

TERRE KPIs Report

March 2024



Introduction

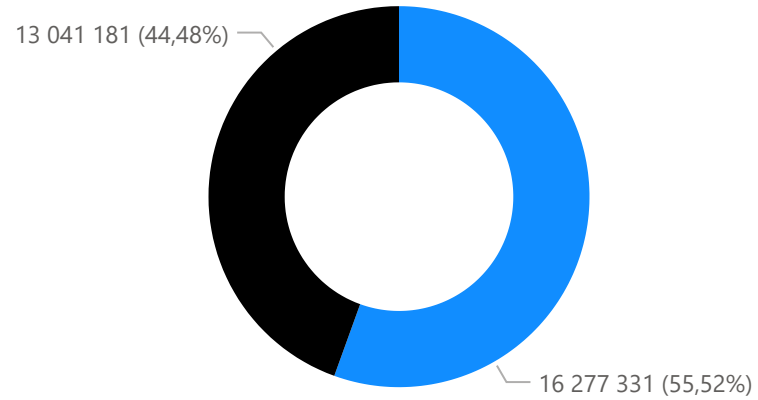
This report is prepared by TSOs participating in TERRE project based on the requirements set up in Article 15 of Implementation Framework for the exchange of balancing energy from Replacement Reserves in accordance with Article 19 of Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing



Volume of upward and downward bids submitted to the platform, requested by the TSOs and accepted by the AOF

Volume of offered bids (MWh)

Direction ● UP ● DOWN



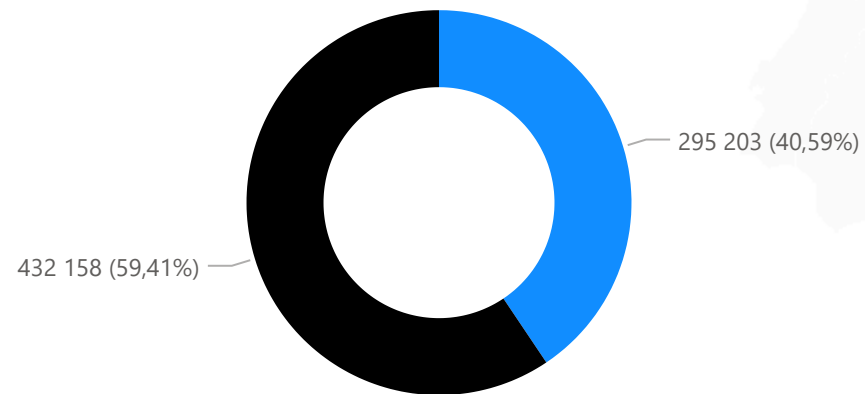
Volume of accepted bids (MWh)

Direction ● UP ● DOWN



Volume of submitted needs (MWh)

Direction ● UP ● DOWN




Volume of satisfied needs (MWh)

Direction ● UP ● DOWN



Use of RR assistance


REE

0	0	
Count of RR assistance+	Count of RR assistance-	

REN

6	55	
Count of RR assistance+	Count of RR assistance-	

RTE

16	20	
Count of RR assistance+	Count of RR assistance-	

Swissgrid

0	2	
Count of RR assistance+	Count of RR assistance-	

Terna

0	0	
Count of RR assistance+	Count of RR assistance-	

Month	Day	TSO	Total RR Assistance + (MWh)
March	2	RTE	36,50
March	3	REN	40,00
March	5	REN	301,00
March	5	RTE	83,50
March	10	RTE	31,00
March	11	REN	848,00
March	12	RTE	9,00
March	16	RTE	18,50
March	17	RTE	30,00
March	18	RTE	25,25
March	19	REN	346,00
March	24	RTE	27,50
March	28	RTE	131,50
March	30	RTE	5,50

Month	Day	TSO	Total RR Assistance - (MWh)
March	1	REN	1 147,00
March	1	RTE	10,00
March	3	REN	6 840,00
March	7	RTE	38,00
March	9	REN	1 700,00
March	10	REN	17 504,00
March	10	RTE	88,50
March	13	REN	71,00
March	14	RTE	5,00
March	15	RTE	38,75
March	16	REN	300,00
March	16	RTE	38,00
March	17	RTE	18,00
March	17	Swissgrid	54,75
March	19	RTE	26,00
March	20	RTE	28,00
March	21	REN	608,00
March	23	REN	9 723,00
March	23	RTE	43,00
March	24	REN	14 500,00
March	24	RTE	127,00
March	25	RTE	101,50
March	28	RTE	19,50
March	29	RTE	82,50
March	31	REN	4 361,00



Using RR assistance

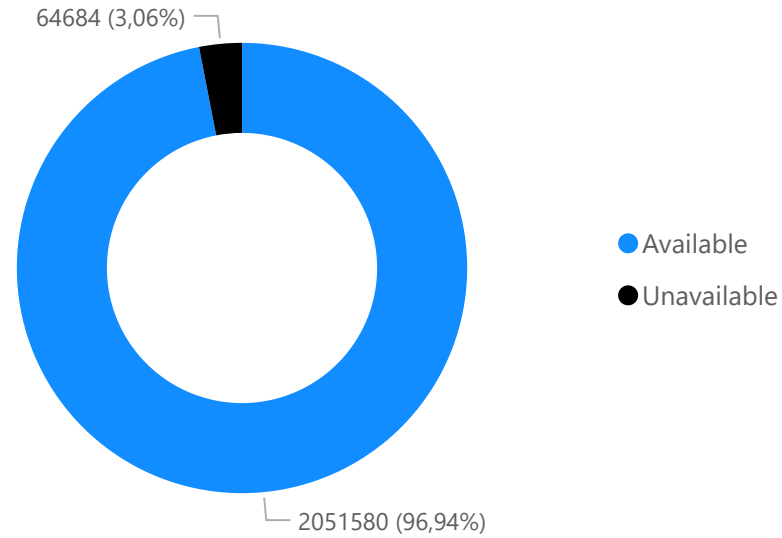


Not Using RR assistance

Note : RR assistance means that the TSO requested need exceeds submitted volume of bids in given direction

Volume and ratio of unavailable bids per TSO (MWh)

Share of available and unavailable bids (%)



Reasons of unavailability of bids

TSO	reasonCode	reasonText	Count
REE	B47	Operational security constraints	2 268
REN	B46	Internal congestion	988
REN	B47	Operational security constraints	13 828
RTE	B47	Operational security constraints	47 600
Total			64 684

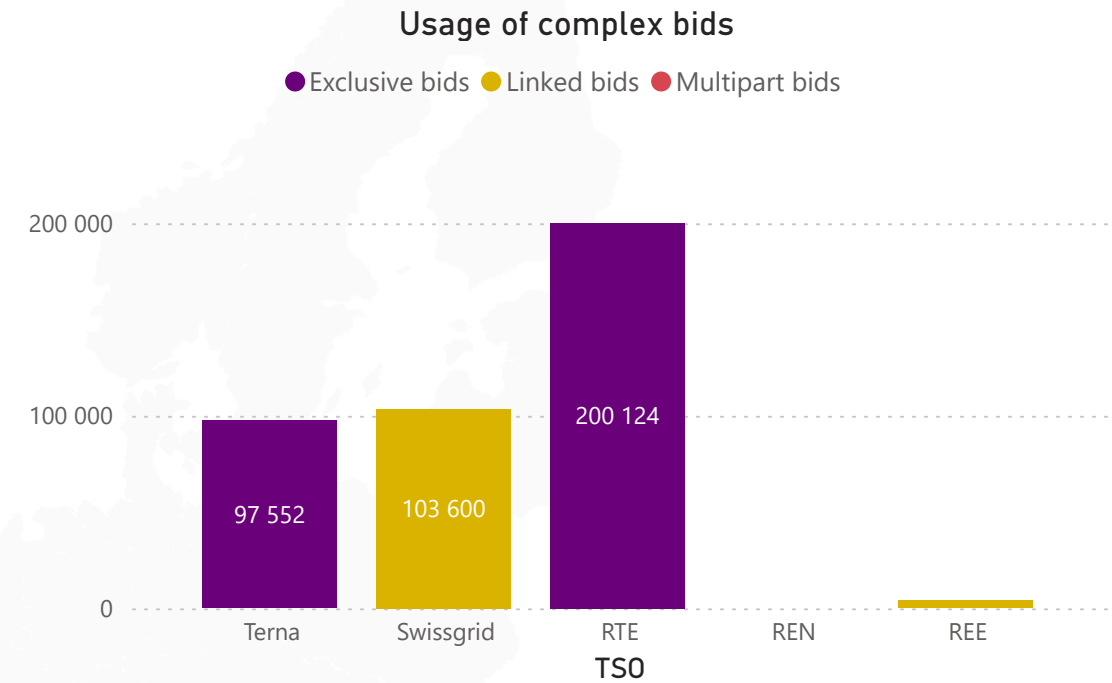
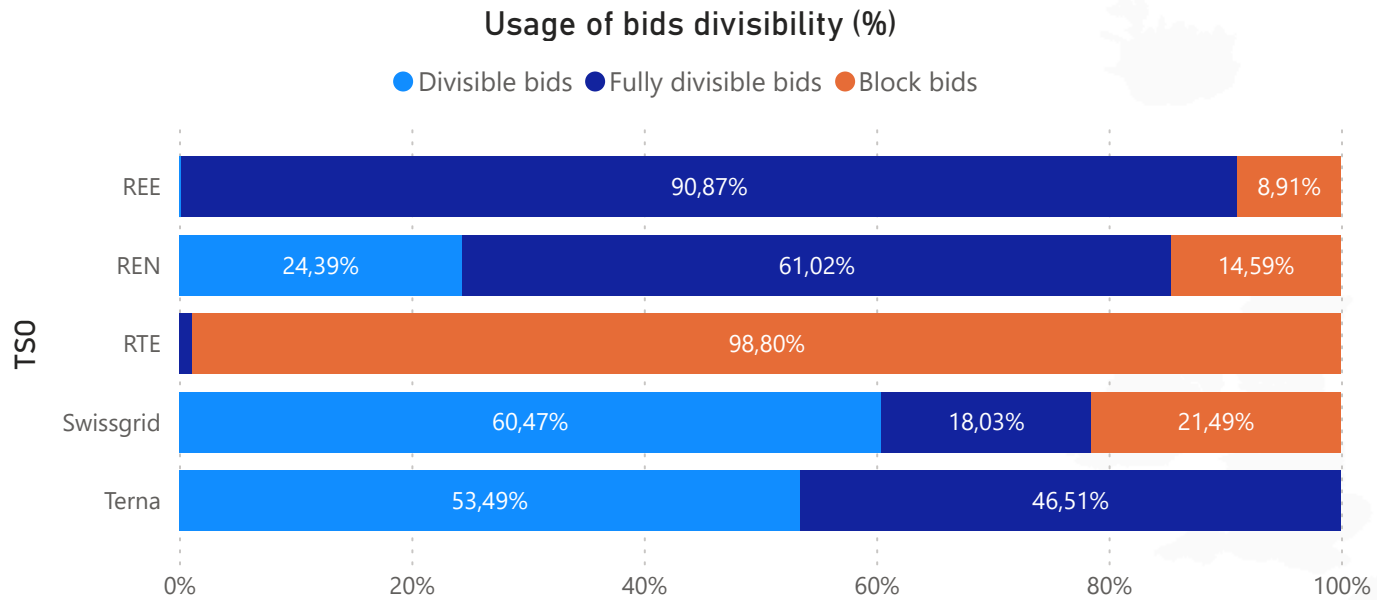
Volume of available and unavailable bids per area (MWh)

TSO	Available	Unavailable	Total
REE	8 516 090	61 322	8 577 411
REN	2 138 229	355 351	2 493 580
RTE	3 600 080	2 172 805	5 772 885
Swissgrid	2 645 180		2 645 180
Terna	9 829 456		9 829 456
Total	26 729 035	2 589 477	29 318 512

Share of unavailable bids per area (%)

TSO	Share of unavailable bids
REE	0,72 %
REN	16,62 %
RTE	60,35 %
Swissgrid	
Terna	
Total	9,69 %

Volume and ratio of fully divisible bids, divisible bids and block bids per TSO



Volume of indivisible, divisible and fully divisible bids (MWh)

TSO	Block bids	Divisible bids	Fully divisible bids	Total
REE	1 189 206	9 258	7 378 947	8 577 411
REN	726 012	275 885	1 491 683	2 493 580
RTE	5 676 330	0	96 555	5 772 885
Swissgrid	505 122	1 651 963	488 096	2 645 180
Terna	0	7 072 097	2 757 359	9 829 456
Total	8 096 670	9 009 203	12 212 640	29 318 512

Analysis of the size of the indivisible part of bids per TSO

Detail divisible bids - indivisible part

RR+	TSO	Avg. indivisible part (MW)	Max indivisible part (MW)	5% percentile (MW)	50% percentile (MW)	95% percentile (MW)
	REE	11,38	15,00	3,00	15,00	15,00
	REN	8,99	10,00	2,00	10,00	10,00
	Swissgrid	4,80	18,00	1,00	6,00	7,00
	Terna	80,03	1 274,00	2,00	22,00	357,00

RR-	TSO	Avg. indivisible part (MW)	Max indivisible part (MW)	5% percentile (MW)	50% percentile (MW)	95% percentile (MW)
	REE	1,00	1,00	1,00	1,00	1,00
	REN	9,99	10,00	10,00	10,00	10,00
	Swissgrid	5,33	12,00	1,00	6,00	7,00
	Terna	316,24	1 469,00	25,00	258,00	827,00

RR+	TSO	Avg. indivisible part (%)	Max indivisible part (%)	5% percentile (%)	50% percentile (%)	95% percentile (%)
	REE	31,90 %	51,72 %	30,00 %	31,25 %	51,72 %
	REN	56,90 %	100,00 %	10,10 %	55,56 %	100,00 %
	Swissgrid	56,88 %	100,00 %	20,00 %	50,00 %	100,00 %
	Terna	45,78 %	100,00 %	3,39 %	41,51 %	100,00 %

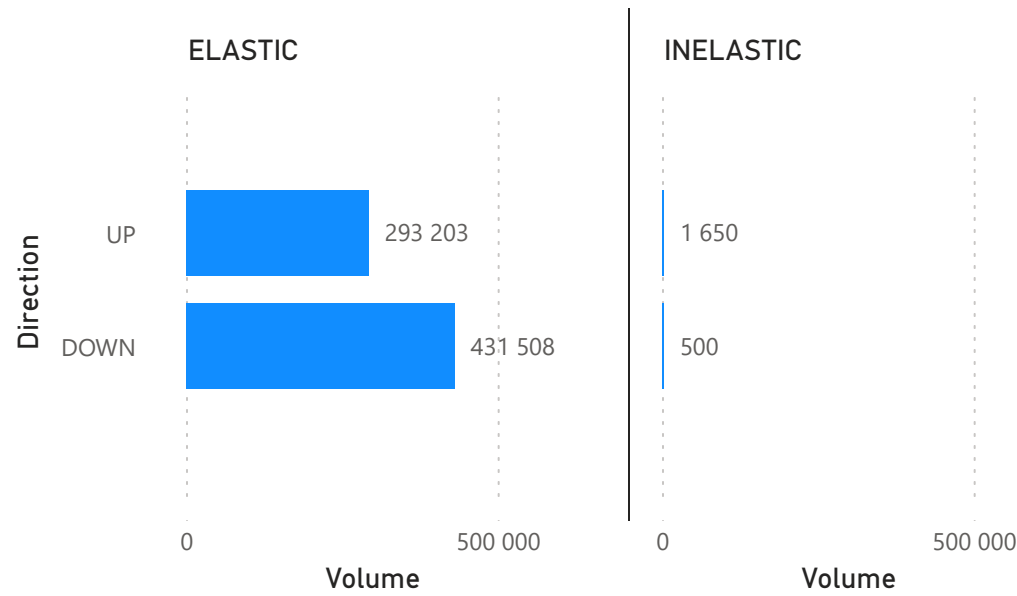
RR-	TSO	Avg. indivisible part (%)	Max indivisible part (%)	5% percentile (%)	50% percentile (%)	95% percentile (%)
	REE	14,98 %	25,00 %	9,09 %	16,67 %	25,00 %
	REN	18,34 %	100,00 %	4,03 %	9,09 %	55,56 %
	Swissgrid	63,07 %	100,00 %	20,00 %	50,00 %	100,00 %
	Terna	97,48 %	100,00 %	86,21 %	100,00 %	100,00 %

Detail indivisible bids

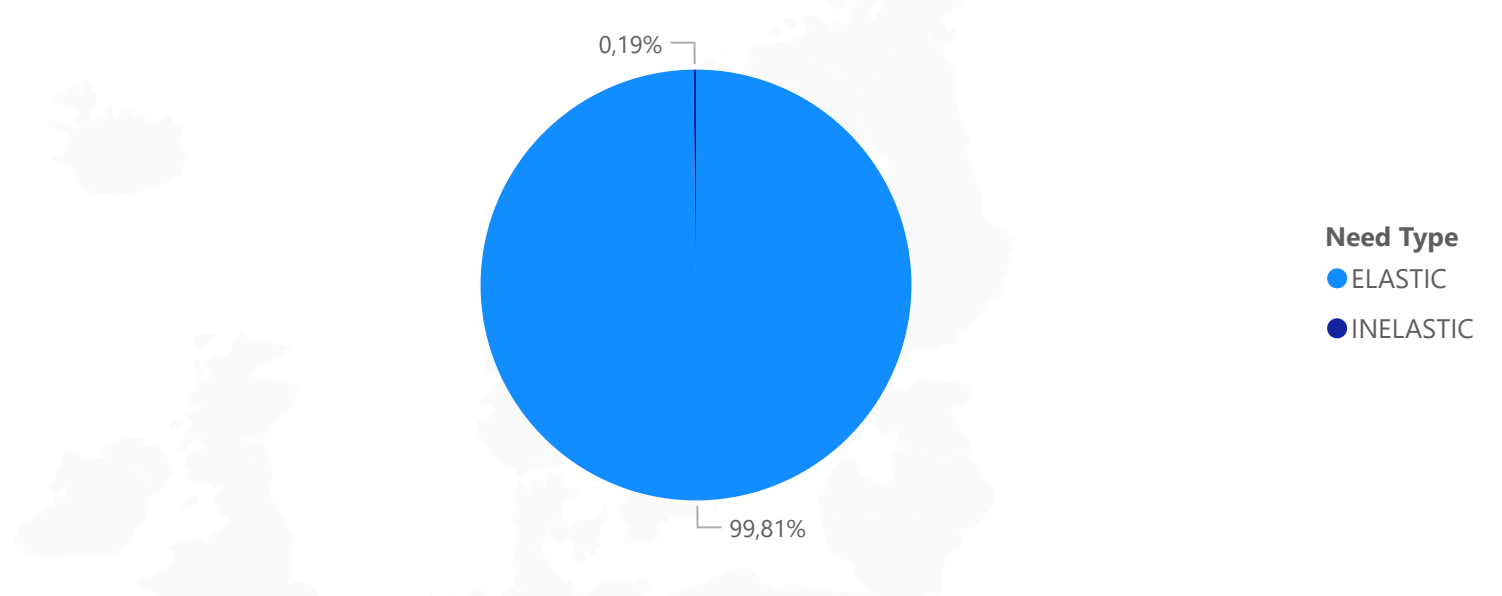
RR+	TSO	Avg. indivisible part (MW)	Max indivisible part (MW)	5% percentile (MW)	50% percentile (MW)	95% percentile (MW)
	REE	86	205	50,00	73,00	190,00
	REN	149	440	1,00	220,00	220,00
	RTE	142	960	36,00	112,00	410,00
	Swissgrid	13	100	5,00	5,00	43,00

RR-	TSO	Avg. indivisible part (MW)	Max indivisible part (MW)	5% percentile (MW)	50% percentile (MW)	95% percentile (MW)
	REE	74	365	1,00	73,00	190,00
	REN	153	440	1,00	220,00	220,00
	RTE	118	993	22,00	98,00	314,00
	Swissgrid	15	100	5,00	5,00	59,00

Volume of elastic and inelastic demand per Direction (MWh)



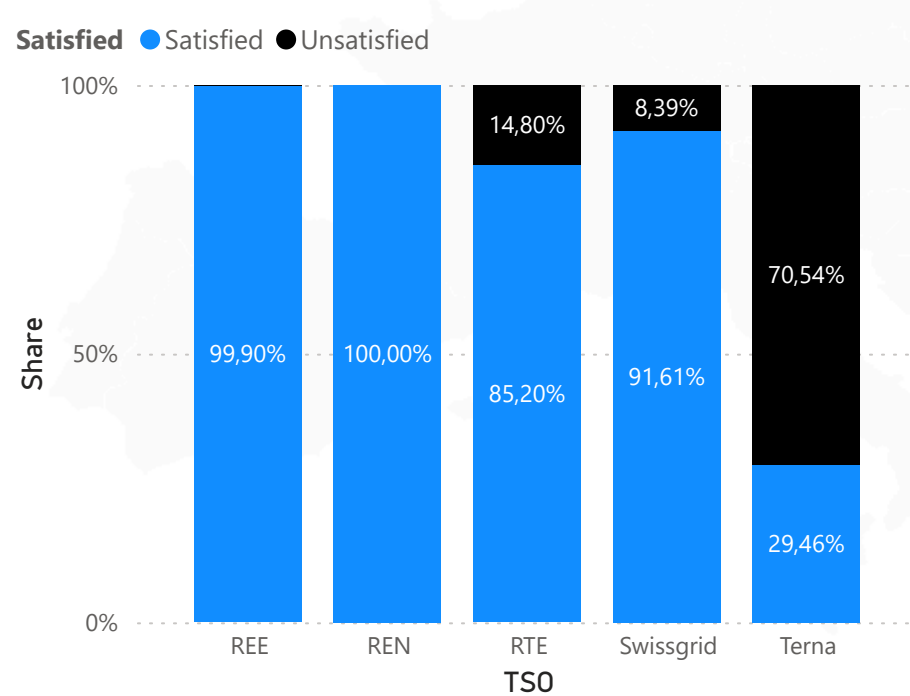
Use of elastic and inelastic demand (%)



Volume of elastic and inelastic demand per TSO (MWh)

TSO	ELASTIC	INELASTIC	Total
REE	392 281		392 281
UP	131 489		131 489
DOWN	260 792		260 792
REN	179 687		179 687
UP	58 005		58 005
DOWN	121 682		121 682
RTE	127 050	2 150	129 200
UP	91 650	1 650	93 300
DOWN	35 400	500	35 900
Swissgrid	11 105		11 105
UP	5 945		5 945
DOWN	5 160		5 160
Terna	14 588		14 588
UP	6 114		6 114
DOWN	8 474		8 474
Total	724 711	2 150	726 861

Share of satisfied needs per Area (%)



Usage of tolerance band

Use of Tolerance band need (MWh)

TSO	DOWN	UP	Total
REE			
REN			
RTE	150	350	500
Swissgrid			
Terna			
Total	150	350	500

Additional need satisfied by Tolerance band (MWh)

TSO	DOWN	UP	Total
REE			
REN			
RTE	32	0	32
Swissgrid			
Terna			
Total	32	0	32

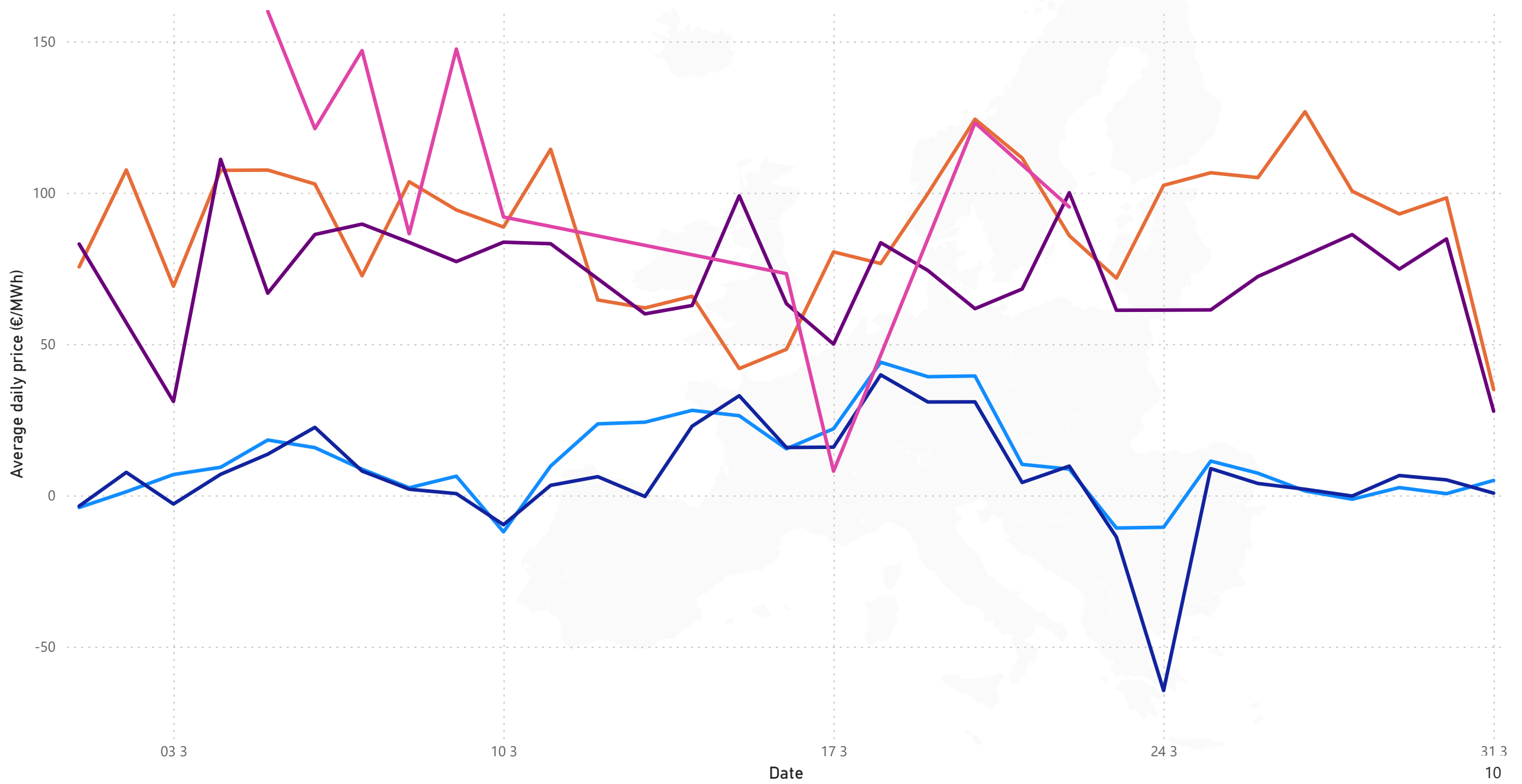
Usage of system constrains

System constrains are not used in TERRE platform at the moment.



Average daily price of satisfied need by TSO

TSO REE REN RTE Swissgrid Terna



Average, minimal and maximal prices of satisfied needs (€/MWh)

REE

11,86

Average Price

-123,51

Minimal Price

120,39

Maximal Price

REN

5,55

Average Price

-200,00

Minimal Price

90,17

Maximal Price

RTE

91,32

Average Price

-48,90

Minimal Price

249,00

Maximal Price

Swissgrid

75,89

Average Price

1,00

Minimal Price

200,20

Maximal Price

Terna

104,09

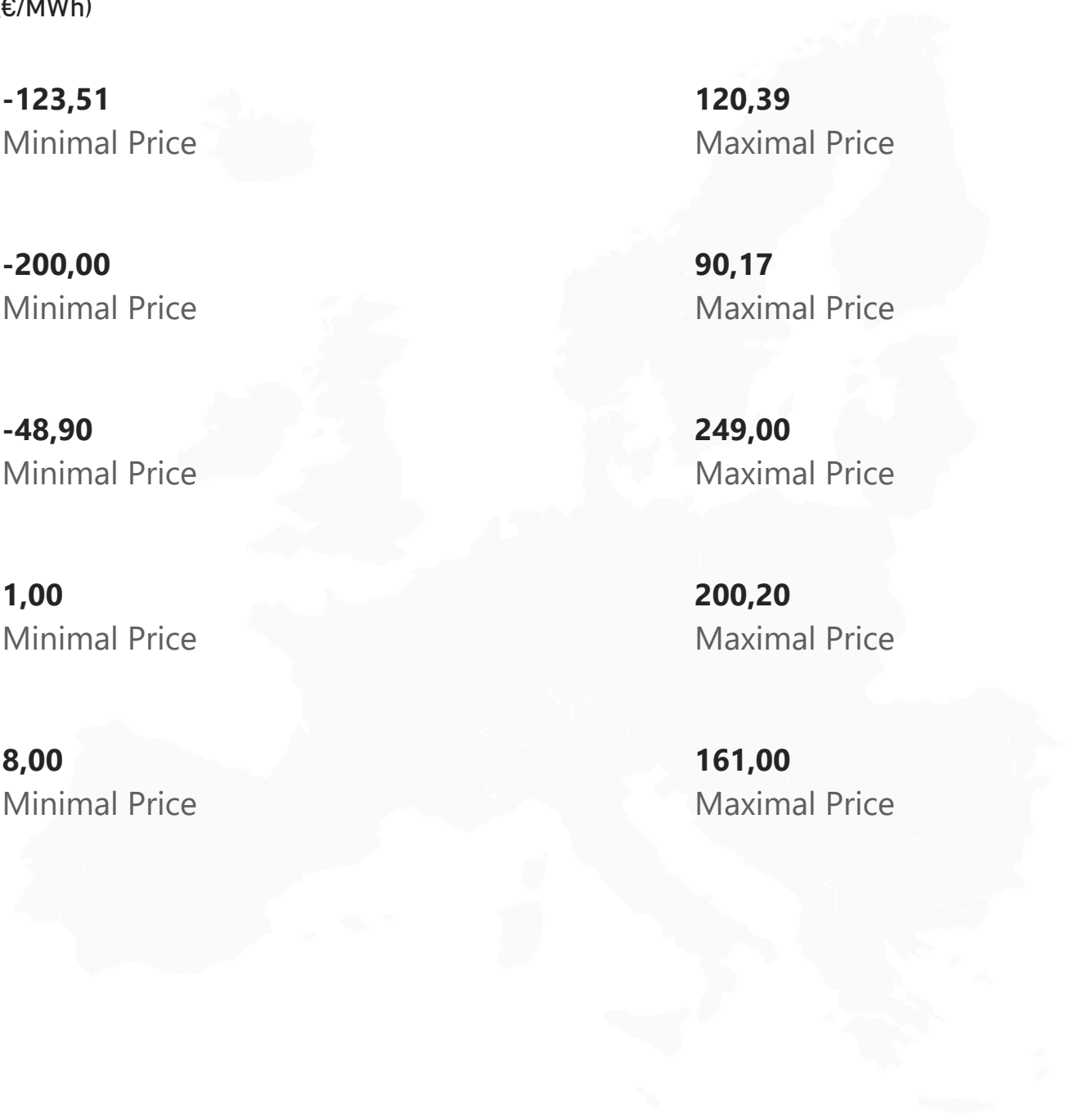
Average Price

8,00

Minimal Price

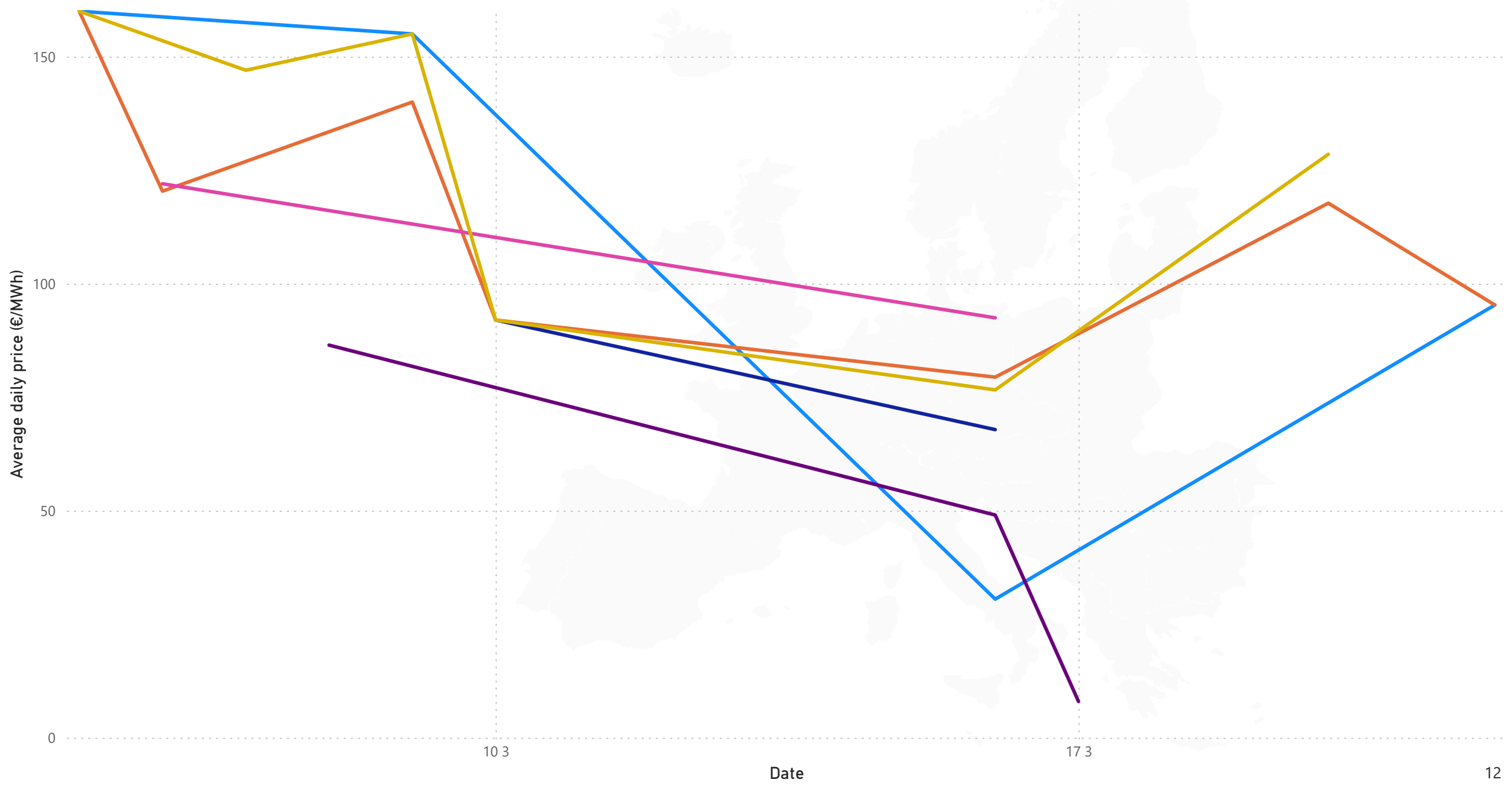
161,00

Maximal Price



Average daily price of satisfied need - Italy areas

Area ● IT-CALABRIA ● IT-CENTRE_NORTH ● IT-CENTRE_SOUTH ● IT-NORTH ● IT-SARDINIA ● IT-SOUTH



Average, minimal and maximal prices of satisfied needs (€/MWh) - Italy areas

IT-CALABRIA

83,06

Average Price

10,00

Minimum Price

160,00

Maximum Price

IT-CENTRE_NORTH

79,93

Average Price

42,09

Minimum Price

92,00

Maximum Price

IT-CENTRE_SOUTH

116,14

Average Price

74,09

Minimum Price

160,00

Maximum Price

IT-NORTH

55,80

Average Price

8,00

Minimum Price

96,47

Maximum Price

IT-SARDINIA

95,15

Average Price

90,42

Minimum Price

122,00

Maximum Price

IT-SOUTH

127,13

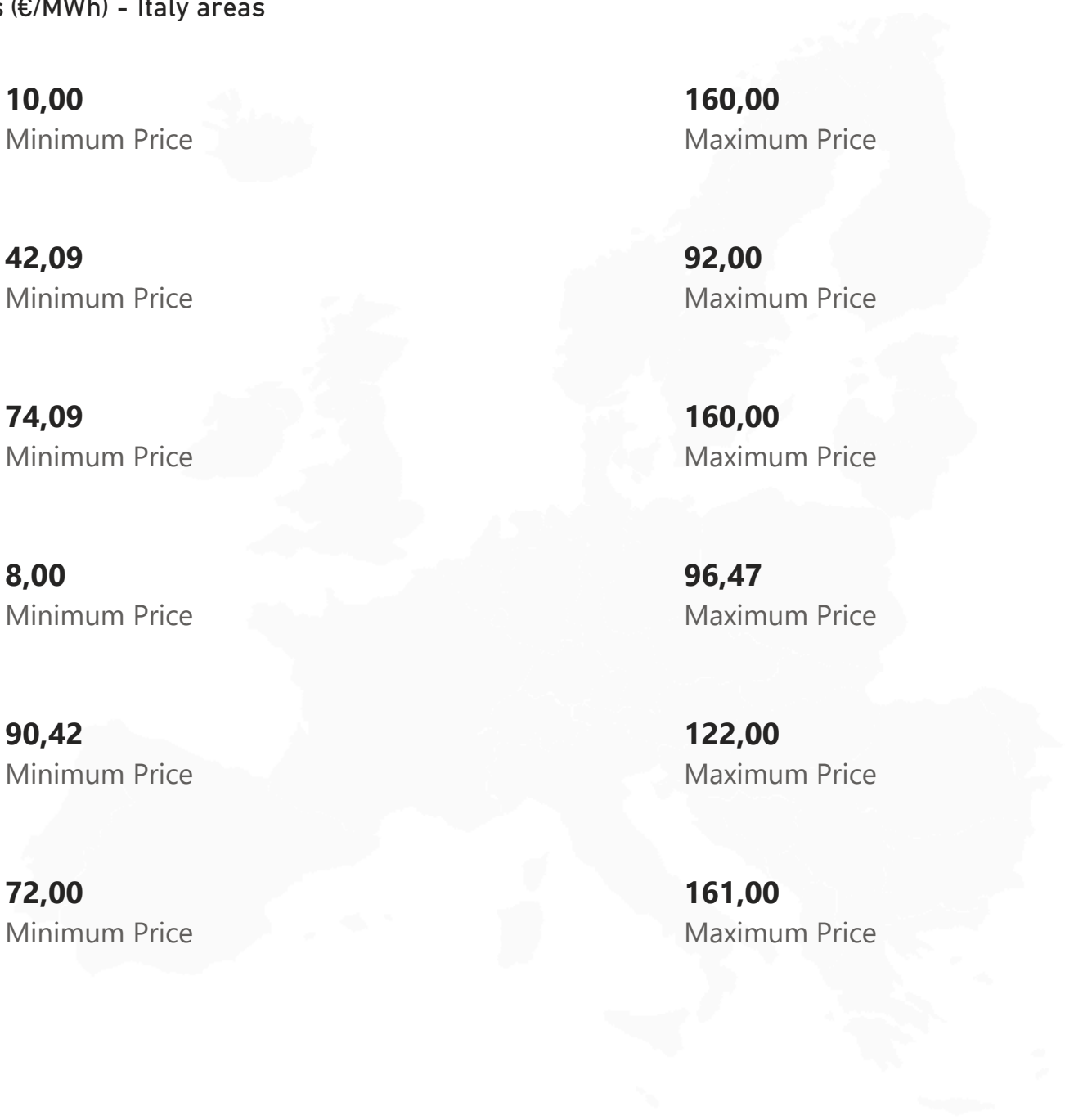
Average Price

72,00

Minimum Price

161,00

Maximum Price



Offered and used cross zonal capacity (MW)

Source TSO	Target TSO	Avg. Offered	Min. Offered	Max. Offered
REE	REN	3 949,22	2,00	7 740,00
REN	REE	2 304,29	5,00	6 953,50
REE	RTE	66,86	3,00	500,00
RTE	REE	475,08	64,00	500,00
RTE	Swissgrid	195,20	1,00	3 685,00
Swissgrid	RTE	3 272,57	15,00	4 500,00
RTE	Terna	87,04	1,00	3 511,00
Terna	RTE	3 834,88	16,00	6 452,00
Swissgrid	Terna	95,19	1,00	2 465,00
Terna	Swissgrid	5 112,01	1 910,00	6 787,00

Source TSO	Target TSO	Avg Used	Min Used	Max Used
REE	REN	74,93	0,00	1 087,00
REN	REE	164,08	0,00	2 200,00
REE	RTE	18,39	0,00	500,00
RTE	REE	18,30	0,00	500,00
RTE	Swissgrid	6,20	0,00	700,00
Swissgrid	RTE	72,06	0,00	810,00
RTE	Terna	3,80	0,00	588,00
TERNA	RTE	14,89	0,00	422,80
Swissgrid	Terna	6,29	0,00	544,70
TERNA	Swissgrid	4,31	0,00	323,00

Source TSO	Target TSO	Count of congestions
REE	REN	4
REN	REE	36
REE	RTE	144
RTE	REE	36
RTE	Swissgrid	26
Swissgrid	RTE	
RTE	Terna	12
TERNA	RTE	
Swissgrid	Terna	80
TERNA	Swissgrid	

Note: Count of congestions refers to quarterhours where given interconnector direction was congested.

Counter activations statistics per Bidding zone (MWh)

BZ	CA count	BZ	Average of estimate CA	BZ	Sum of estimate CA
CH	14	CH	32,97	CH	453,40
ES	373	ES	88,02	ES	32 786,10
FR	5	FR	49,44	FR	222,50
IT-CALABRIA		IT-CALABRIA		IT-CALABRIA	
IT-CENTRE_NORTH		IT-CENTRE_NORTH		IT-CENTRE_NORTH	
IT-CENTRE_SOUTH		IT-CENTRE_SOUTH		IT-CENTRE_SOUTH	
IT-NORTH		IT-NORTH		IT-NORTH	
IT-ROSSANO		IT-ROSSANO		IT-ROSSANO	
IT-SACODC		IT-SACODC		IT-SACODC	
IT-SARDINIA		IT-SARDINIA		IT-SARDINIA	
IT-SICILY		IT-SICILY		IT-SICILY	
IT-SOUTH		IT-SOUTH		IT-SOUTH	
PT	31	PT	4,16	PT	129,00
Total	422	Total	79,65	Total	33 591,00

Ratio of CA per BZ

BZ	Ratio of CA to Available volume	Ratio of CA to Activated volume
CH	0,00 %	0,02 %
ES	0,03 %	1,16 %
FR	0,00 %	0,01 %
IT-CALABRIA		
IT-CENTRE_NORTH		
IT-CENTRE_SOUTH		
IT-NORTH		
IT-ROSSANO		
IT-SACODC		
IT-SARDINIA		
IT-SICILY		
IT-SOUTH		
PT	0,00 %	0,00 %

Ratio of CA all BZ

Ratio of CA to Available volume	Ratio of CA to Activated volume
0,04 %	1,84 %

Volume of URBs and share of URBs to activated volume (MWh)

TSO	Upward URBs	Downward URBs	Upward accepted offers	Downward accepted offers	Share of upward URBs to accepted offers	Share of downward URBs to accepted offers
REE	37 651,00	74 329,00	333 219,20	723 743,20	11,30 %	10,27 %
REN	0,00	32 236,00	82 475,20	73 647,40	0,00 %	43,77 %
RTE	0,00	49 290,00	27 134,50	14 745,00	0,00 %	334,28 %
Swissgrid	552,00	98 970,00	120 839,60	16 077,20	0,46 %	615,59 %
Terna	0,00	11 892,00	19 782,00	6 337,60	0,00 %	187,64 %
Total	38 203,00	266 717,00	583 450,50	834 550,40	6,55 %	31,96 %

Share of indivisible bids submitted in the CMOL, per price interval

● Divisible bids ● Indivisible bids

