

TERRE KPIs Report

January 2024



Introduction

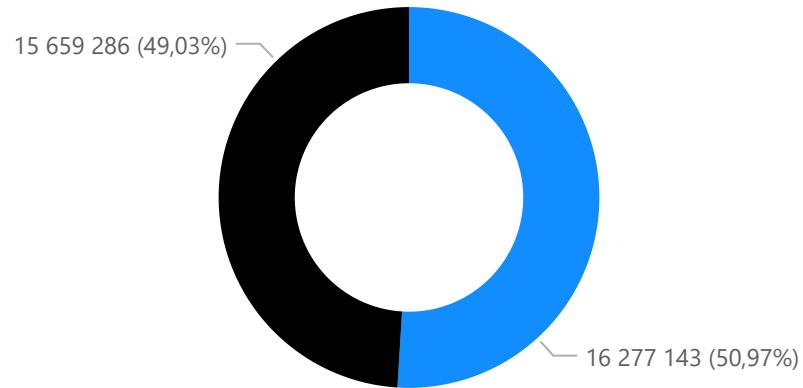
This report is prepared by TSOs participating in TERRE project based on the requirements set up in Article 15 of Implementation Framework for the exchange of balancing energy from Replacement Reserves in accordance with Article 19 of Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing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



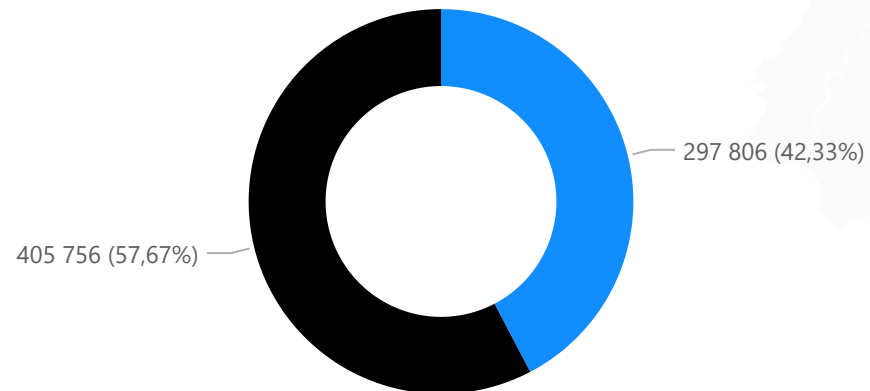
Volume of accepted bids (MWh)

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
Count of RR assistance+

0
Count of RR assistance-



REN

7
Count of RR assistance+


6
Count of RR assistance-



RTE

28
Count of RR assistance+

19
Count of RR assistance-



Swissgrid

2
Count of RR assistance+

1
Count of RR assistance-




Terna

0
Count of RR assistance+

0
Count of RR assistance-



Month	Day	TSO	Total RR Assistance + (MWh)	Month	Day	TSO	Total RR Assistance - (MWh)
January	5	REN	268,00	January	1	RTE	114,50
January	6	REN	300,00	January	2	REN	842,00
January	8	REN	325,00	January	2	RTE	660,75
January	8	RTE	49,00	January	4	RTE	32,00
January	9	RTE	159,00	January	5	REN	500,00
January	10	RTE	28,50	January	6	RTE	6,75
January	10	Swissgrid	125,75	January	7	RTE	6,00
January	11	RTE	54,00	January	17	REN	15,00
January	12	REN	33,00	January	21	RTE	48,25
January	12	RTE	10,25	January	23	RTE	66,25
January	13	REN	8,00	January	24	RTE	19,50
January	13	RTE	5,75	January	25	RTE	19,50
January	14	RTE	100,00	January	26	RTE	46,00
January	17	RTE	30,50	January	27	RTE	57,00
January	19	RTE	9,50	January	27	Swissgrid	92,25
January	20	RTE	221,00	January	31	RTE	21,00
January	24	REN	266,00				
January	27	RTE	9,00				
January	28	RTE	124,00				
January	31	REN	254,00				
January	31	RTE	90,00				

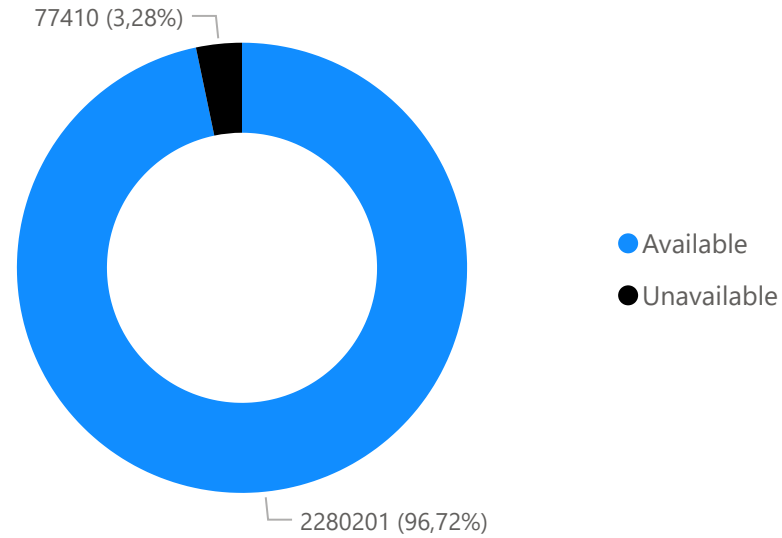
 Using RR assistance

 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	2 280
REN	B46	Internal congestion	244
REN	B47	Operational security constraints	34 052
RTE	B47	Operational security constraints	40 834
Total			77 410

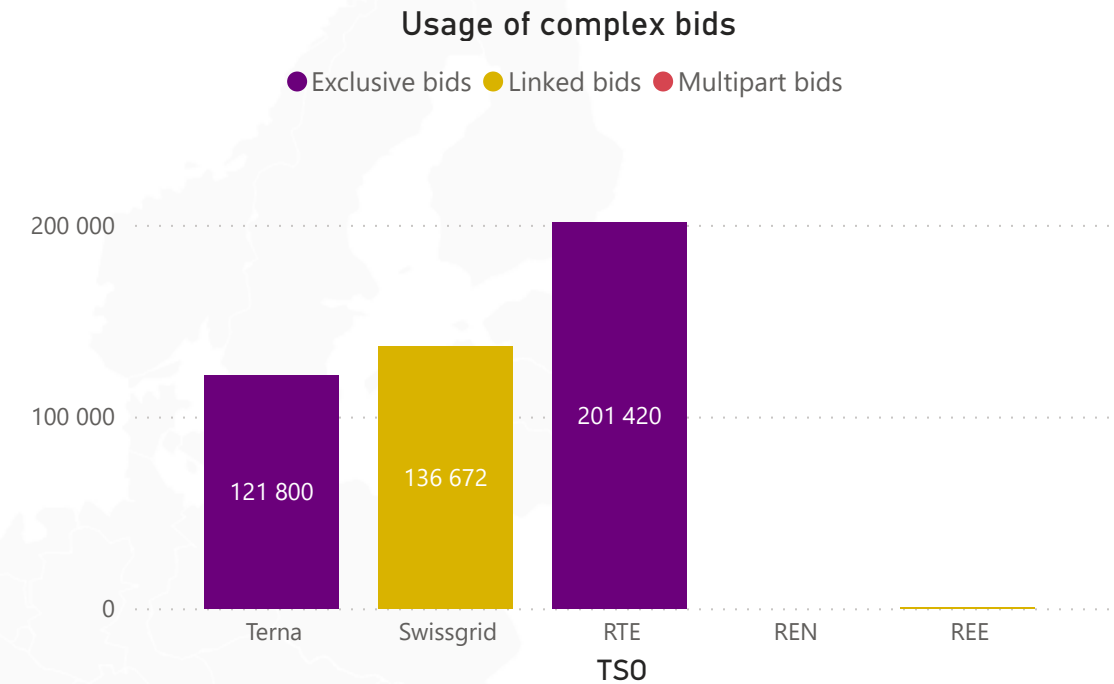
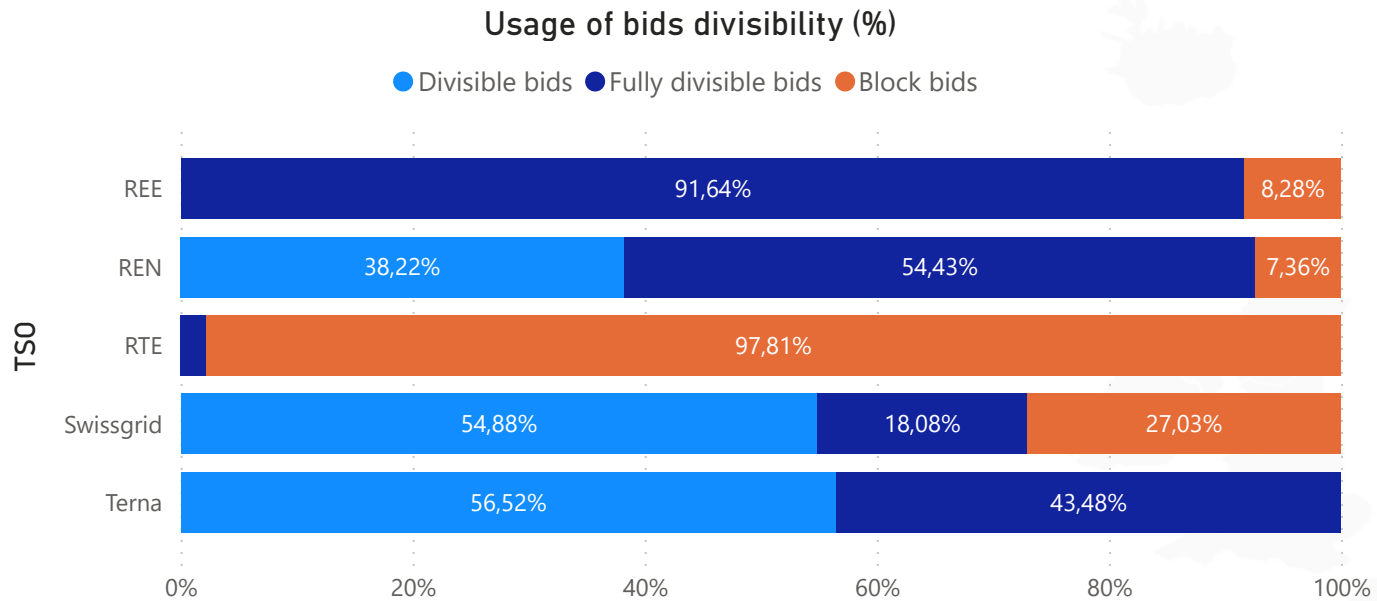
Volume of available and unavailable bids per area (MWh)

TSO	Available	Unavailable	Total
REE	8 865 570	56 342	8 921 912
REN	2 542 840	317 260	2 860 100
RTE	3 578 209	1 305 987	4 884 196
Swissgrid	2 991 339		2 991 339
Terna	12 278 882		12 278 882
Total	30 256 840	1 679 589	31 936 429

Share of unavailable bids per area (%)

TSO	Share of unavailable bids
REE	0,64 %
REN	12,48 %
RTE	36,50 %
Swissgrid	
Terna	
Total	5,55 %

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	1 134 520	1 690	7 785 702	8 921 912
REN	659 275	555 844	1 644 981	2 860 100
RTE	4 692 389	0	191 807	4 884 196
Swissgrid	754 778	1 741 682	494 879	2 991 339
Terna	0	8 658 457	3 620 425	12 278 882
Total	7 240 962	10 957 673	13 737 794	31 936 429

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	9,61	15,00	1,00	15,00	15,00
REN	9,13	10,00	3,00	10,00	10,00
Swissgrid	5,27	11,00	1,00	6,00	7,00
Terna	75,14	798,00	2,00	19,00	399,00

RR+

TSO	Avg. indivisible part (%)	Max indivisible part (%)	5% percentile (%)	50% percentile (%)	95% percentile (%)
REE	30,58 %	34,09 %	14,29 %	33,33 %	34,09 %
REN	56,10 %	100,00 %	14,93 %	52,63 %	100,00 %
Swissgrid	63,11 %	100,00 %	20,00 %	50,00 %	100,00 %
Terna	45,57 %	100,00 %	3,69 %	41,51 %	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	92	205	65,00	75,00	190,00
REN	160	220	3,00	220,00	220,00
RTE	106	834	24,00	87,00	227,00
Swissgrid	15	100	5,00	10,00	41,00

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	9,87	10,00	9,00	10,00	10,00
Swissgrid	5,15	10,00	1,00	6,00	7,00
Terna	287,97	1 571,00	25,00	239,00	773,00

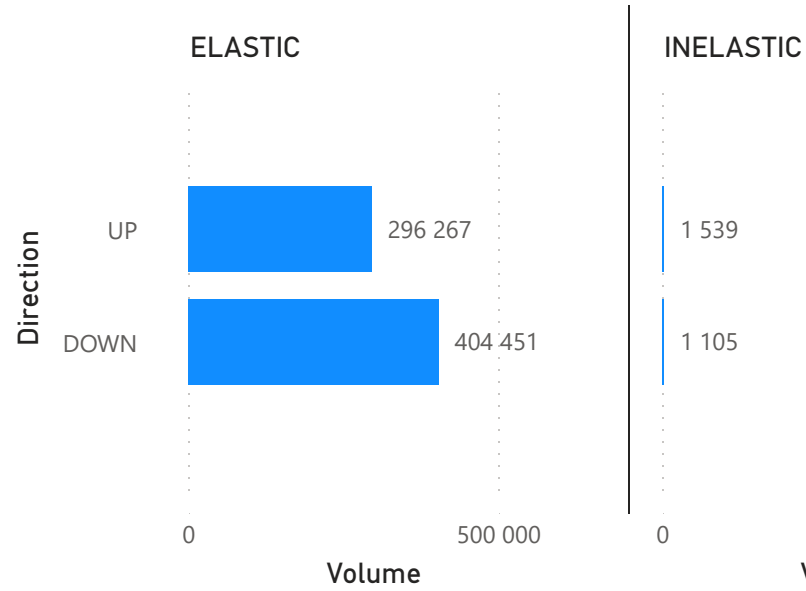
RR-

TSO	Avg. indivisible part (%)	Max indivisible part (%)	5% percentile (%)	50% percentile (%)	95% percentile (%)
REE	19,35 %	50,00 %	16,67 %	16,67 %	50,00 %
REN	44,24 %	100,00 %	7,63 %	41,67 %	100,00 %
Swissgrid	62,29 %	100,00 %	20,00 %	50,00 %	100,00 %
Terna	97,55 %	100,00 %	86,21 %	100,00 %	100,00 %

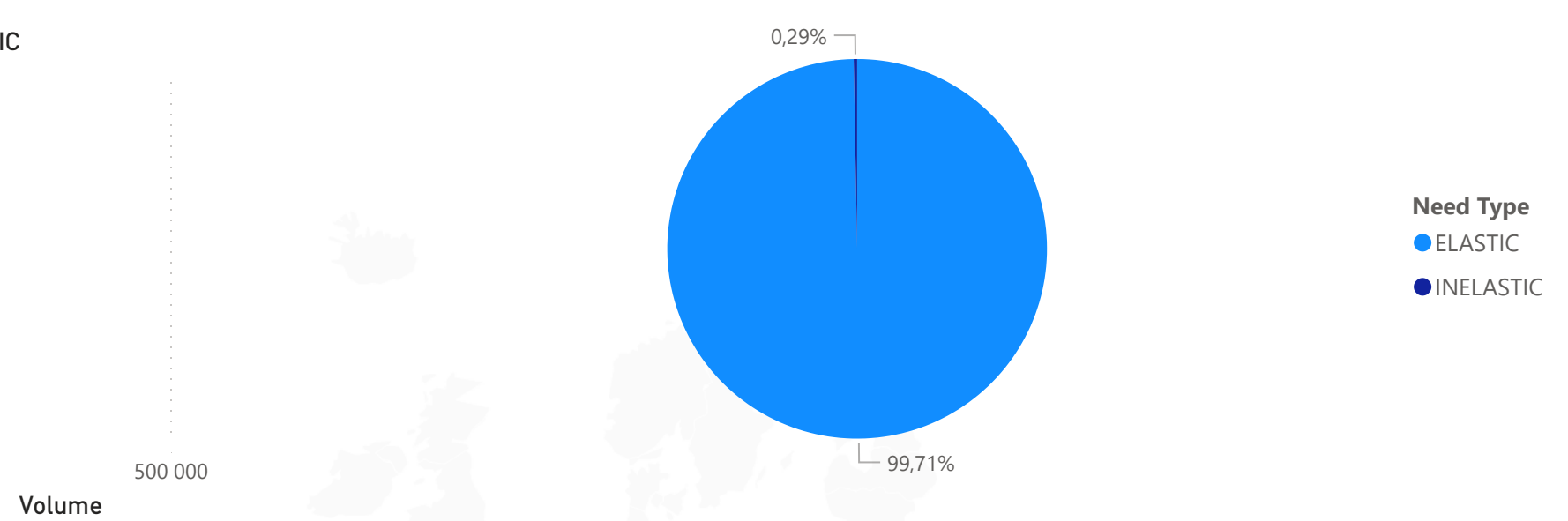
RR-

TSO	Avg. indivisible part (MW)	Max indivisible part (MW)	5% percentile (MW)	50% percentile (MW)	95% percentile (MW)
REE	79	210	1,00	75,00	205,00
REN	177	220	4,00	220,00	220,00
RTE	122	967	22,00	101,00	343,00
Swissgrid	18	100	5,00	6,00	55,00

Volume of elastic and inelastic demand per Direction (MWh)



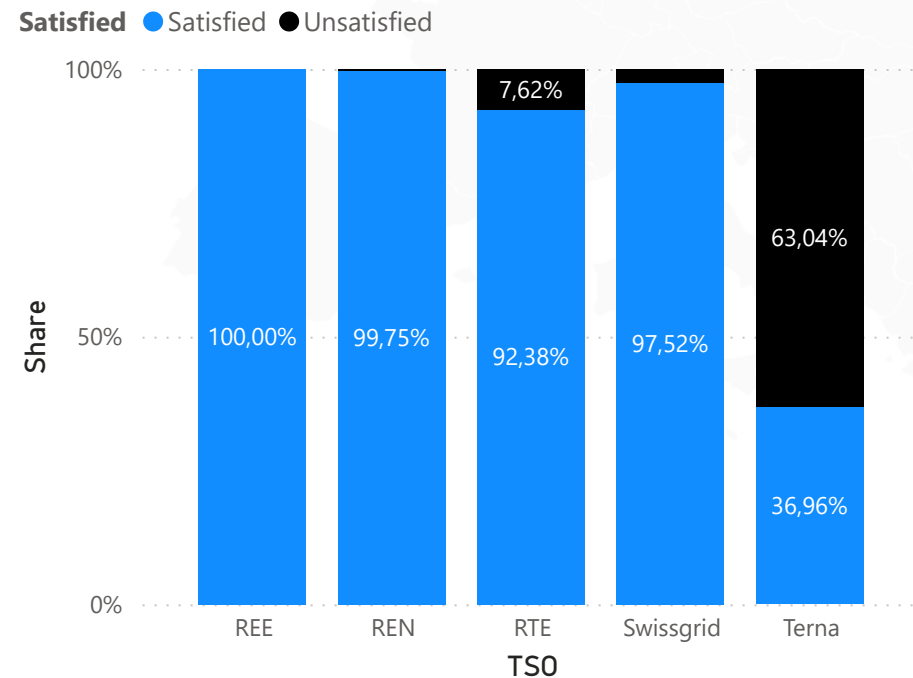
Use of elastic and inelastic demand (%)



Volume of elastic and inelastic demand per TSO (MWh)

TSO	ELASTIC	INELASTIC	Total
REE	380 861		380 861
UP	105 735		105 735
DOWN	275 126		275 126
REN	124 354	1 694	126 048
UP	62 447	1 539	63 986
DOWN	61 907	155	62 062
RTE	125 750	950	126 700
UP	81 000		81 000
DOWN	44 750	950	45 700
Swissgrid	17 895		17 895
UP	11 505		11 505
DOWN	6 390		6 390
Terna	51 858		51 858
UP	35 580		35 580
DOWN	16 278		16 278
Total	700 718	2 644	703 362

Share of satisfied needs per Area (%)



Usage of tolerance band

Use of Tolerance band need (MWh)

TSO	DOWN	UP	Total
REE			
REN			
RTE	200		200
Swissgrid			
Terna			
Total	200		200

Additional need satisfied by Tolerance band (MWh)

TSO	DOWN	UP	Total
REE			
REN			
RTE	177		177
Swissgrid			
Terna			
Total	177		177

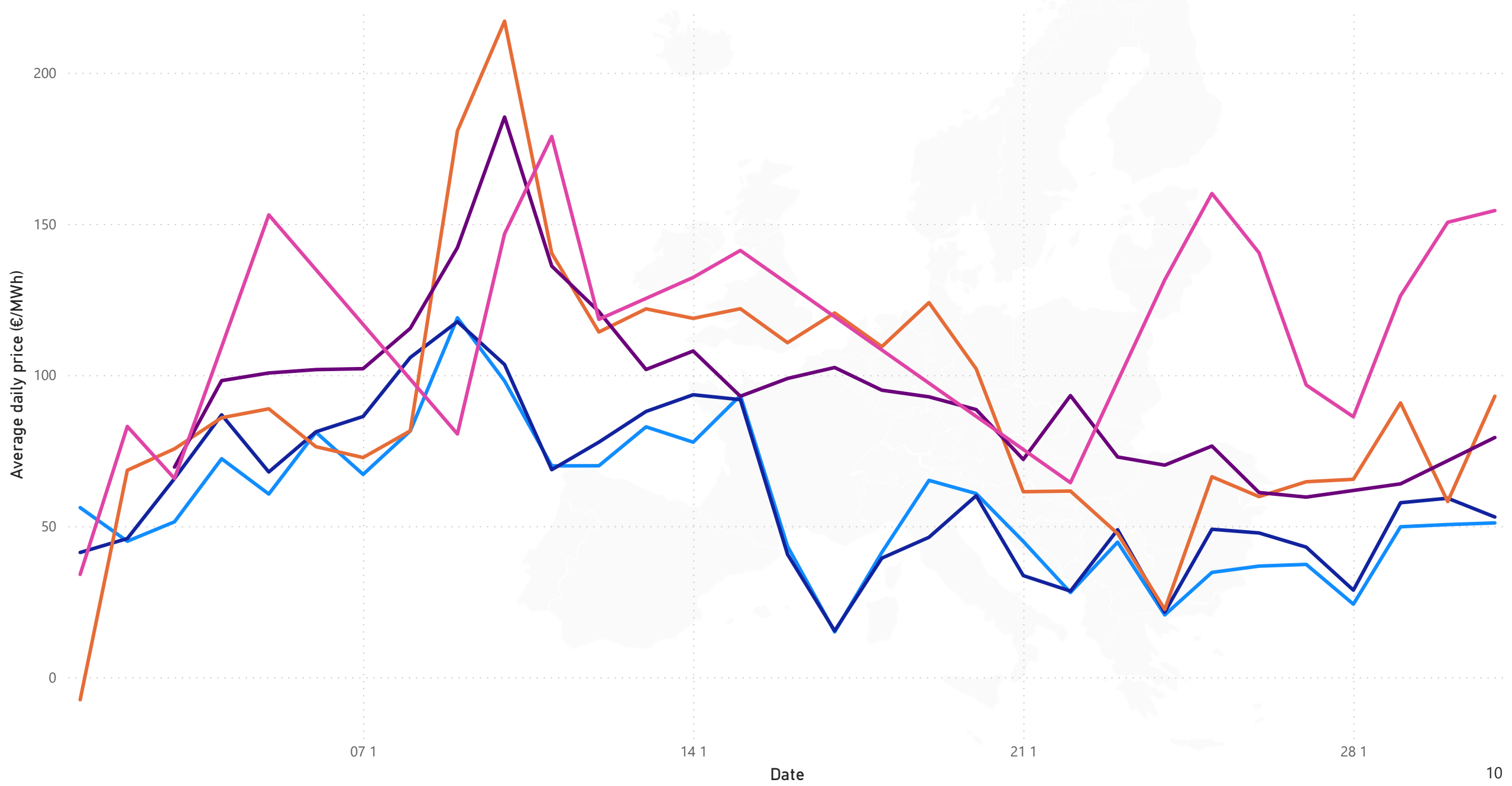
Usage of system constrains

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

56,97

Average Price

-60,00

Minimal Price

152,07

Maximal Price

REN

62,58

Average Price

-200,00

Minimal Price

148,75

Maximal Price

RTE

94,76

Average Price

-65,32

Minimal Price

754,35

Maximal Price

Swissgrid

97,06

Average Price

14,00

Minimal Price

400,00

Maximal Price

Terna

123,97

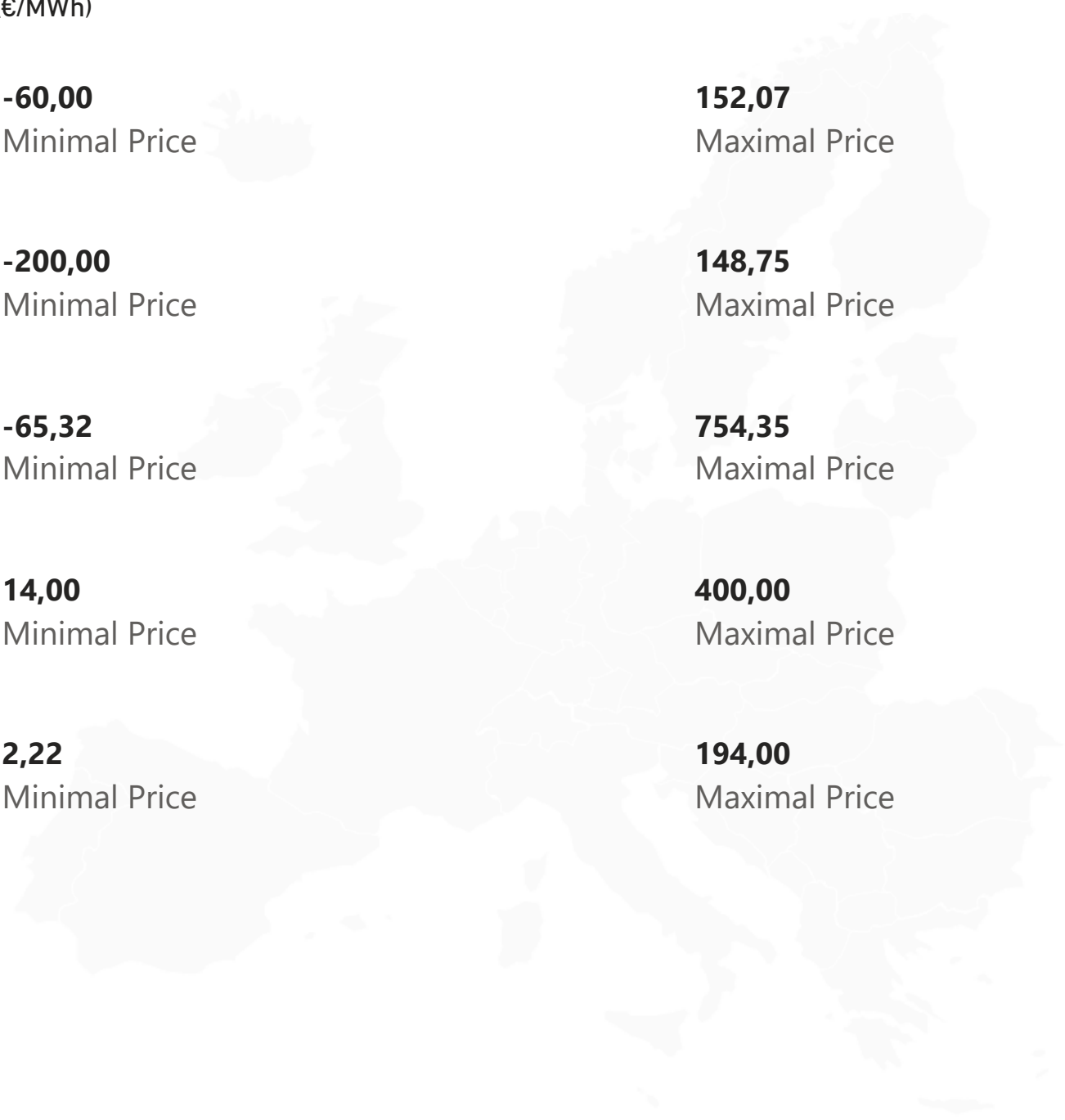
Average Price

2,22

Minimal Price

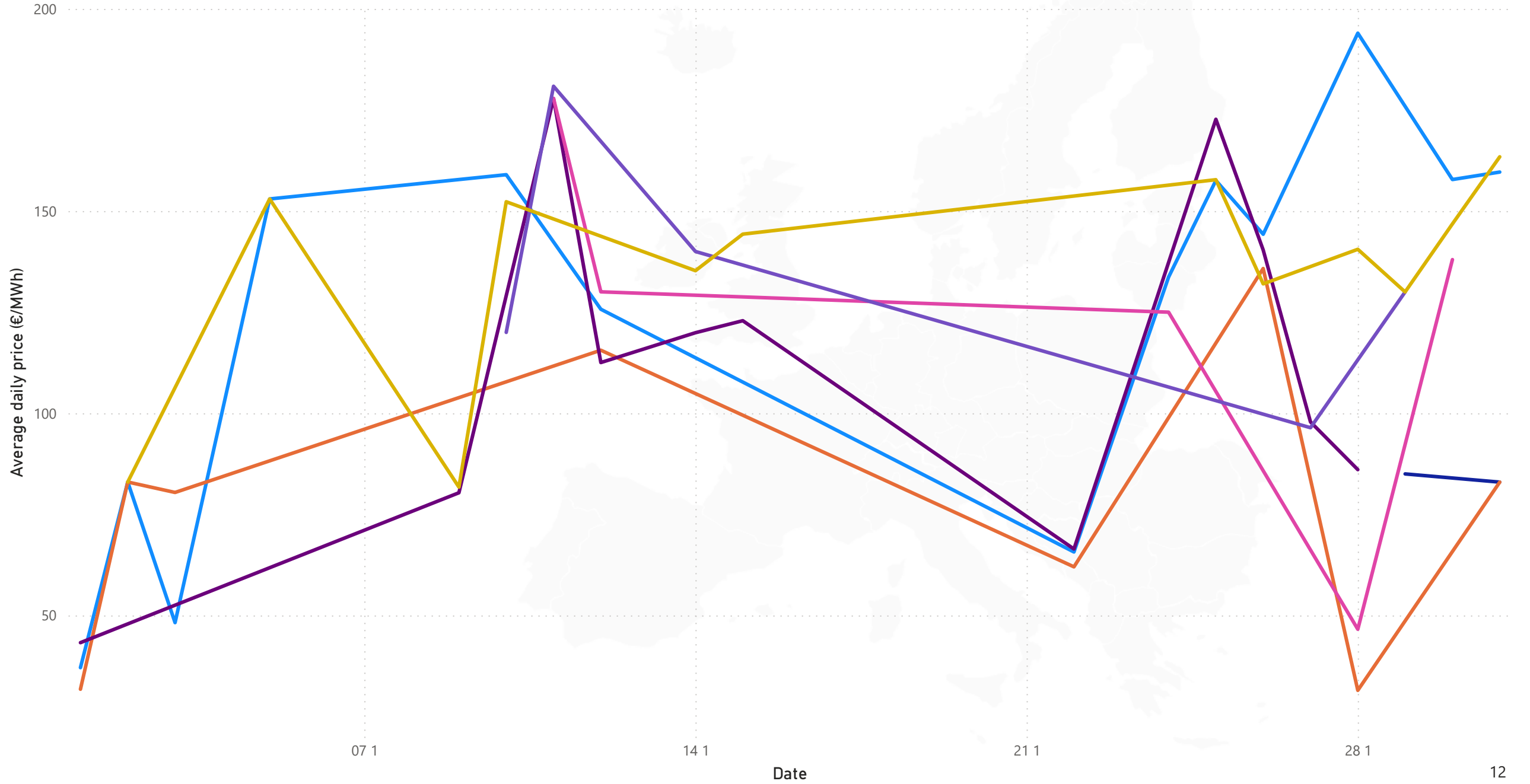
194,00

Maximal Price



Average daily price of satisfied need - Italy areas

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



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

IT-CALABRIA

130,12

Average Price

2,22

Minimum Price

194,00

Maximum Price

IT-CENTRE_NORTH

83,99

Average Price

82,97

Minimum Price

85,00

Maximum Price

IT-CENTRE_SOUTH

71,01

Average Price

12,47

Minimum Price

139,00

Maximum Price

IT-NORTH

116,51

Average Price

27,47

Minimum Price

188,70

Maximum Price

IT-SARDINIA

128,77

Average Price

46,58

Minimum Price

188,70

Maximum Price

IT-SICILY

131,64

Average Price

95,00

Minimum Price

188,70

Maximum Price

IT-SOUTH

147,17

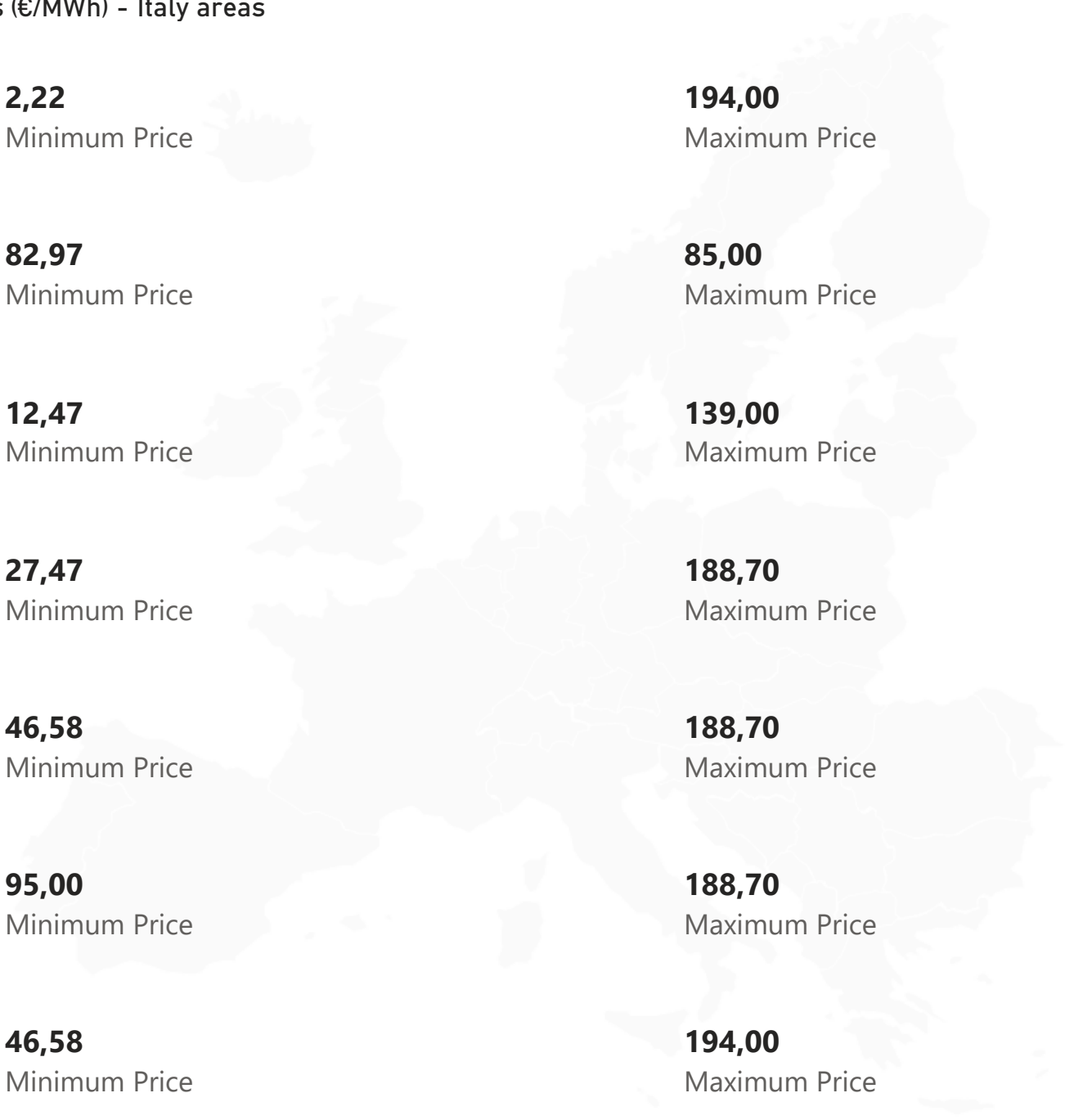
Average Price

46,58

Minimum Price

194,00

Maximum Price



Offered and used cross zonal capacity (MW)

Source TSO	Target TSO	Avg. Offered	Min. Offered	Max. Offered
REE	REN	3 267,31	10,00	7 602,00
REN	REE	2 815,49	0,60	7 151,80
REE	RTE	266,72	2,50	500,00
RTE	REE	346,19	0,20	500,00
RTE	Swissgrid	498,98	0,50	4 499,80
Swissgrid	RTE	3 697,70	17,00	4 500,00
RTE	Terna	192,41	1,10	3 311,60
Terna	RTE	5 024,71	2 207,90	6 853,00
Swissgrid	Terna	221,17	1,00	2 911,00
Terna	Swissgrid	4 734,91	2 587,00	6 384,00

Source TSO	Target TSO	Avg Used	Min Used	Max Used
REE	REN	134,83	0,00	1 499,00
REN	REE	52,85	0,00	1 338,00
REE	RTE	68,34	0,00	500,00
RTE	REE	25,91	0,00	500,00
RTE	Swissgrid	27,18	0,00	715,00
Swissgrid	RTE	44,87	0,00	710,00
RTE	Terna	9,31	0,00	645,00
TERNATA	RTE	19,77	0,00	800,00
Swissgrid	Terna	8,34	0,00	395,60
TERNATA	Swissgrid	11,20	0,00	645,00

Source TSO	Target TSO	Count of congestions
REE	REN	20
REN	REE	12
REE	RTE	324
RTE	REE	72
RTE	Swissgrid	136
Swissgrid	RTE	
RTE	Terna	60
TERNATA	RTE	
Swissgrid	Terna	100
TERNATA	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	13	CH	41,54	CH	519,25
ES	499	ES	114,03	ES	56 930,65
FR	3	FR	22,40	FR	56,00
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	11	PT	194,27	PT	2 137,00
Total	525	Total	113,55	Total	59 642,90

Ratio of CA all BZ

Ratio of CA to Available volume	Ratio of CA to Activated volume
0,06 %	2,60 %

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	8 836,00	123 423,00	413 368,90	567 046,10	2,14 %	21,77 %
REN	0,00	20 508,00	40 567,20	159 093,00	0,00 %	12,89 %
RTE	0,00	20 782,00	12 398,00	30 299,00	0,00 %	68,59 %
Swissgrid	1 419,00	123 915,00	88 993,70	56 297,20	1,59 %	220,11 %
Terna	0,00	1 740,00	32 176,80	9 802,00	0,00 %	17,75 %
Total	10 255,00	290 368,00	587 504,60	822 537,30	1,75 %	35,30 %

Ratio of CA per BZ

BZ	Ratio of CA to Available volume	Ratio of CA to Activated volume
CH	0,00 %	0,02 %
ES	0,04 %	2,02 %
FR	0,00 %	0,00 %
IT-CALABRIA		
IT-CENTRE_NORTH		
IT-CENTRE_SOUTH		
IT-NORTH		
IT-ROSSANO		
IT-SACODC		
IT-SARDINIA		
IT-SICILY		
IT-SOUTH		
PT	0,00 %	0,08 %

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

● Divisible bids ● Indivisible bids

