



Austrian Gas Grid Management AG

Report on market area balancing activities in Austria

Period 2021

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List of abbreviations

BE	Balancing energy
BG	Balance group
BGR	Balance group representative
BGC	Balance group coordinator
BIM	Balancing incentive mark-up
CEGH	Central European Gas Hub
DA	Distribution area
DAM	Distribution area manager
EEX	European Energy Exchange
GMMO-VO	Gas-Marktmodell-Verordnung, Gas-Market-Model Ordinance
GTC	General Terms and Conditions
MA	Market area
MAM	Market area manager
TS	Transmission system
VTP	Virtual trading point

1 Introduction

In the Austrian market model, AGGM Austrian Gas Grid Management AG (AGGM) operates as both, Market Area Manager and Distribution Area Manager (MAM and DAM) and is responsible for balancing activities in the Austrian gas grid.

Ex-ante and ex-post balancing are essential elements of the Austrian balancing method and provide for measures to ensure balanced entry and exit quantities and keeping the TS within its operational limits. The balancing rules underlying provide the framework for all parties involved, with, the balance group representatives (BGR) being responsible for maintaining a balanced energy portfolio. In the course of the ex-ante balancing, the MAM compares the allocated entry and exit capacities for each BG based on nominations and informs the BGR of any imbalances. If the BGR itself does not take any action to restore balance, the MAM calls off capacities at the gas exchange on behalf and on the account of the BGR. Ex-post balancing of the DA is performed by comparing the forecasted and the actual system exits and entries. In its role as DAM, AGGM procures physical balancing energy (BE), if necessary, at the gas exchange of the virtual trading point (VTP) to ensure system. For that purpose, AGGM buys and sells balancing energy at market prices on behalf and on the account of the balance group coordinator (BGC).

In addition, as part of managing balancing energy, the MAM is responsible for collecting balancing incentive mark-ups (BIM) when the appropriate conditions are met. Avoiding those mark-ups serves as an incentive for BGRs to ensure consistently balanced injection and withdrawal nominations for each BG. The MAM can at the same time use those balancing incentive mark-ups to cover the procurement of balancing energy for the market area and related costs incurred by any intraday balancing required.

The following report has been prepared in line with the objective of achieving the utmost transparency in matters relating to balancing incentive mark-ups and any balancing measures. This balancing report examines balancing activity in the calendar year 2021 and presents comparisons with previous years to show current developments.

The second section outlines the legal background to balancing in Austria. The third section presents the physical balancing activities carried out in the DA and in the TS. The fourth section describes developments in relation to balancing incentive mark-ups. The report concludes with a summary of the key insights from this year's balancing report.

2 Legal background

2.1 Balancing

The following documents provide the legal framework for balancing of the Austrian grids by the MAM and DAM:

- Balancing Network Code
Regulation (EU) No. 312/2014 of the Commission establishing a Network Code on Gas Balancing of Transmission Networks
- The Austrian Natural Gas Act 2011 (*Gaswirtschaftsgesetz, GWG*)
Federal Act adopting new rules for the gas market, Federal Law Gazette 107/2011 as amended
- Gas Market Model Ordinance 2012 (*Gas-Marktmittel-Verordnung*)
Energie-Control Austria Executive Board Ordinance on Provisions for the Gas Market Model, Federal Law Gazette II no. 171/2012 as amended
- GTC MAM-DAM-BGR East
General terms and conditions of the Market Area Manager and Distribution Area Manager governing the legal relationships between (i) the MAM and the BGRs, on the one hand, and (ii) the DAM and the BGRs, on the other hand, in the MA-East, Version 2.0 and 3.0
- GTC DAM-BGR T&V
General terms and conditions of the Distribution Area Manager governing the legal relationship between the DAM and the BGRs in the MA Tyrol and Vorarlberg (T&V), version 4.0

2.2 Balancing incentive mark-ups

The following documents provide the legal framework for calculating balancing incentive mark-ups for unbalanced BG positions:

- Balancing Network Code
Regulation (EU) No. 312/2014 of the Commission establishing a Network Code on Gas Balancing of Transmission Networks
- Gas Market Model Ordinance 2012 (*Gas-Marktmittel-Verordnung*)
Energie-Control Austria Executive Board Ordinance on Provisions for the Gas Market Model, Federal Law Gazette II no. 171/2012 as amended
- GTC MAM-DAM-BGR East
General terms and conditions of the Market Area Manager and Distribution Area Manager governing the legal relationships between (i) the MAM and the BGRs, on the one hand, and (ii) the DAM and the BGRs, on the other hand, in the MA-East, Version 2.0 and 3.0

3 Balancing activities

In its role as MAM and DAM, AGGM ensures the continuous supply of gas in Austria. Irrespective of this, it is the responsibility of the BGRs to ensure that their entries and exits are physically balanced. In case, there is insufficient line pack in the gas grid (internal balancing or control energy) AGGM takes physical balancing actions in the course of its gas flow control activities. As said above, AGGM takes balancing activities by purchasing or selling balancing energy for the DA and by purchasing or selling capacities in order to balance BG positions.

Chapter 3.3 concludes with the development of the neutrality accounts in the DA.

3.1 Balancing in the market area

In 2021, no balancing energy was required to be called off to ensure system stability or intraday balancing of the TS.

However, the MAM made the following call-offs at the VTP to compensate for BGs' intraday imbalances on behalf and on the account of the BGRs. The table below shows the quantities called off (buy / sold), the count of call-offs per month (buy / sold) and the total of BGs called off per day. Note that BGs can be affected multiple times per month. Where multiple trades were carried out for the purposes of one call-off, only one transaction is recorded.

2021	Quantity called-off Buy (MWh)	Quantity called-off Sold (MWh)	MAM Trades Buy (count)	MAM Trades Sold (count)	Total of BGs called off per day (count)
January	13.864.000	6.698.000	42	39	75
February	14.709.000	8.188.000	28	19	46
March	16.054.000	5.371.000	39	27	63
April	7.494.000	12.225.000	22	35	56
May	3.232.000	11.631.000	14	35	47
June	8.289.000	2.903.000	8	22	30
July	8.215.000	6.847.000	11	14	25
August	7.325.000	1.884.000	20	12	31
September	1.096.000	5.036.000	11	17	27
October	2.931.000	1.095.000	31	8	39
November	8.391.000	3.771.000	23	13	34
December	4.804.000	4.548.000	22	16	37
Total	96.404.000	70.197.000	271	257	510

Table 1: Balancing actions in the MA

These figures are available on an hourly basis on the AGGM platform under "[Publication](#)".

A comparison with the previous year (Fig. 1) shows a consistent number of trades at the VTP and number of affected BG. The quantities have continued to decline.

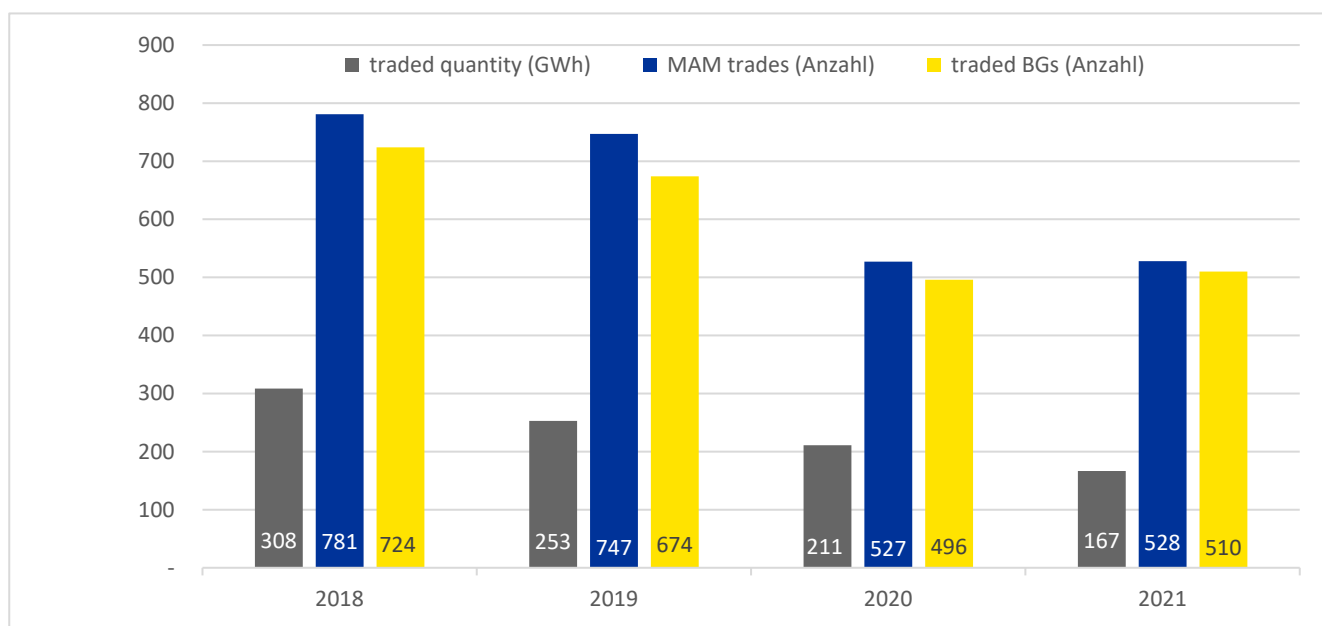


Figure 1: Comparison of balancing actions in the MA-East 2018-2021

3.2 Balancing activities in the distribution area

In order to maintain system stability, the following balancing energy capacities (in MWh) were procured at the gas exchange of the VTP for the DA in 2021: Table 2 shows BE capacities bought and sold for the DA-East and the MA-T&V. In addition, the number of BE calls in opposite directions (within a gas day) for the MA-T&V can be seen. These calls were not necessary in the DA-East. Due to the persistent sufficient liquidity on the gas exchanges, calls via the Merit Order List pursuant to section 31 GMMO-VO 2012 were not required.

2021	DA-East		MA Tyrol & Vorarlberg		
	BE buy	BE sell	BE buy	BE sell	Number of BE calls in opposite direction
January	19.600	101.718	7.070	41.346	5
February	120.296	56.900	5.040	28.530	2
March	41.245	72.300	2.110	11.830	0
April	63.200	22.700	1.530	15.620	1
May	45.900	20.840	9.830	2.950	1
June	0	90.900	4.920	1.200	0
July	9.200	58.912	5.260	240	0
August	55.750	0	3.100	780	0
September	85.500	8.900	11.160	0	0
October	83.684	2.700	1.700	11.370	1
November	52.300	47.400	4.090	17.800	2
December	24.400	85.854	4.150	12.470	1
Total	601.075	569.124	59.960	144.136	

Table 2: Balancing actions DA

Figure 2 compares procurement of balancing energy in the years 2017-2021. In general, fluctuations are due to seasonal temperature variations and corresponding market signals.

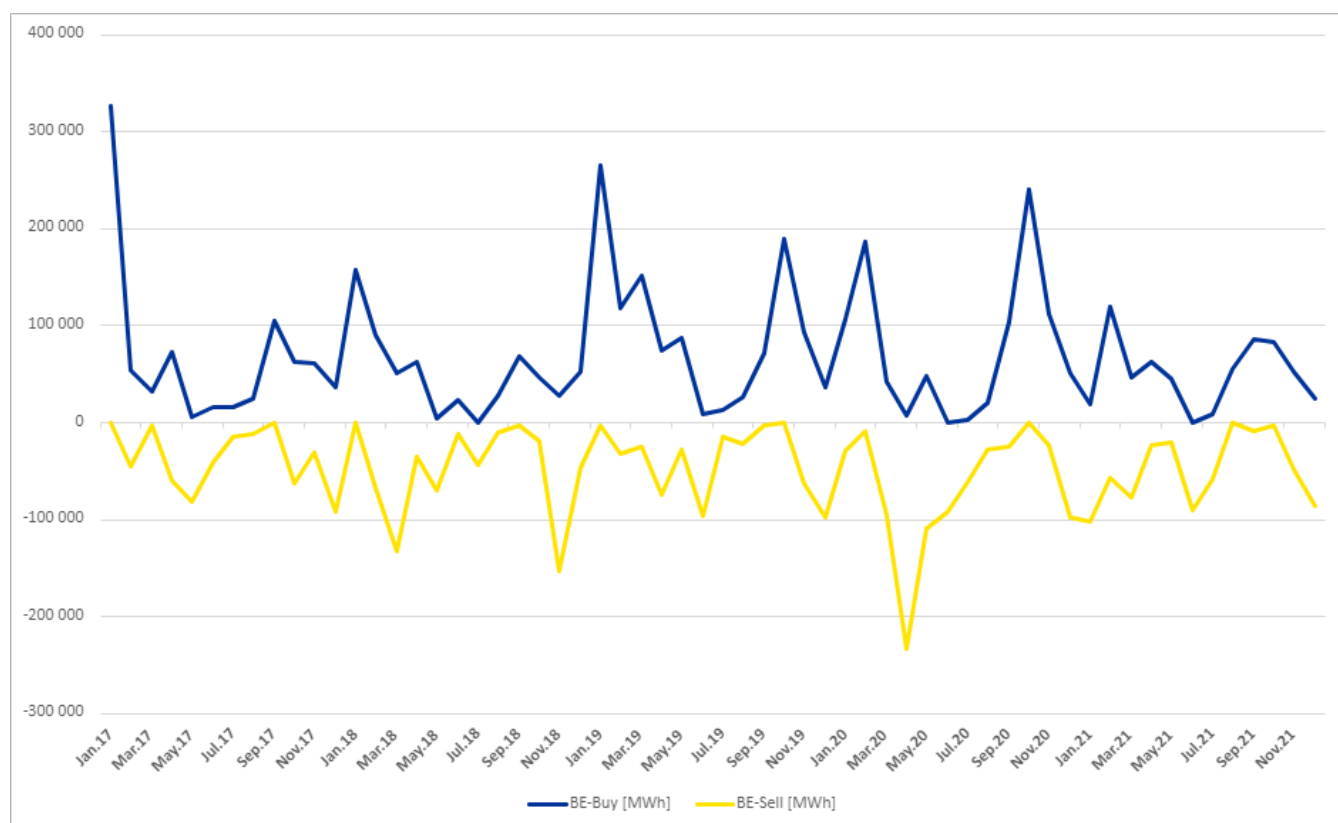


Figure 2: Comparison of balancing actions in the DA 2017-2021

Month 2021	DA-East					MA Tyrol & Vorarlberg				
	Maximum purch. price	Avg. purch. price	Reference price stock exchange	Avg. selling price	Minimum selling price	Maximum purch. price	Avg. purch. price	Reference price stock exchange	Avg. selling price	Minimum selling price
January	25,767	21,542	18,744	17,614	16,031	26	20,699	19,732	19,593	16,925
February	21,131	17,926	17,492	16,723	15,518	19,975	19,963	17,725	17,507	15,45
March	19,27	17,818	17,954	17,909	16,276	19,55	18,677	17,976	17,913	16,304
April	22,558	20,468	20,646	19,312	19,211	20,7	20,586	20,723	20,426	19
May	28,238	26,74	25,178	24,283	23,134	27,275	26,107	25,132	25,144	24,4
June	*	*	28,662	27,732	24,988	34,356	30,116	28,671	25,883	25,872
Juli	36,418	36,28	35,881	36,042	34,438	37,45	35,466	35,886	34,925	34,925
August	49,75	45,798	43,384	*	*	50,225	46,856	43,556	44,219	44,1
September	91,923	72,616	62,532	57,158	48,217	92,263	69,955	62,386	*	*
October	115,575	97,161	90,267	88,397	88,397	92,975	85,005	90,056	83,872	63,455
November	96	83,401	80,781	87,822	84,85	14,5	90,975	80,285	81,03	80,512
December	183,95	167,672	113,771	97,843	62,263	157,325	129,398	113,85	106,929	82,025

Table 3: Balancing energy procurement prices

* = no call-offs

The following prices (in EUR/MWh) were applied for the above-mentioned call-offs in 2021 in the DA-East and the MA-T&V (Table 3).

Figures 3 and 4 compare purchase prices for BE in MA-East and the MA-T&V for the years 2017-2021. As shown, over recent years the prices were subjected to normal fluctuation. The only exception was the period of cold weather in February/March 2018 and the subsequent weeks. During this period, market prices rose abruptly and significantly. In 2021 due to the significant increase of the gas exchange prices the balancing prices were accordingly high.

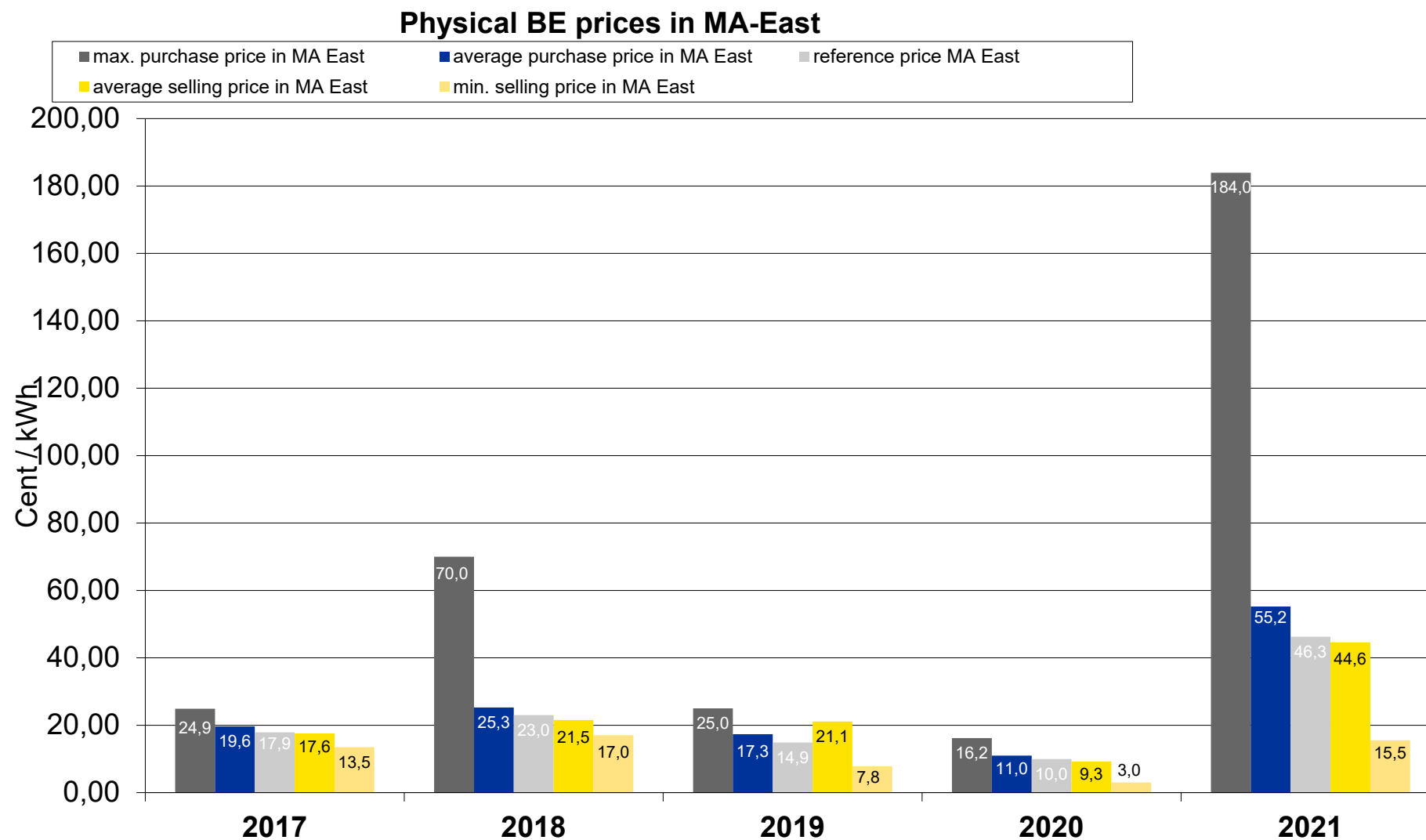


Figure 3: Comparison of BE procurement prices in the MA-East 2017-2021

Physical BE prices in MA-Tyrol and Vorarlberg

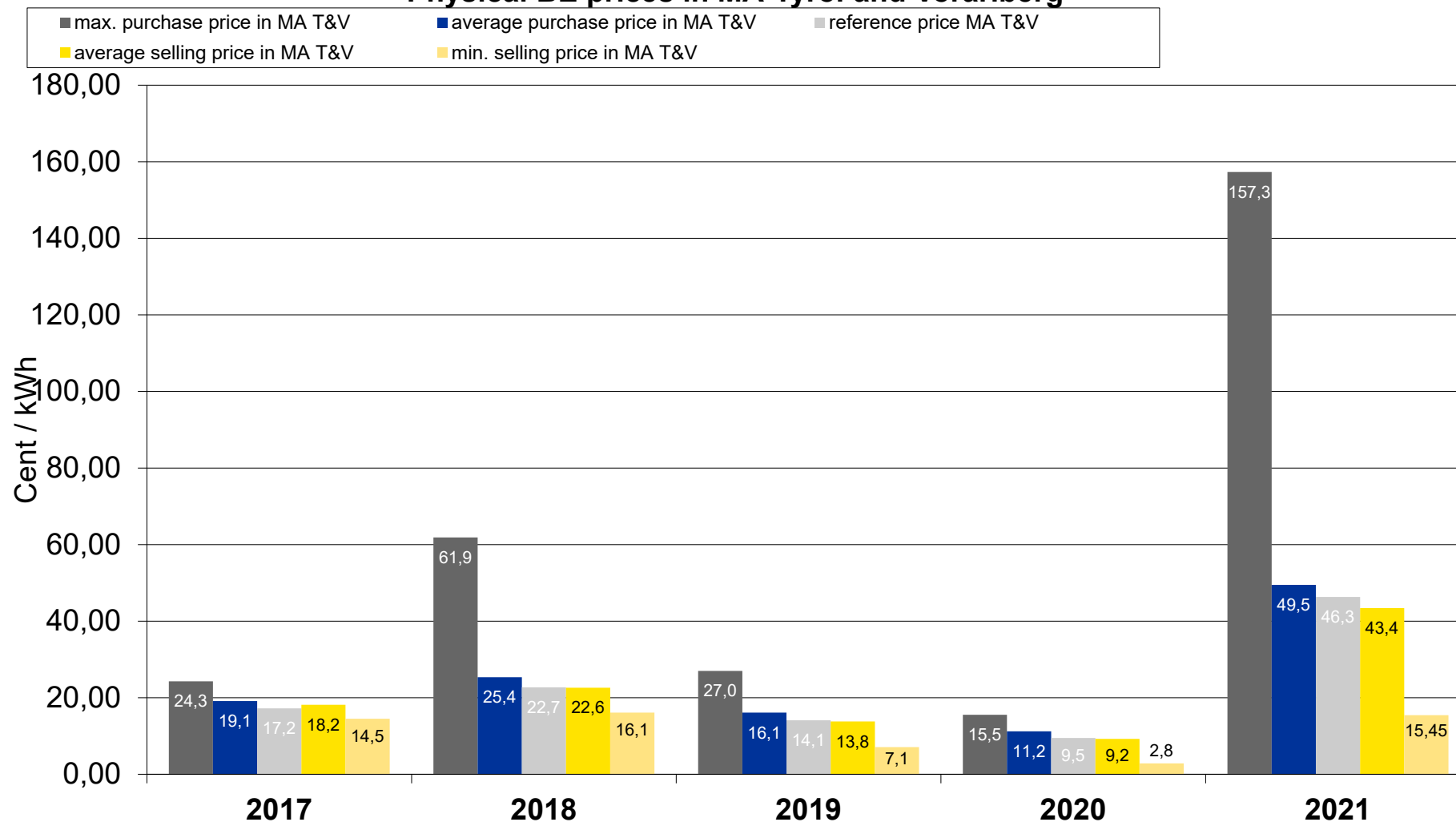


Figure 4: Comparison of BE procurement prices in the MA-T&V 2017-2021

3.3 Development of neutrality accounts

The clearing and settlement agents are conducting the settlement of the imbalances on a monthly basis. Part of it is a neutrality settlement to BGRs. Revenues and expenditures resulting from the procurement of physical balancing energy and from the settlement of the imbalances are documented on a neutrality account.

The following diagrams show the development of the neutrality accounts separated for the DA-East and the MA-T&V. The account position for the DA-East was €3.208.136 at the end of 2020 and amounted to € €8.808.430 at the end of 2021; the account position for the MA-T&V was €199.070 at the end of 2020 and led to €1.440.561 at the end of 2021.

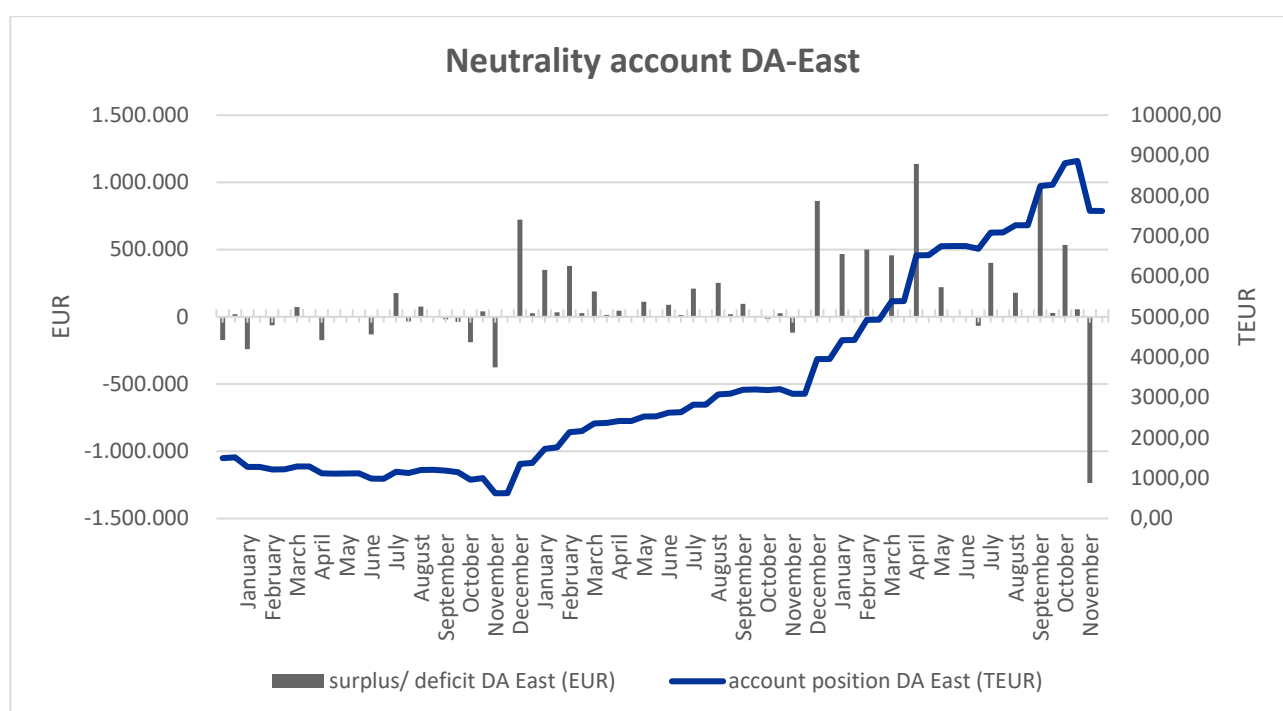


Figure 5: Development of neutrality account DA-East 2021

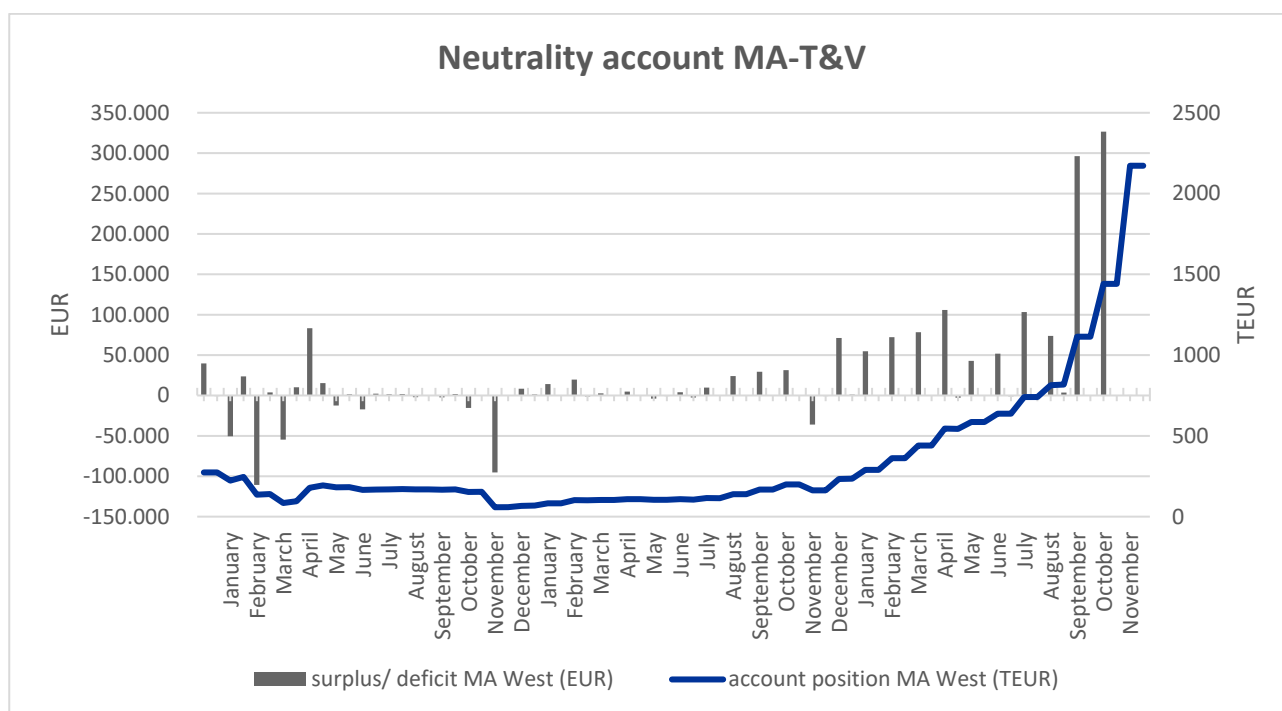


Figure 6: Development of neutrality account MA-T&V 2021

Details about revenues and expenditures can be found on the websites of the clearing and settlement agents [AGCS](#) (for DA-East) and [A&B](#) (for the MA-T&V).

4 Balancing incentive mark-ups

The method of balancing incentive mark-ups implemented in the MA-East of Austria is an incentive mechanism for BGRs to submit balanced nominations. Balancing incentive mark-ups are payable if there are hourly imbalances and if further parameters are met.

4.1 Method for balancing incentive mark-ups in 2021

The following chart illustrates the method of balancing incentive mark-ups. Blue boxes indicate that BG imbalances are not charged (see GTC MAM-DAM-BGR East, Article 20 as amended).

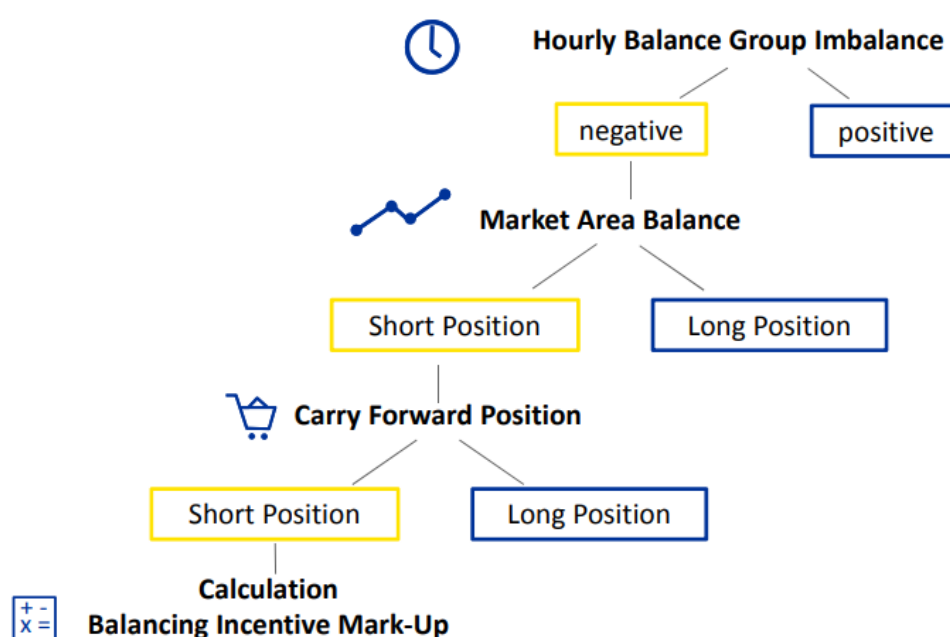


Figure 7: Balancing incentive mark-up method

The current balancing incentive mark-up method serves in particular as an incentive to reduce short positions. The amounts to be used for calculating an hourly short position are listed in the table below.

4.1.1 Calculation method 2021

The following rate scales apply as of 01.08.2020 for the calculation of balancing incentive mark-ups:

Hourly deviations of a short position in kWh	Amount of balancing incentive mark-up in eurocents as of 1 August 2020
Volumes between 0 and 400,000 kWh	0,09 Cent/kWh
Volumes > 400,000 kWh	0,45 Cent/kWh

Table 4: Rate scale 2021

4.2 Balancing incentive mark-ups charged in 2021

In 2021, the MAM charged the volumes and amounts (in Euro, excl. VAT) listed below by month and scale:

Month 2021	BIM by scale 0.09 cent/kWh		BIM by scale 0,45 cent/kWh		Total BIM	
	kWh	€	kWh	€	kWh	€
January	22 697 368	20 427,64	913 304	4 109,87	23 610 672	24 537,51
February	19 882 959	17 894,67	560 046	2 520,21	20 443 005	20 414,88
March	21 291 236	19 162,06	1 299 666	5 848,50	22 590 902	25 010,56
April	18 746 586	16 871,95	2 094 044	9 423,20	20 840 630	26 295,15
May	6 976 138	6 278,53	0	0	6 976 138	6 278,53
June	3 190 499	2 871,43	0	0	3 190 499	2 871,43
July	9 845 716	8 861,16	3 977 463	17 898,58	13 823 179	26 759,74
August	5 834 450	5 251,02	3 156 812	14 205,65	8 991 262	19 456,67
September	5 692 033	5 122,83	410 695	1 848,13	6 102 728	6 970,96
October	21 721 433	19 549,30	2 829 352	12 732,08	24 550 785	32 281,38
November	27 886 178	25 097,58	2 379 769	10 708,96	30 265 947	35 806,54
December	42 426 034	38 183,46	3 282 596	14 771,69	45 708 630	52 955,15
Total	206 190 630	185 571,63	20 903 747	94 066,87	227 094 377	279 638,50

Table 5. Charged balancing incentive mark-ups by scale 2021

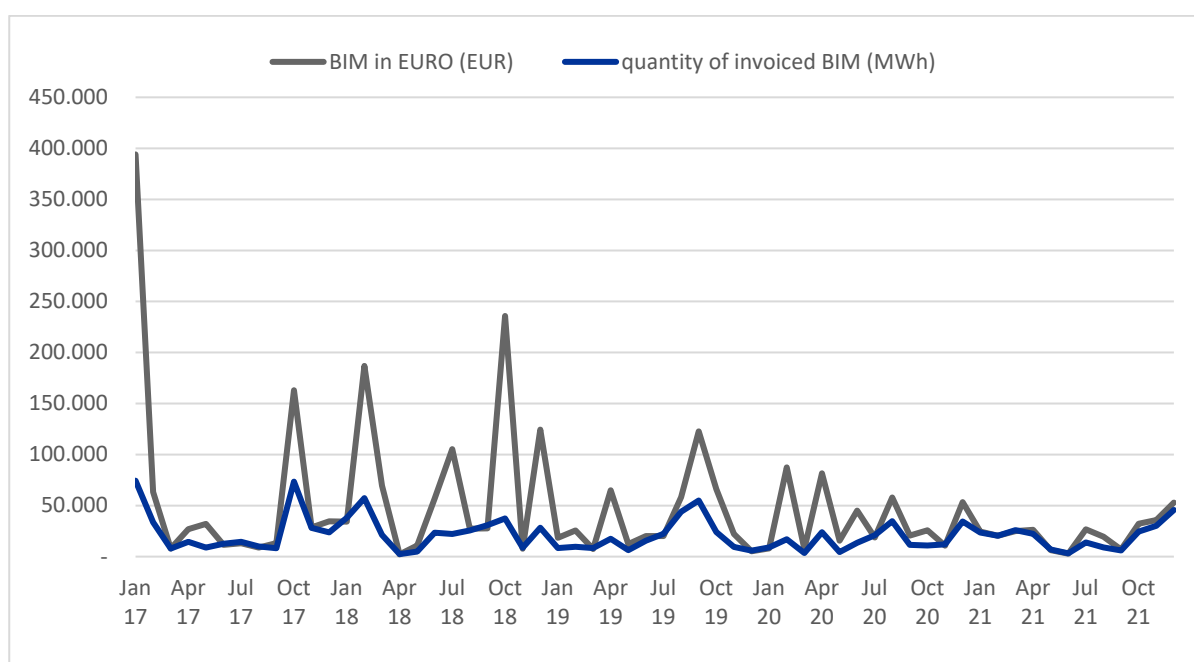


Figure 8: Comparison of balancing incentive mark-ups 2017-2021

In 2021, a total of **85 invoices were sent**. Due to the the threshold to charge monthly balancing incentive mark-ups of 500 EUR, according to the GT MAM-DAM BGR East, **244 invoices were not sent** in 2021.

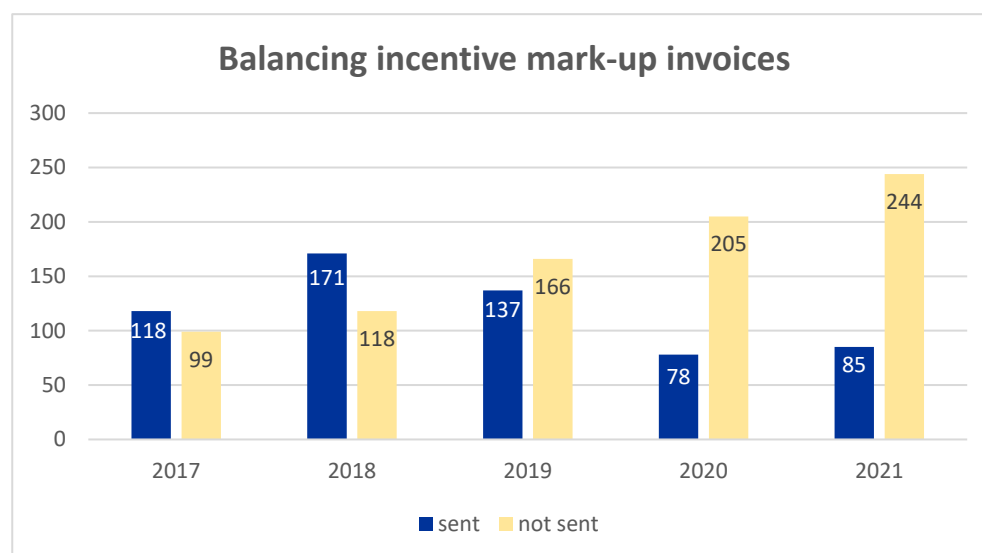


Figure 9: Balancing incentive mark-up invoices 2017-2021

4.3 Offsetting of open carry-forward accounts

Due to a suspension of services or cancellation of the BGR agreement, the carry-forward accounts of individual BGRs could not be balanced in due time. Pursuant to article 20.6 of GTC MAM-DAM-BGR East, the MAM shall offset the carry-forward accounts at the VTP.

Therefore, the MAM settled the imbalance by selling or buying the corresponding volumes at the VTP. A total amount of €2.150,40 was subtracted from the balancing incentive mark-up account.

4.4 Balancing incentive mark-up account

At the end of December 2021, the amounts in the balancing incentive mark-up account are as follows:

BIM as of 31.12.2020	2.038.582,34€
Total of BIM	279.638,50€
BIM as of 31.12.2021	2.318.220,84€
Special Position due to settlement of BGR carry-forward accounts	2.150,40

Table 6: Balancing incentive mark-up account 2021

5 Conclusions and summary

The 2021 balancing report shows that balancing activities carried out by AGGM and the charged amounts for balancing incentive mark-ups remained steady in comparison with previous years.

5.1 Balancing activities

From January to December 2021, the MAM did not perform any extraordinary call-offs for unbalanced BGs.

Regarding the MA-T&V table 2 indicates a significant selling of AE, thus pointing to a systematic surplus for the entire year. The described situation in the MA-T&V is therefore caused by the BGRs nominations.

The data illustrates an increase of the neutrality accounts therefore the Balance Group Coordinator intends to provide a disbursal of 0,02 cents in 2022.

5.2 Balancing incentive mark-ups

Observations of the BGR's nomination behavior indicate no change in portfolio management by the BGRs. Thus, it seems that the incentive for balanced BG nominations is still given.