

# TERRE KPIs Report

May 2024



## Introduction

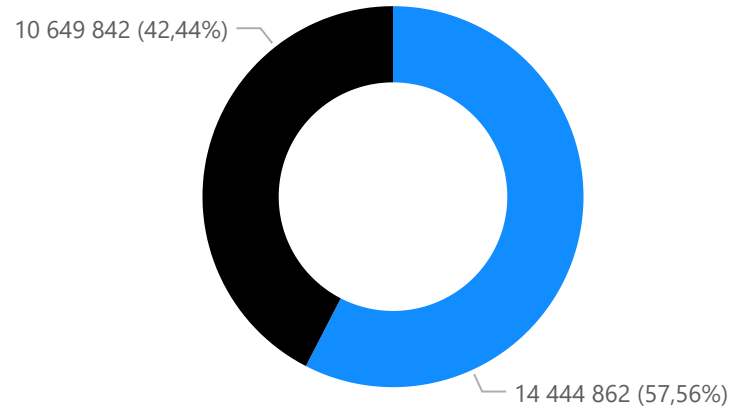
This report is prepared by TSOs participating in TERRE project based on the requirements set up in Article 15 of Implementation Framework for the exchange of balancing energy from Replacement Reserves in accordance with Article 19 of Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing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



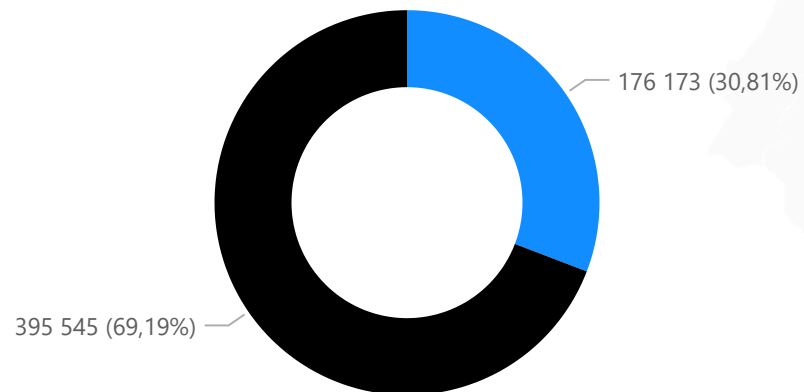
### Volume of accepted bids (MWh)

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

1	142	
Count of RR assistance+	Count of RR assistance-	

### RTE

10	21	
Count of RR assistance+	Count of RR assistance-	

### Swissgrid

0	5	
Count of RR assistance+	Count of RR assistance-	

### Terna

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



Using RR assistance



Not Using RR assistance

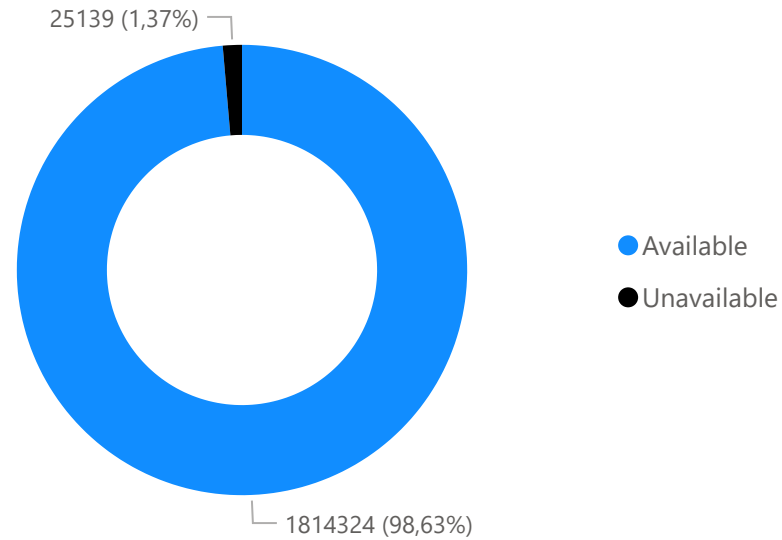
Month	Day	TSO	Total RR Assistance + (MWh)
May	3	REN	500,00
May	14	RTE	13,00
May	17	RTE	29,00
May	19	RTE	19,00
May	29	RTE	72,00
May	31	RTE	73,75

Month	Day	TSO	Total RR Assistance - (MWh)
May	1	REN	14 445,00
May	2	REN	950,00
May	2	RTE	16,00
May	3	REN	325,00
May	4	REN	2 400,00
May	4	RTE	24,00
May	4	Swissgrid	10,00
May	5	REN	2 546,00
May	5	RTE	10,00
May	5	Swissgrid	120,75
May	7	REN	3 726,00
May	7	RTE	34,00
May	8	REN	2 676,00
May	9	REN	1 808,00
May	10	REN	241,00
May	10	RTE	824,00
May	10	Swissgrid	131,75
May	11	REN	6 034,00
May	11	RTE	1 400,00
May	12	REN	400,00
May	12	RTE	16,50
May	13	RTE	1 200,00
May	14	REN	3 800,00
May	15	REN	2 975,00
May	18	REN	1 500,00
May	19	REN	4 800,00
May	20	RTE	69,00
May	23	REN	1 000,00
May	24	REN	1 000,00
May	24	RTE	1,00
May	25	REN	4 550,00
May	26	REN	11 800,00
May	27	REN	9 873,00
May	28	REN	2 066,00
May	29	REN	3 022,00
May	30	REN	4 367,00
May	30	RTE	18,00
May	31	REN	13 425,00

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	3 421
REN	B46	Internal congestion	1 760
REN	B47	Operational security constraints	2 764
RTE	B47	Operational security constraints	17 194
<b>Total</b>			<b>25 139</b>

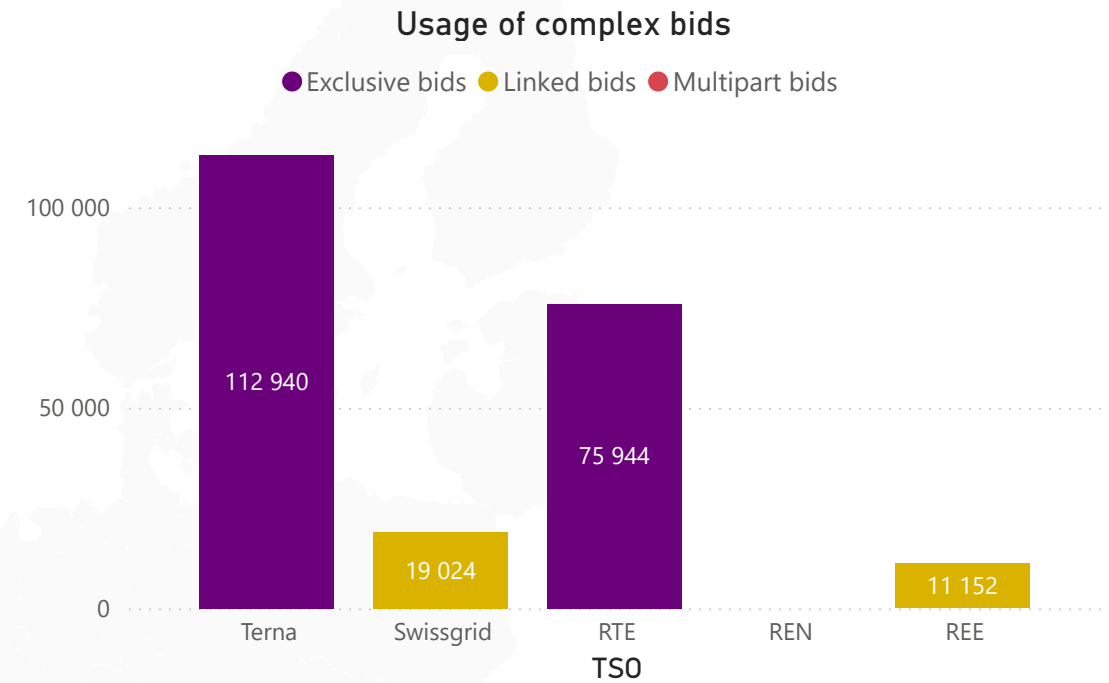
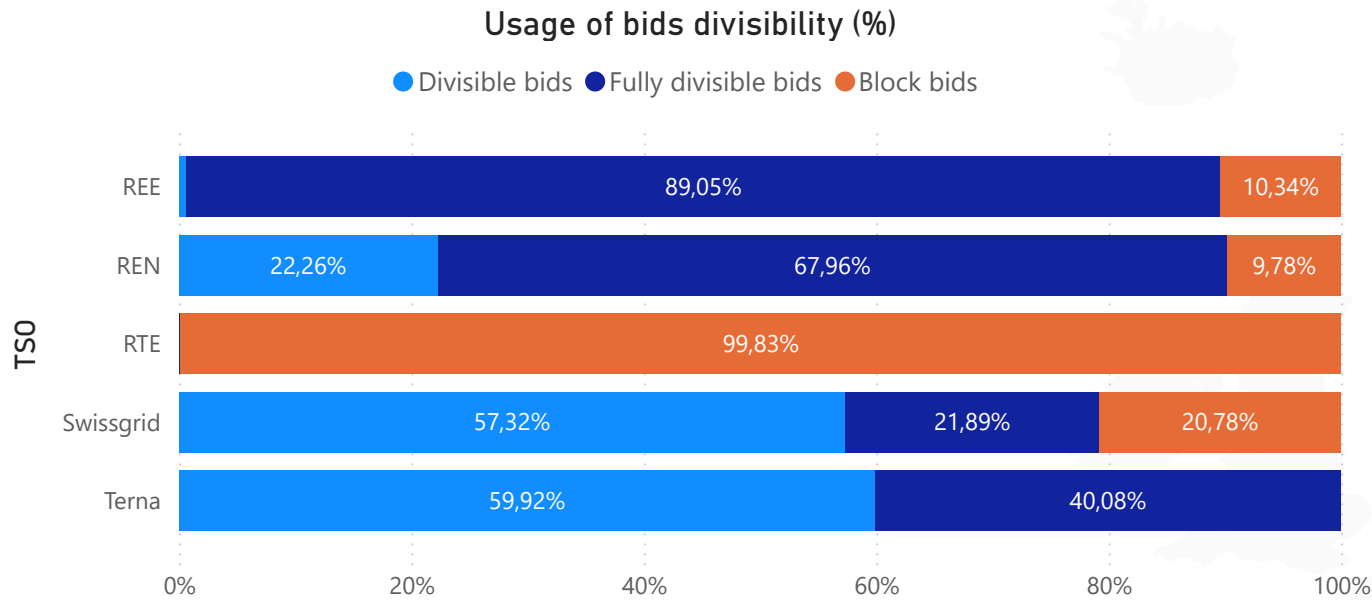
Volume of available and unavailable bids per area (MWh)

TSO	Available	Unavailable	Total
REE	8 069 117	80 768	<b>8 149 885</b>
REN	2 498 965	93 639	<b>2 592 604</b>
RTE	1 282 780	834 054	<b>2 116 834</b>
Swissgrid	2 058 499		<b>2 058 499</b>
Terna	10 176 881		<b>10 176 881</b>
<b>Total</b>	<b>24 086 242</b>	<b>1 008 461</b>	<b>25 094 703</b>

Share of unavailable bids per area (%)

TSO	Share of unavailable bids
REE	0,99 %
REN	3,61 %
RTE	39,40 %
Swissgrid	
Terna	
<b>Total</b>	<b>4,02 %</b>

# 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	906 013	27 506	7 216 366	<b>8 149 885</b>
REN	438 743	909 434	1 244 427	<b>2 592 604</b>
RTE	2 116 818	16	16	<b>2 116 834</b>
Swissgrid	468 397	1 189 859	400 244	<b>2 058 499</b>
Terna	0	8 052 309	2 124 572	<b>10 176 881</b>
<b>Total</b>	<b>3 929 971</b>	<b>10 179 107</b>	<b>10 985 625</b>	<b>25 094 703</b>

# 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	11,79	15,00	3,00	15,00	15,00
	REN	9,57	10,00	4,00	10,00	10,00
	Swissgrid	5,23	12,00	1,00	6,00	7,00
	Terna	96,97	1 434,00	2,00	29,00	478,00

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	5,13	12,00	1,00	6,00	7,00
	Terna	300,44	1 463,00	25,00	257,00	769,00

RR+	TSO	Avg. indivisible part (%)	Max indivisible part (%)	5% percentile (%)	50% percentile (%)	95% percentile (%)
	REE	31,65 %	51,72 %	30,00 %	31,25 %	34,09 %
	REN	18,21 %	100,00 %	3,21 %	6,90 %	100,00 %
	Swissgrid	61,17 %	100,00 %	20,00 %	50,00 %	100,00 %
	Terna	50,21 %	100,00 %	4,00 %	42,22 %	100,00 %

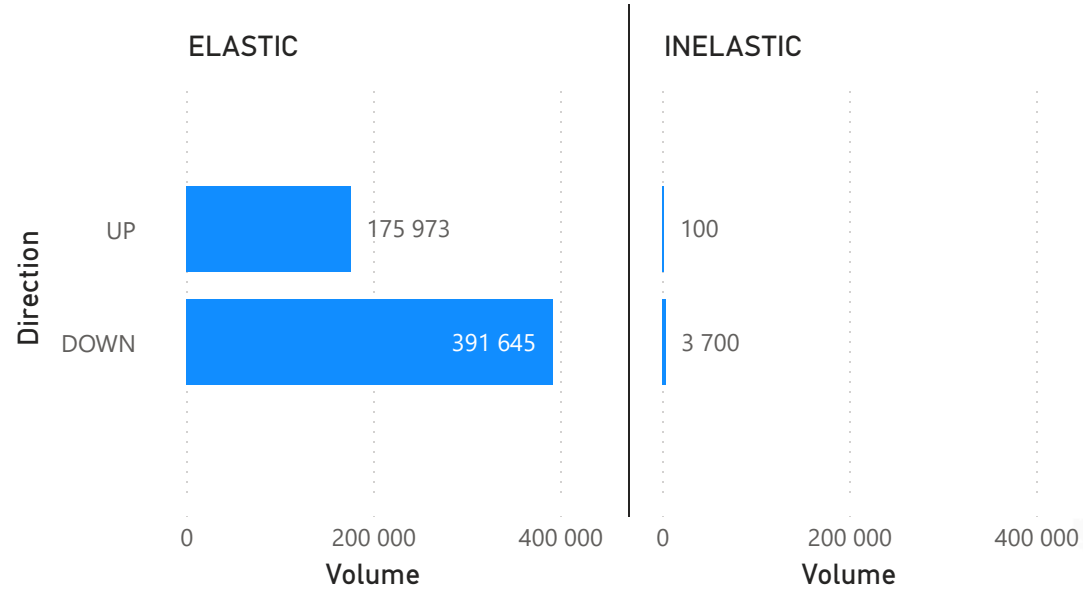
RR-	TSO	Avg. indivisible part (%)	Max indivisible part (%)	5% percentile (%)	50% percentile (%)	95% percentile (%)
	REE	16,01 %	100,00 %	10,00 %	11,11 %	33,33 %
	REN	12,38 %	100,00 %	1,54 %	6,94 %	34,48 %
	Swissgrid	59,74 %	100,00 %	20,00 %	50,00 %	100,00 %
	Terna	96,45 %	100,00 %	86,21 %	100,00 %	100,00 %

## Detail indivisible bids

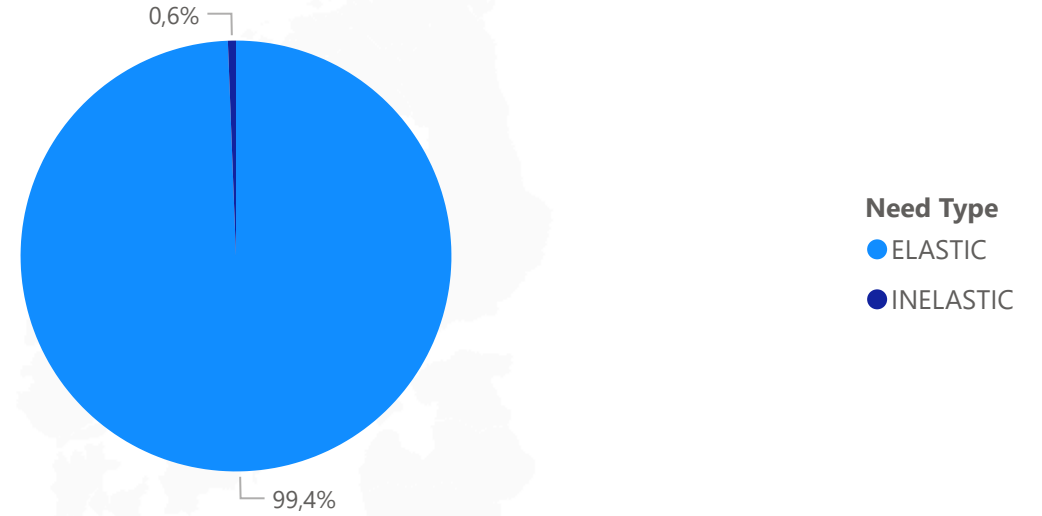
RR+	TSO	Avg. indivisible part (MW)	Max indivisible part (MW)	5% percentile (MW)	50% percentile (MW)	95% percentile (MW)
	REE	98	414	65,00	89,00	190,00
	REN	174	250	4,00	220,00	220,00
	RTE	138	993	36,00	123,00	410,00
	Swissgrid	15	100	5,00	10,00	40,00

RR-	TSO	Avg. indivisible part (MW)	Max indivisible part (MW)	5% percentile (MW)	50% percentile (MW)	95% percentile (MW)
	REE	37	220	1,00	1,00	138,00
	REN	179	509	1,00	220,00	220,00
	RTE	97	985	22,00	71,00	302,00
	Swissgrid	17	100	5,00	5,00	60,00

Volume of elastic and inelastic demand per Direction (MWh)



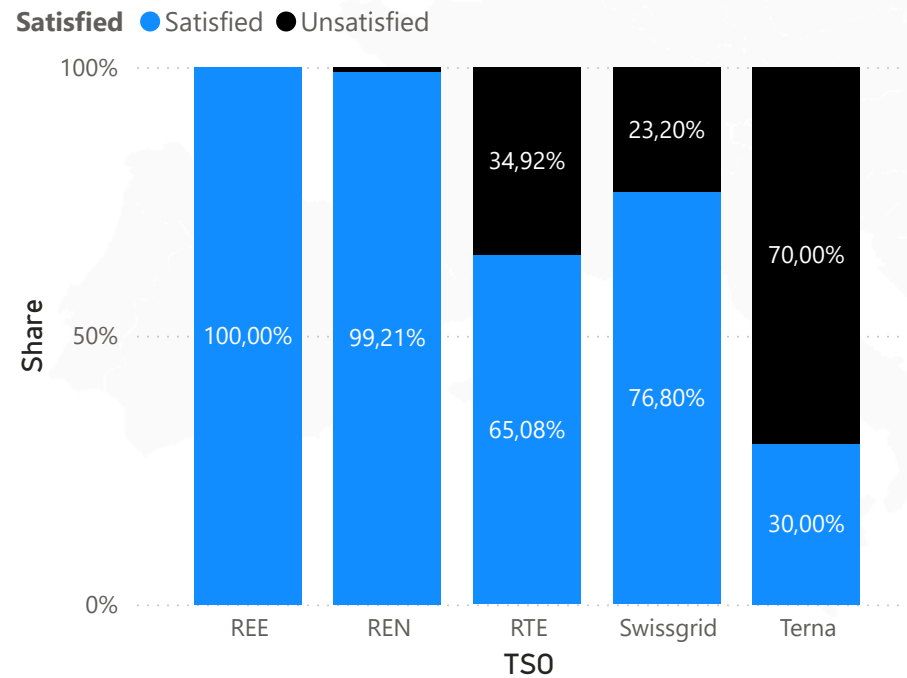
Use of elastic and inelastic demand (%)



Volume of elastic and inelastic demand per TSO (MWh)

TSO	ELASTIC	INELASTIC	Total
<b>REE</b>	<b>304 969</b>		<b>304 969</b>
UP	89 212		<b>89 212</b>
DOWN	215 758		<b>215 758</b>
<b>REN</b>	<b>191 289</b>		<b>191 289</b>
UP	36 831		<b>36 831</b>
DOWN	154 458		<b>154 458</b>
<b>RTE</b>	<b>52 400</b>	<b>3 800</b>	<b>56 200</b>
UP	38 500	100	<b>38 600</b>
DOWN	13 900	3 700	<b>17 600</b>
<b>Swissgrid</b>	<b>13 320</b>		<b>13 320</b>
UP	8 215		<b>8 215</b>
DOWN	5 105		<b>5 105</b>
<b>Terna</b>	<b>5 640</b>		<b>5 640</b>
UP	3 215		<b>3 215</b>
DOWN	2 425		<b>2 425</b>
<b>Total</b>	<b>567 618</b>	<b>3 800</b>	<b>571 418</b>

Share of satisfied needs per Area (%)





## Usage of tolerance band

### Use of Tolerance band need (MWh)

TSO	DOWN	UP	Total
REE			
REN			
RTE	200	100	<b>300</b>
Swissgrid			
Terna			
<b>Total</b>	<b>200</b>	<b>100</b>	<b>300</b>

### Additional need satisfied by Tolerance band (MWh)

TSO	DOWN	UP	Total
REE			
REN			
RTE	0	0	<b>0</b>
Swissgrid			
Terna			
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>

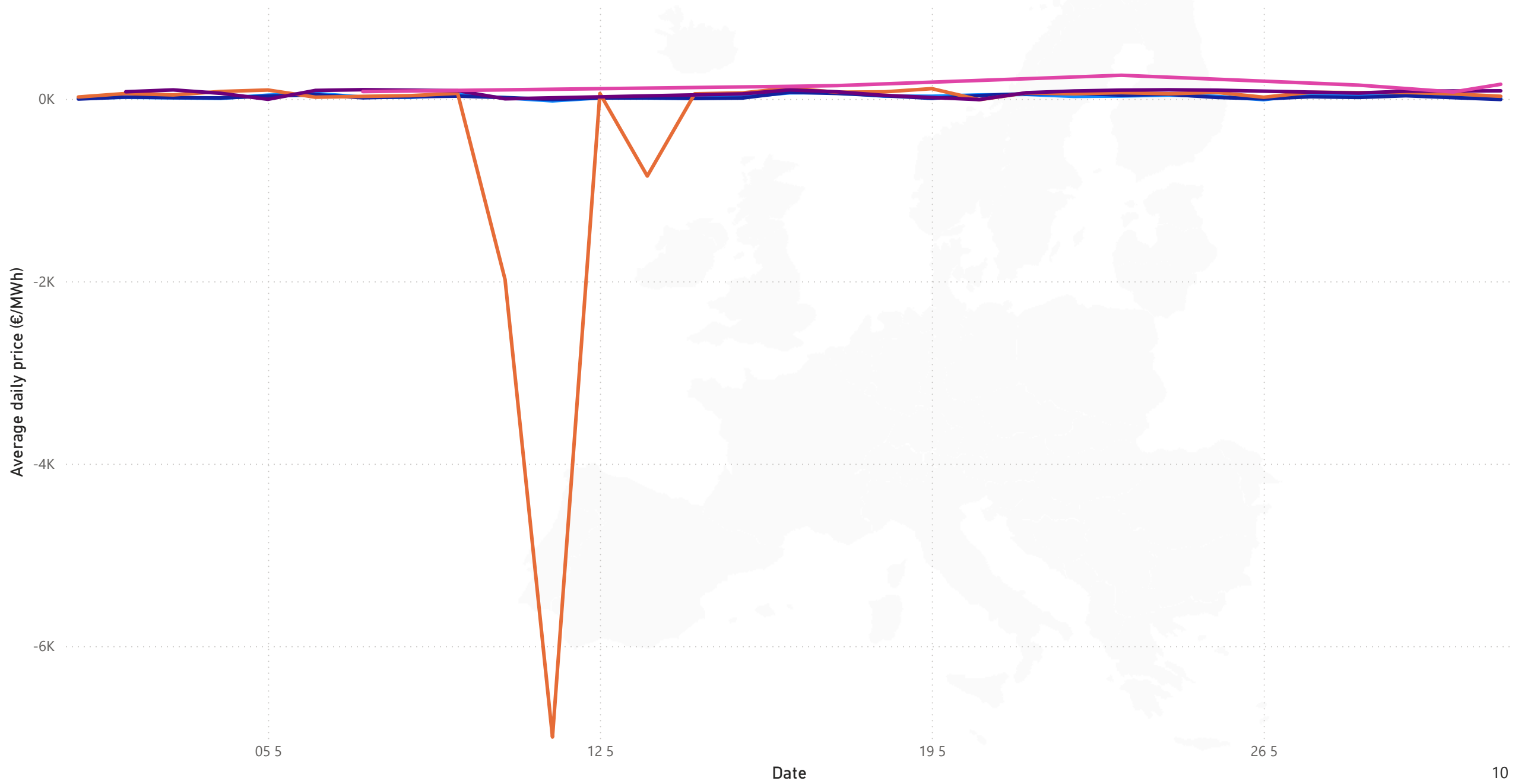
## Usage of system constrains

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**

**27,18**

Average Price

**-162,18**

Minimal Price

**119,00**

Maximal Price

**REN**

**25,04**

Average Price

**-162,18**

Minimal Price

**203,20**

Maximal Price

**RTE**

**-92,66**

Average Price

**-13 999,83**

Minimal Price

**140,00**

Maximal Price

**Swissgrid**

**80,37**

Average Price

**-15,00**

Minimal Price

**171,02**

Maximal Price

**Terna**

**148,34**

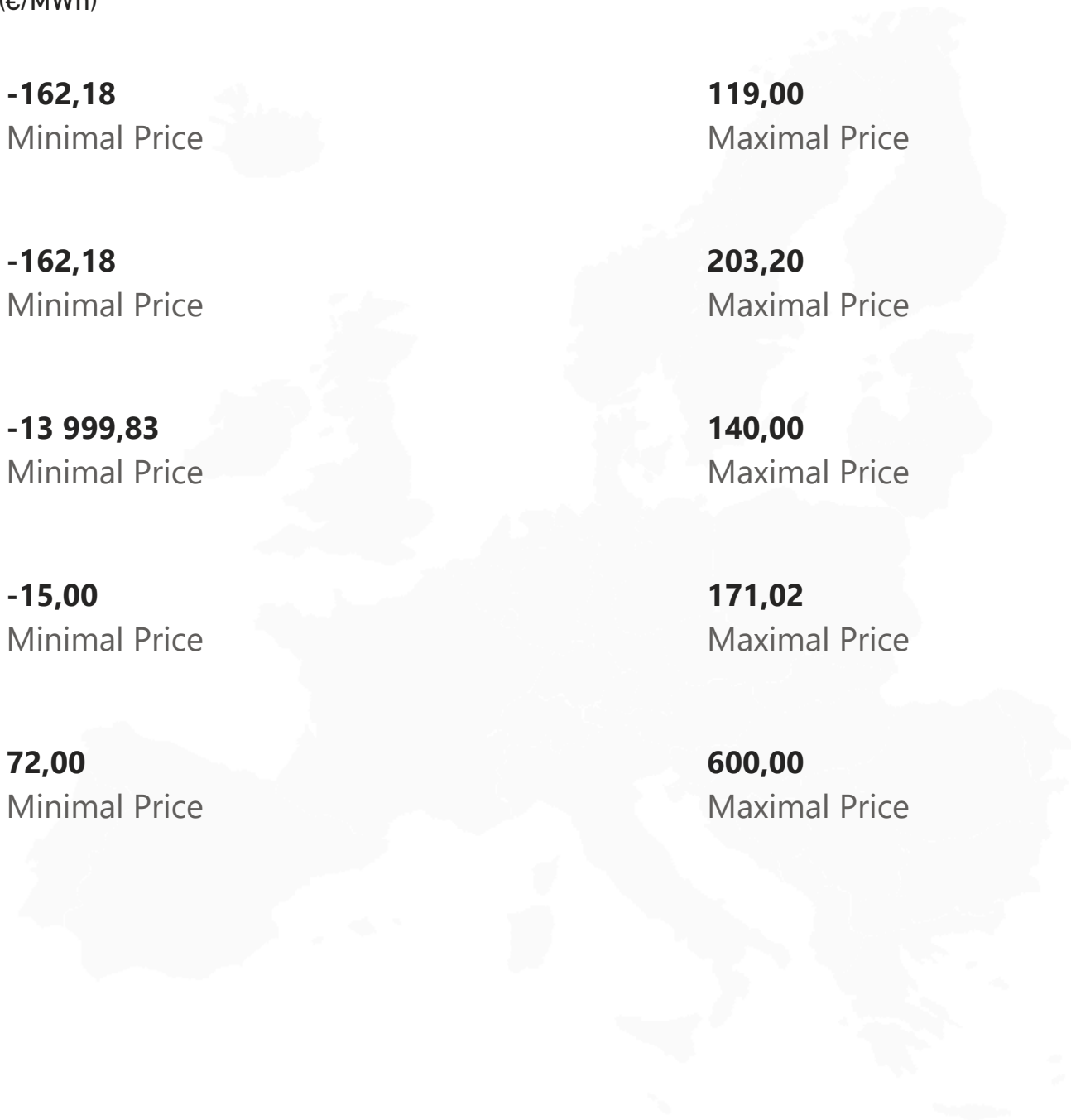
Average Price

**72,00**

Minimal Price

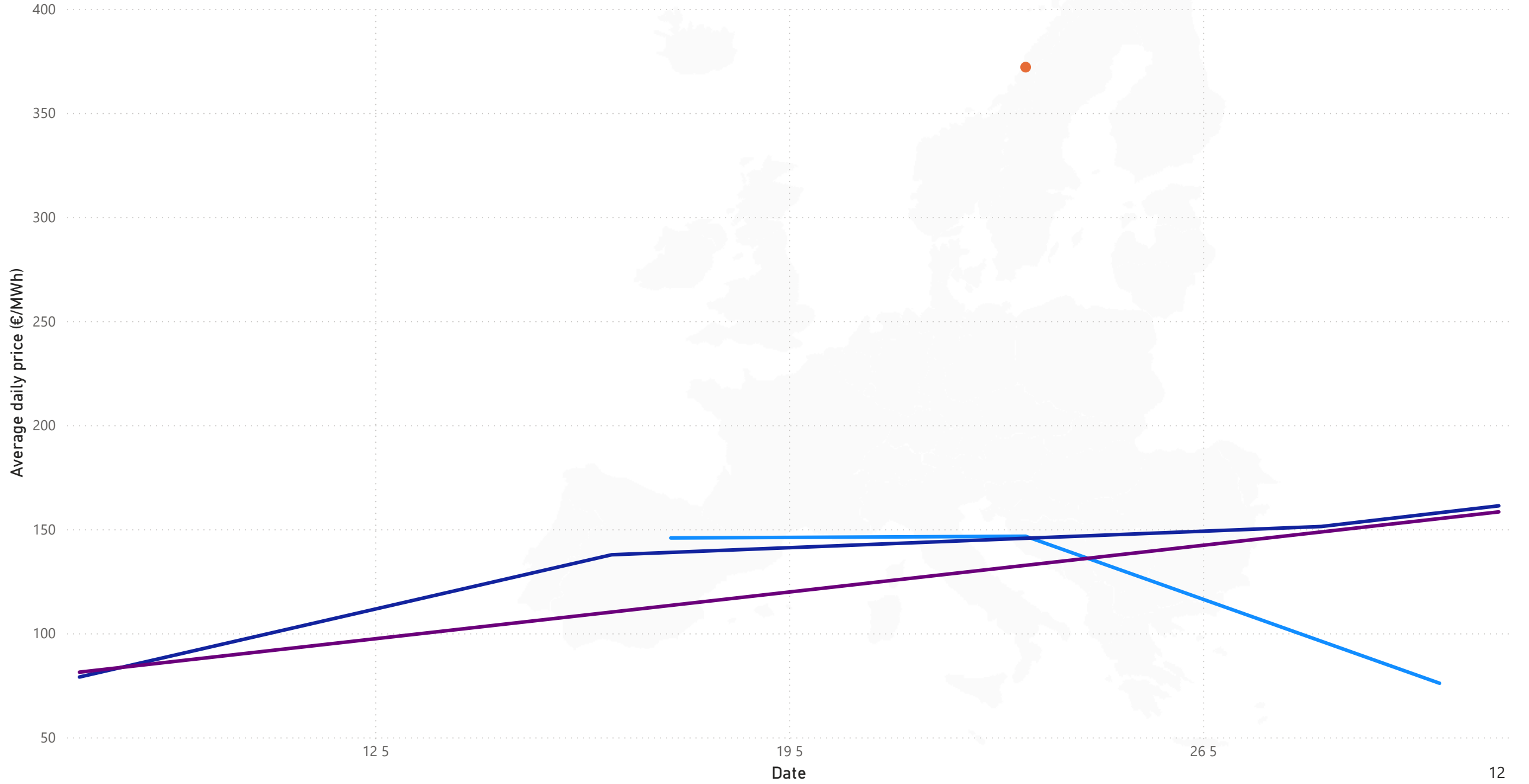
**600,00**

Maximal Price



# Average daily price of satisfied need - Italy areas

Area ● IT-CALABRIA ● IT-CENTRE\_SOUTH ● IT-SICILY ● IT-SOUTH



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

### IT-CALABRIA

**125,03**

Average Price

**76,00**

Minimum Price

**150,38**

Maximum Price

### IT-CENTRE\_SOUTH

**144,76**

Average Price

**72,00**

Minimum Price

**165,00**

Maximum Price

### IT-SICILY

**372,00**

Average Price

**144,00**

Minimum Price

**600,00**

Maximum Price

### IT-SOUTH

**119,83**

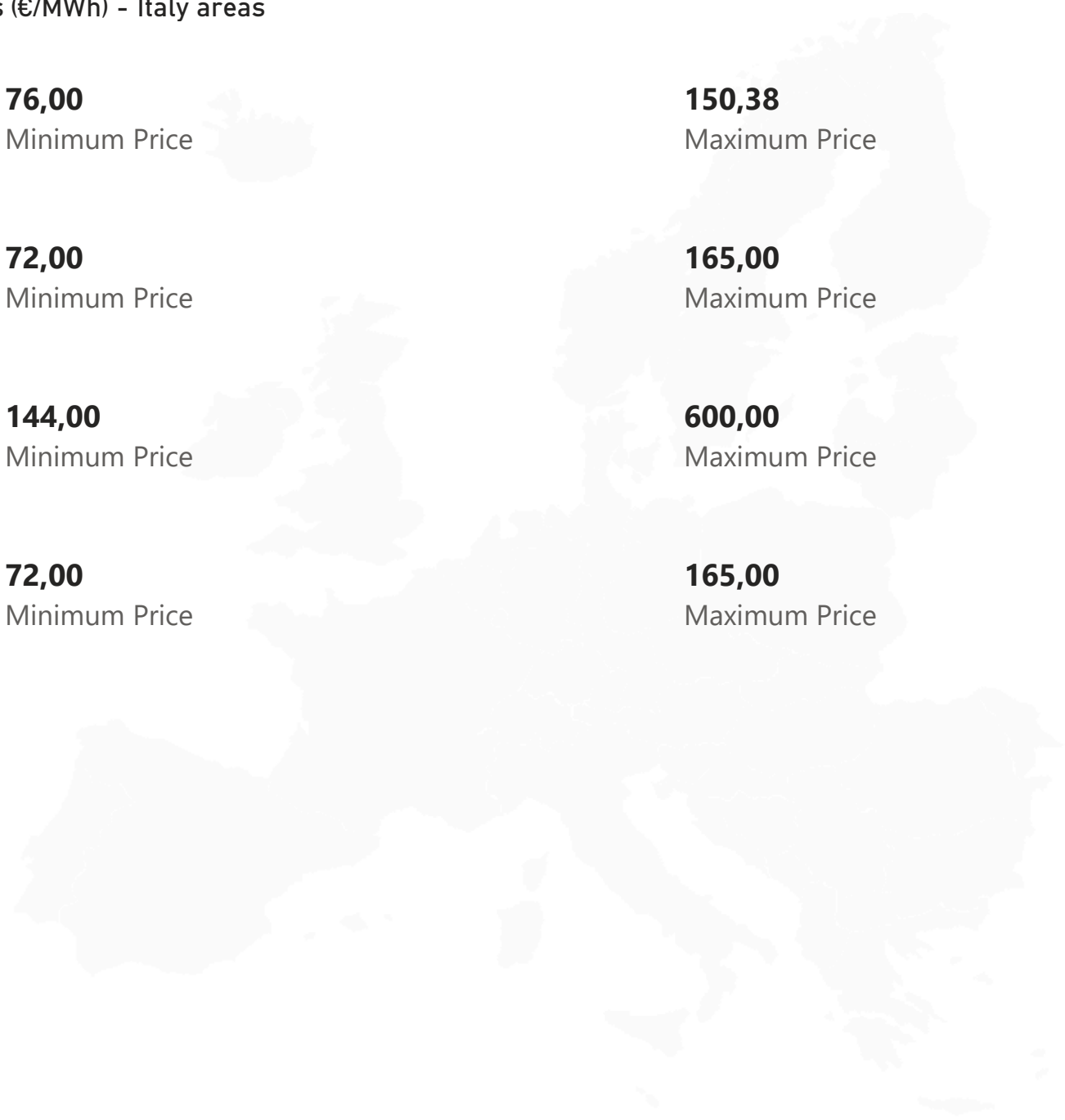
Average Price

**72,00**

Minimum Price

**165,00**

Maximum Price



## Offered and used cross zonal capacity (MW)

Source TSO	Target TSO	Avg. Offered	Min. Offered	Max. Offered
REE	REN	1 822,77	0,80	6 490,00
REN	REE	3 843,94	5,00	7 166,60
REE	RTE	355,70	1,00	500,00
RTE	REE	284,23	1,00	500,00
RTE	Swissgrid	186,23	1,00	3 427,00
Swissgrid	RTE	3 078,06	5,00	3 584,00
RTE	Terna	25,07	10,00	3 474,00
Terna	RTE	3 938,78	1 056,00	5 890,00
Swissgrid	Terna	42,91	1,00	1 338,00
Terna	Swissgrid	3 173,27	385,00	4 696,00

Source TSO	Target TSO	Avg Used	Min Used	Max Used
REE	REN	65,10	0,00	1 269,00
REN	REE	190,00	0,00	2 500,00
REE	RTE	36,09	0,00	500,00
RTE	REE	9,04	0,00	500,00
RTE	Swissgrid	3,31	0,00	400,00
Swissgrid	RTE	5,59	0,00	400,00
RTE	Terna	3,59	0,00	580,00
TERNA	RTE	0,32	0,00	85,30
Swissgrid	Terna	0,41	0,00	100,00
TERNA	Swissgrid	0,49	0,00	118,00

Source TSO	Target TSO	Count of congestions
REE	REN	24
REN	REE	4
REE	RTE	92
RTE	REE	20
RTE	Swissgrid	8
Swissgrid	RTE	
RTE	Terna	12
TERNA	RTE	
Swissgrid	Terna	12
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	7	CH	9,43	CH	66,00
ES	367	ES	61,29	ES	22 508,75
FR	3	FR	73,67	FR	221,00
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	1	PT	55,00	PT	55,00
<b>Total</b>	<b>378</b>	<b>Total</b>	<b>60,41</b>	<b>Total</b>	<b>22 850,75</b>

## Ratio of CA per BZ

BZ	Ratio of CA to Available volume	Ratio of CA to Activated volume
CH	0,00 %	0,00 %
ES	0,02 %	1,06 %
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
0,03 %	1,36 %

## 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	5 173,00	56 924,00	254 540,60	651 746,90	2,03 %	8,73 %
REN	0,00	9 456,00	27 051,40	71 897,60	0,00 %	13,15 %
RTE	0,00	17 607,00	6 784,00	7 590,00	0,00 %	231,98 %
Swissgrid	40,00	172 505,00	22 799,00	7 443,50	0,18 %	2317,53 %
Terna	0,00	2 188,00	5 628,00	8 668,00	0,00 %	25,24 %
<b>Total</b>	<b>5 213,00</b>	<b>258 680,00</b>	<b>316 803,00</b>	<b>747 346,00</b>	<b>1,65 %</b>	<b>34,61 %</b>

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

● Divisible bids ● Indivisible bids

