as a member of ENTSO-E per the tables "ENTSO-E in figures" on page 2-5.

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	29368	19311	10057
BA	3874	6005	-2131
BE	23737	2718	21019
BG	4238	14704	-10466
CH	33620	33804	-184
CY ²	-	-	-
CZ	16139	28661	-12522
DE	33563	85351	-51788
DK	15898	9642	6256
EE	5349	6273	-924
FI	14956	15089	-133
FR	21200	5426	15774
GB ³	9917	72904	-62987
GR	23507	2436	21071
HR	11091	1473	9618
HU	13167	5529	7638
IE	19936	6249	13687
IS ²	1776	1050	726
IT	-	-	-
IT ²	50826	3423	47403
LT	7938	730	7208
LU	7524	1917	5607
LV	5243	3424	1819
ME	3092	2500	592
MK	5288	2777	2511
NI ⁴	1296	708	588
NL	30883	21775	9108
NO	7208	21761	-14553
PL	14459	14793	-334
PT	8077	5811	2266
RO	1433	8158	-6725
RS	6615	7365	-750
SE	12514	34302	-21788
SI	9039	8976	63
SK	14966	12612	2354
ENTSO-E	467 740	467 649	91

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.

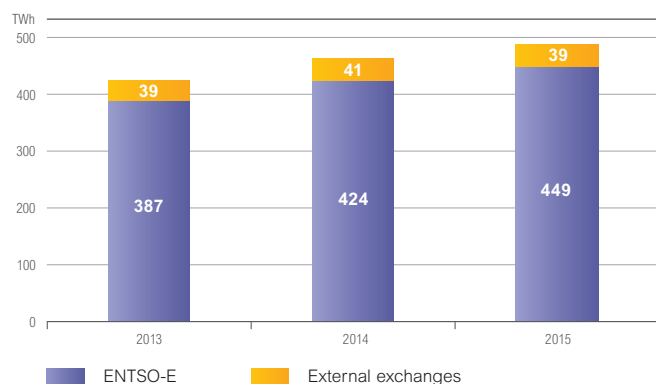
² Isolated system; therefore no exchange data.

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 3 years



Overview electricity exchanges for the past 3 years in GWh

	All Exchanges	ENTSO-E	External ¹
2013	426 148	387 251	38 897
2014	464 395	423 650	40 745
2015	488 227	449 036	39 191

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 2015¹

	Highest load			Lowest load		
	Date	Time ²	value (in MW)	Date	Time ²	value (in MW)
AT	24.11	17:00	11 386	23.08	03:00	4 722
BA	31.12	17:00	2 105	02.05	03:00	858
BE³	22.01	18:00	13 129	02.08	06:00	6 556
BG	08.01	18:00	7 100	07.06	05:00	2 781
CH	12.02	08:00	10 155	02.08	06:00	4 875
CY	04.08	14:00	954	01.06	05:00	270
CZ	09.02	12:00	9 982	02.08	05:00	4 428
DE	24.11	17:00	79 893	25.05	03:00	36 146
DK	10.06	10:00	5 844	26.04	03:00	1 915
EE	07.01	15:00	1 394	27.07	04:00	498
ES	04.02	20:00	40 324	25.12	05:00	18 041
FI	22.01	07:00	13 584	19.09	02:00	5 194
FR	06.02	18:00	91 611	16.08	06:00	29 299
GB⁴	19.01	18:00	59 576	12.07	06:00	20 871
GR	30.07	12:00	9 813	25.10	14:00	3 599
HR	22.07	12:00	2 950	22.06	05:00	1 160
HU	08.07	12:00	6 106	25.05	05:00	2 857
IE	14.01	17:00	4 662	19.07	07:00	1 804
IS	25.02	13:00	2 327	08.08	06:00	1 622
IT	22.07	15:00	59 648	26.12	04:00	18 785
LT	07.01	16:00	1 748	12.07	04:00	784
LU	07.07	11:00	1 087	02.08	03:00	339
LV	08.01	15:00	1 225	25.06	03:00	438
ME	22.07	13:00	583	11.05	04:00	225
MK	08.01	23:00	1 439	02.06	03:00	530
NI⁵	14.01	18:00	1 737	14.07	06:00	538
NL	06.01	17:00	17 761	02.08	06:00	8 892
NO	04.02	08:00	22 530	23.08	05:00	9 527
PL	07.01	17:00	23 069	26.12	00:00	10 143
PT	07.01	20:00	8 618	05.04	07:00	3 419
RO	08.01	18:00	8 488	12.04	14:00	3 799
RS	31.12	17:00	6 879	10.05	05:00	2 486
SE	05.02	17:00	23 395	19.07	05:00	9 242
SI	05.02	11:00	2 086	01.05	03:00	960
SK	25.11	17:00	4 145	02.08	05:00	2 231
ENTSO-E⁶	05.02	18:00	528 093	16.08	06:00	240 673

¹ Hourly load values represent the average of the hour, they are calculated to represent 100% of the national values.

² It is the hour following the given time (00:00 meaning the hour from 00:00 to 01:00)

³ The reported figures are best estimates based on actual measurements and extrapolations.

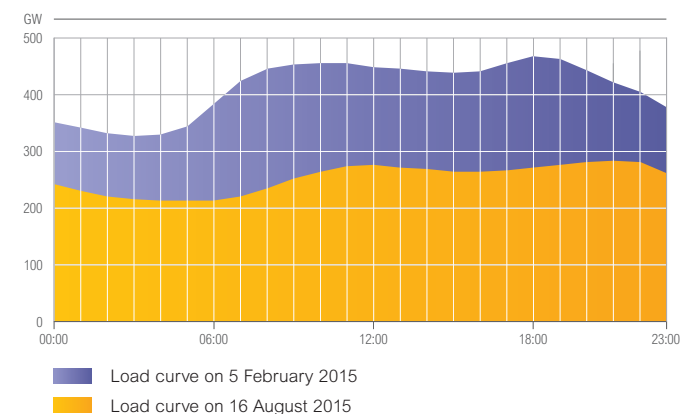
⁴ All data with the country code GB represents monthly statistical data as sum of England, Scotland and Wales.

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

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

ENTSO-E peak load 2015

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}

	05.02.15 Time ³ at 18:00	16.08.15 at 06:00	05.02.15 at 18:00	16.08.15 at 06:00	05.02.15 at 18:00	16.08.15 at 06:00		
AT	10 977	5 377	FR	90 970	29 299	MK	1 151	600
BA	1 877	996	GB⁴	57 988	23 043	NI⁵	1 543	571
BE	13 091	6 856	GR	7 358	4 561	NL	17 272	9 430
BG	5 899	3 119	HR	2 714	1 560	NO	21 433	9 596
CH	9 658	5 256	HU	5 796	3 566	PL	22 245	11 299
CY	604	511	IE	4 470	1 927	PT	7 394	4 000
CZ	9 828	4 788	IS	2 303	1 913	RO	8 023	4 362
DE	79 455	38 978	IT	50 019	20 614	RS	6 303	2 907
DK	5 474	2 606	LT	1 600	889	SE	22 971	9 805
EE	1 267	591	LU	812	383	SI	2 085	1 090
ES	37 650	20 051	LV	1 107	560	SK	4 038	2 428
FI	12 200	6 817	ME	518	324	*	528 093	240 673

*ENTSO-E

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

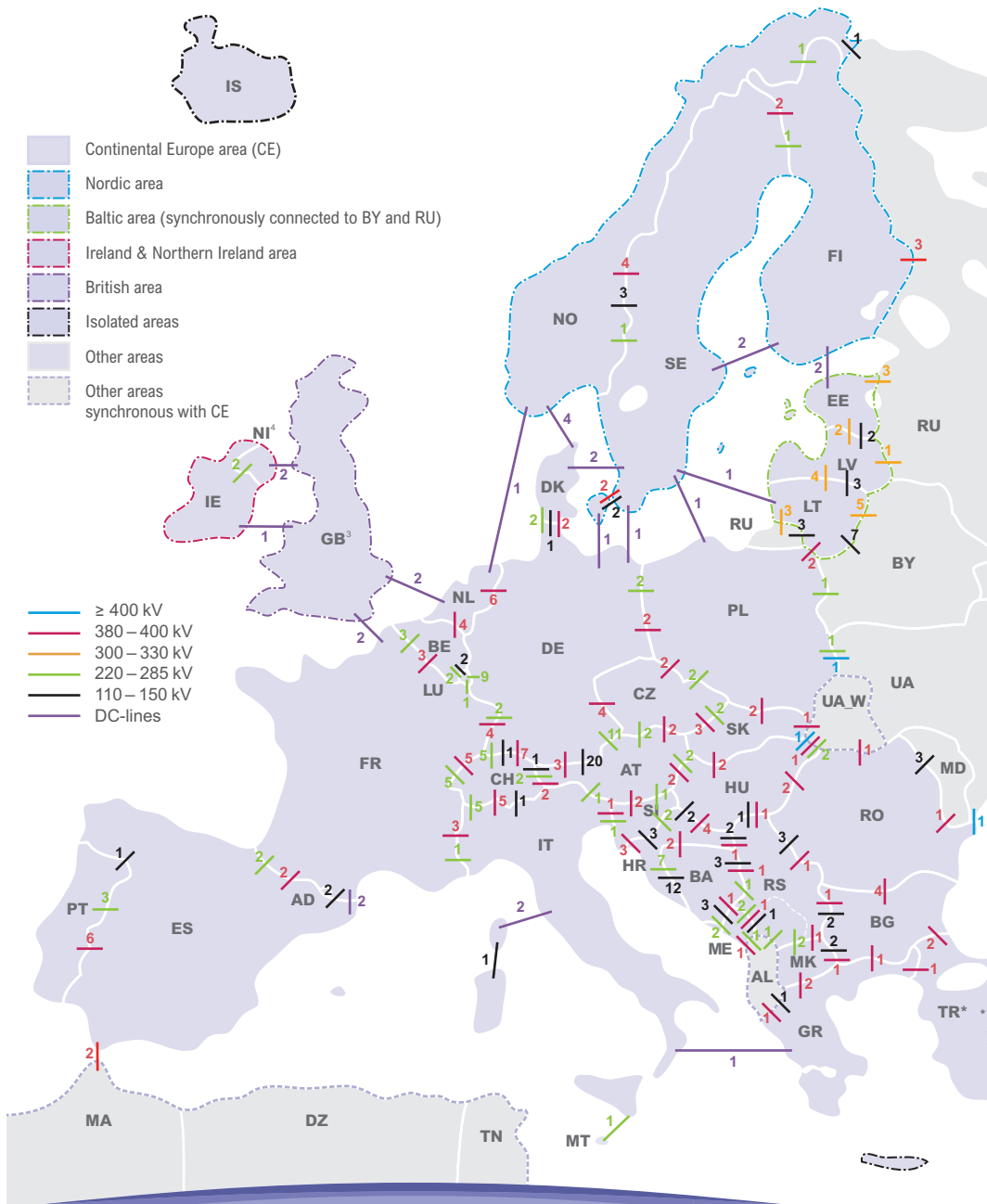
² All values are calculated to represent 100% of the national values.

³ It is the hour following the given time (00:00 meaning the hour from 00:00 to 01:00)

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

⁵ 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 2015 in the ENTSO-E area^{1,2}

ENTSO-E Overview circuit length in km

	Length of AC circuits	of which AC cables	Sum of DC cables
Over 400 kV	4697	1749	2334
350–400 kV	152486	1432	1047
300–330 kV	10962	225	62
220–285 kV	140407	3610	2233
110–160 kV	–	–	105
Sum	308552	7016	5781

Number of cross frontier lines in the ENTSO-E area

	AC	DC
Over 400 kV	7	8
380–400 kV	121	5
300–330 kV	18	3
200–285 kV	93	10
110–150 kV	88	1
Under 110 kV	1	–
Sum	328	27

¹ Non geographic location of lines.

² Only lines operated by TSOs are taken into account.

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

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

TR* *TEIAS is an ENTSO-E Observer Member

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LV	Latvia	Augstsprieguma tīkls	AS Augstsprieguma tīkls
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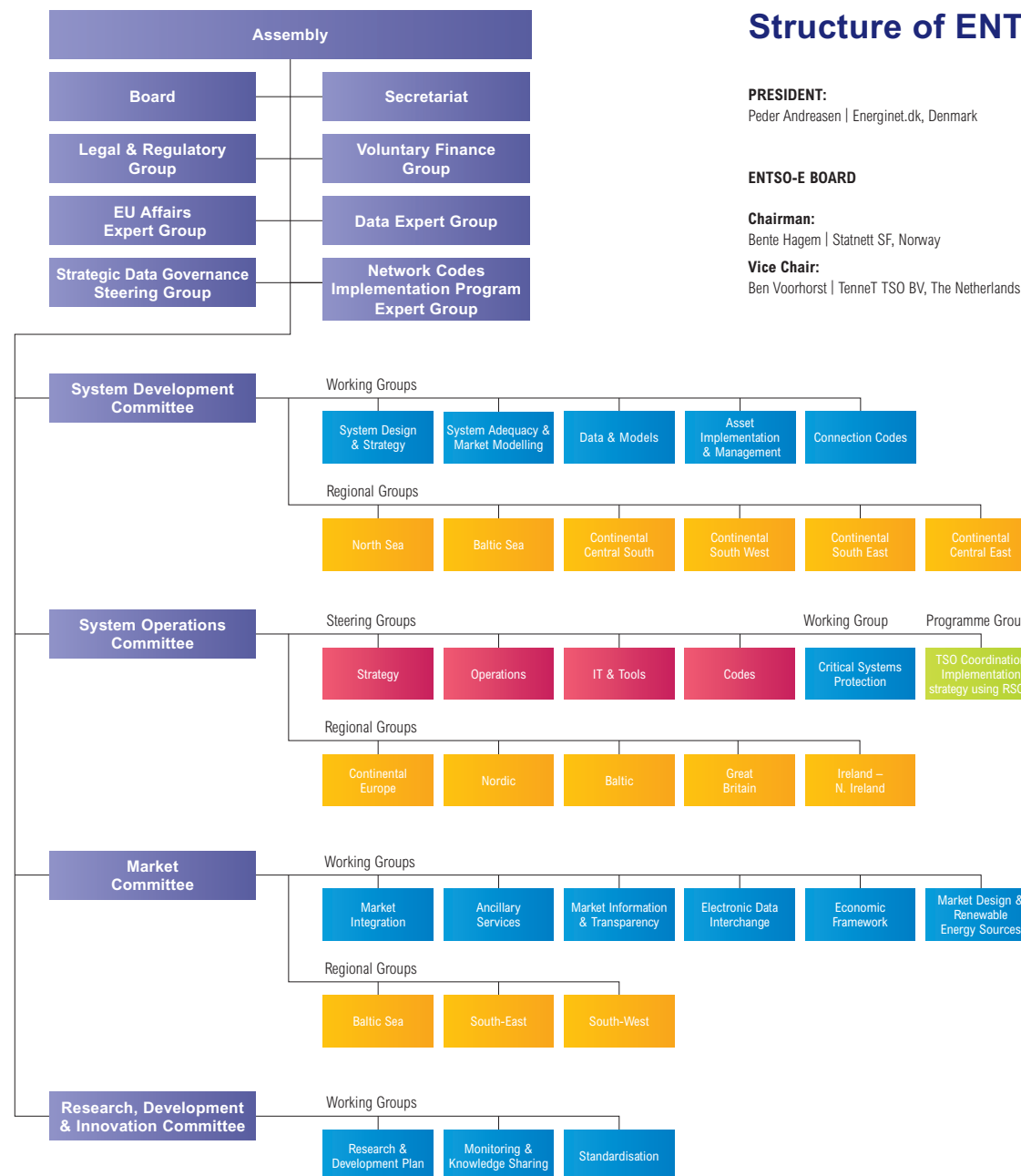
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ENTSO-E at a Glance

ENTSO-E, the European Network of Transmission System Operators, represents 42 electricity transmission system operators (TSOs) from 35 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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