



AGGM Austrian Gas Grid Management AG

Report on market area balancing activities in Austria

Period 2019

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List of abbreviations

GTC	General Terms and Conditions
BE	Balancing energy
BG	Balance group
BGR	Balance group representative
BGC	Balance group coordinator
BIM	Balancing incentive markup
CF	Carry-forward account
TS	Transmission system
GWG	Gaswirtschaftsgesetz, the Austrian Natural Gas Act
MA	Market area
MAM	Market area manager
TSO	Transmission system operator
DA	Distribution area
DAM	Distribution area manager
VTP	Virtual trading point

1 Introduction

In the Austrian market model, AGGM Austrian Gas Grid Management AG (AGGM) operates both as 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 Balance Group (BG) structure and provide for measures to ensure balanced entry and exit quantities, keeping the transmission system within its operational limits. The balancing rules underlying the model 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 distribution area is performed by comparing the forecasted and the actual system exit and entry. In its role as DAM, AGGM procures physical balancing energy (BE), if necessary, at the gas exchange of the virtual trading point (VTP) in order to ensure system stability in the distribution area (DA). 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 markups (BIM) when the appropriate conditions are met. Avoiding those markups serves as an incentive for BGRs to consistently ensure balanced injection and withdrawal nominations for each BG. The MAM can at the same time use those balancing incentive markups to cover the procurement of balancing energy for the market area and the 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 markups and any balancing measures. This balancing report examines balancing activity in the 2019 calendar year 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 distribution area and in the transmission system (TS). The fourth section describes developments in relation to balancing incentive markups. 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-Marktmodell-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 1.0 and 2.0
- GTC DAM-BGR TYROL & VORARLBERG
General terms and conditions of the Distribution Area Manager governing the legal relationship between the DAM and the BGRs in the Tyrol and Vorarlberg market areas, version 3.0 and 4.0

2.2 Balancing incentive markups

The following documents provide the legal framework for calculating balancing incentive markups 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-Marktmodell-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 1.0 and 2.0

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. If linepack in the gas grid (internal balancing or control energy) is insufficient, 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 distribution area 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 distribution areas.

3.1 Balancing in the market area

In 2019, no balancing energy was required to be called off to ensure system stability or intraday balancing of the transmission system.

However, the MAM made the following call-offs at the VTP to compensate for intraday imbalances of BGs on behalf and on the account of the BGRs: The table shows the quantities called off, the number of call-offs per month 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.

Month 2019	Quantity called-off (MWh)	MAM trades (number)	Total of BGs called off per day (number)
January	19,016	56	54
February	15,422	42	41
March	14,135	56	52
April	37,730	75	67
May	15,900	67	61
June	31,809	79	65
July	17,921	50	45
August	14,091	45	40
September	39,583	70	60
October	22,370	111	100
November	6,721	34	33
December	18,056	62	56
Total	252,754	747	674

Table 1: Balancing actions in the MA

These figures are also available online on an hourly basis on the AGGM platform under [“Publication”](#).

A comparison with the previous year (Fig. 1) shows that the number of trades on the VTP is slightly decreasing but almost identical, whereby the total quantity has more or less remained steady since 2016.

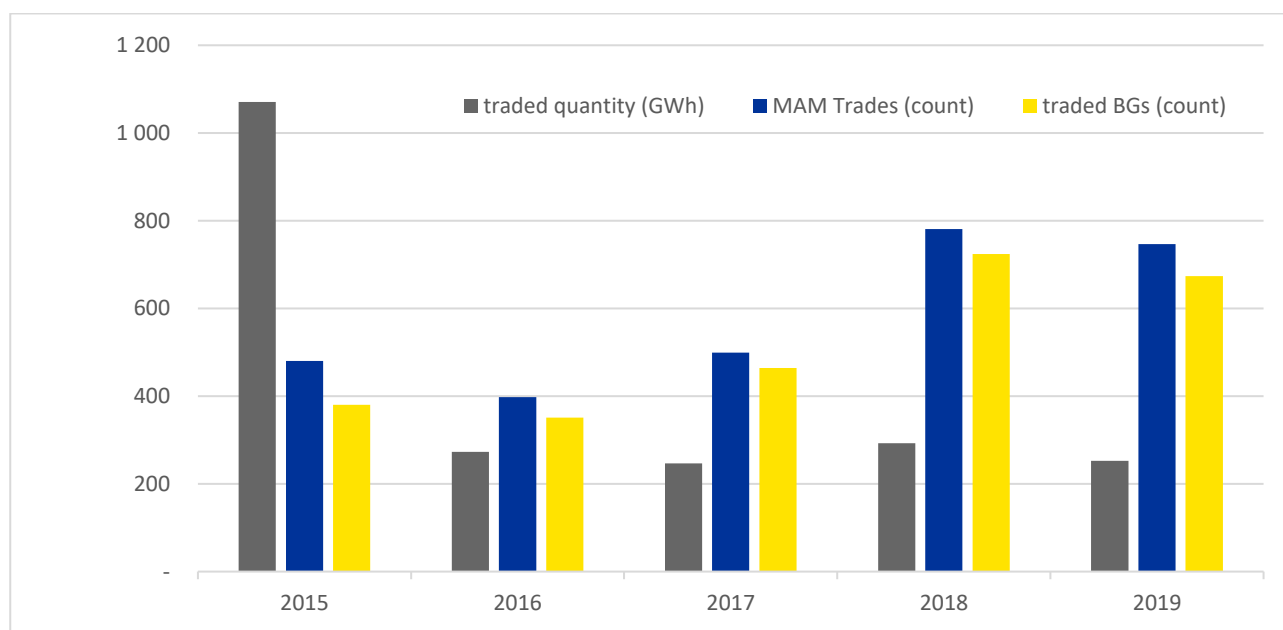


Figure 1: Comparison of balancing actions in the MA East, 2015-2019

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 2019: Table 2 shows BE capacities bought and sold for the Eastern distribution area and the market areas Tyrol and Vorarlberg. In addition, the number of BE calls in opposite directions (within a gasday) for the market areas Tyrol and Vorarlberg 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.

Month 2019	Eastern DA		Tyrol & Vorarlberg MAs		
	BE buy	BE sell	BE buy	BE sell	Number of BE calls in opposite direction
January	265,504	3,000	10,215	8,488	9
February	117,448	31,600	1,390	11,750	-
March	151,749	24,200	6,636	9,980	1
April	73,755	73,837	9,945	3,785	2
May	87,806	27,584	22,234	1,920	2
June	8,440	96,774	9,235	570	-
July	13,000	14,600	2,420	-	-
August	26,200	21,525	1,415	500	-
September	71,200	3,200	1,840	5,390	-
October	189,041	-	-	18,660	-
November	93,760	63,358	640	21,675	1
December	37,200	98,119	-	31,720	-
Total	1,135,103	457,797	65,970	114,438	

Table 2: Balancing actions DA

Figure 2 compares procurement of balancing energy in the years 2016-2019. In general, fluctuations are due to seasonal temperature variations and corresponding market signals. This is probably also true of the significant peak in January 2017.

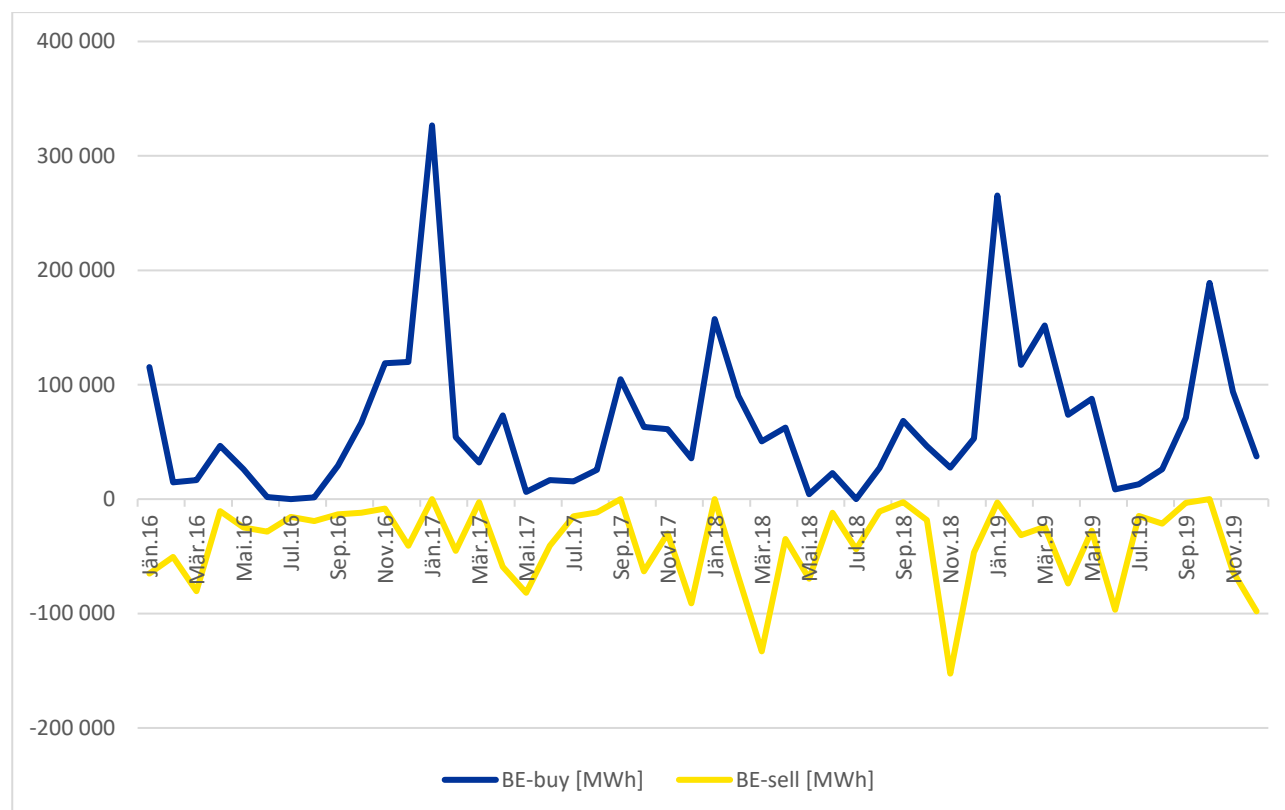


Figure 2: Comparison of balancing actions in the distribution area, 2016-2019

The following prices (in EUR/MWh) were applied for these call-offs in 2019 in the Eastern distribution area and the market areas Tyrol and Vorarlberg (Table 3).

Month 2019	Eastern DA					Tyrol & Vorarlberg MAs				
	Maximum purch. price	Avg. purch. price	Avg. price w/o call-off	Avg. selling price	Minimum selling price	Maximum purch. price	Avg. purch. price	Avg. price w/o call-off	Avg. selling price	Minimum selling price
January	25.000	23.190	22.648	21.080	21.080	27.000	22.789	22.408	21.838	20.200
February	20.100	19.544	20.070	18.852	17.713	20.100	19.544	20.070	18.852	17.713
March	18.964	17.727	17.197	16.223	14.375	19.634	17.133	16.505	14.275	15.629
April	19.800	17.940	17.407	15.559	13.168	17.825	16.258	15.980	14.901	13.534
May	18.266	22.688	21.751	19.952	19.952	16.125	14.693	14.321	13.194	12.150
June	18.266	16.958	16.241	14.768	12.540	12.850	11.523	10.933	11.576	11.300
July	14.055	12.741	11.428	9.682	9.299	13.225	11.911	11.228	No call-off	No call-off
August	11.425	10.862	10.551	10.156	9.592	10.400	10.278	10.349	10.882	10.800
September	12.959	12.213	11.696	10.740	10.740	11.925	11.661	9.847	9.281	7.281
October	14.946	11.804	11.112	No call-off	No call-off	No call-off	No call-off	10.433	9.885	7.100
November	18.150	16.060	14.855	11.786	7.825	16.317	16.314	14.723	13.802	9.809
December	18.019	15.385	13.700	11.593	9.304	No call-off	No call-off	13.512	13.262	10.350

Table 3: Balancing energy procurement prices

Figures 3 and 4 compare purchase prices for BE in MA East and the market areas in the west for the years 2016-2019. As shown, the prices over recent years were subject to minimal fluctuation within the normal range. The only exception to this was the period of cold weather in February/March 2018 and the subsequent weeks. During this period, market prices rose abruptly and significantly, sometimes over periods of a few hours.

Physical BE prices in MA East

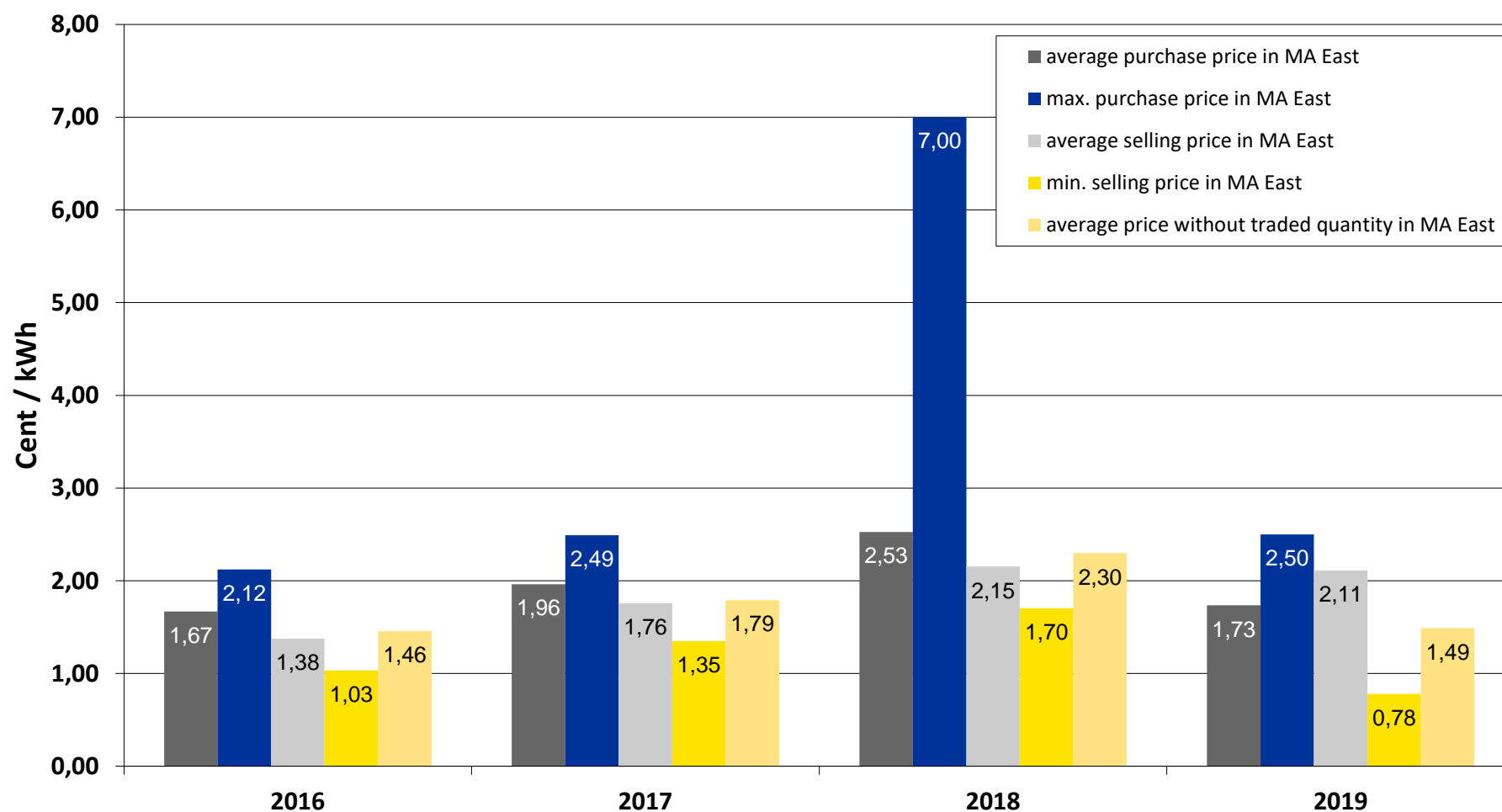


Figure 3: Comparison of BE procurement prices in the MA East, 2016-2019

Physical BE prices in MA Tyrol & Vorarlberg

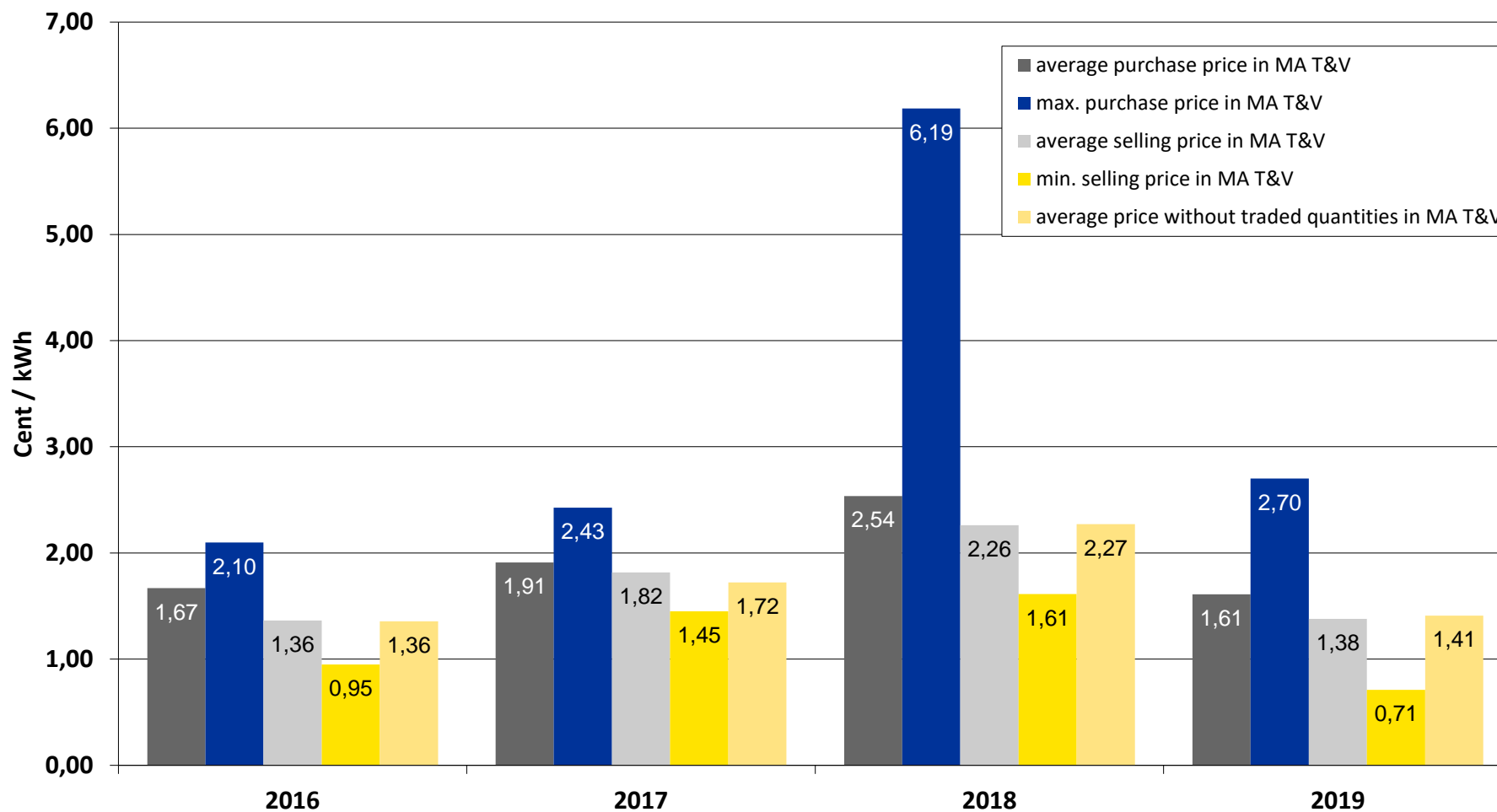


Figure 4: Comparison of BE procurement prices, Western market areas, 2016-2019

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 market areas Tyrol and Vorarlberg. The account position for the DA East was € 1,669,680 at the end of 2018 and amounted to € 1,001,114 at the end of 2019; the account position for the market areas Tyrol and Vorarlberg was € 234,316 at the end of 2018 and led to € 58,582 at the end of 2019.

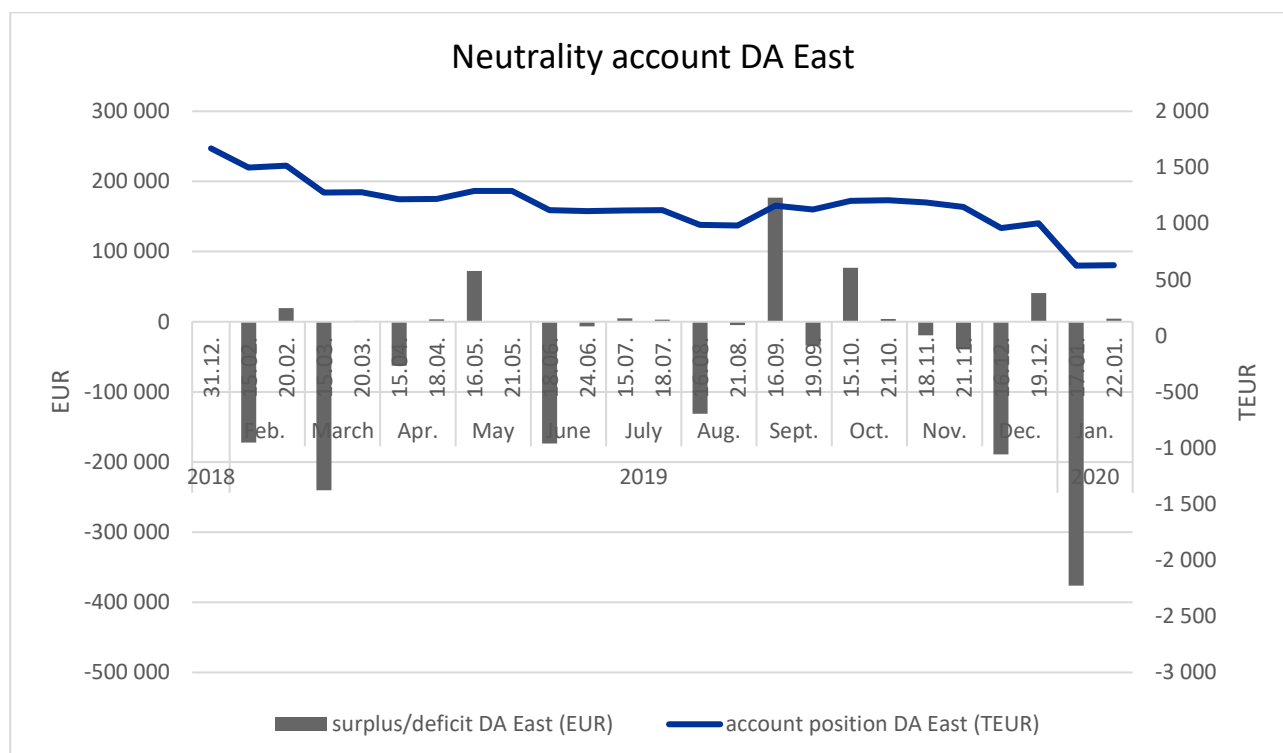


Figure 5: Development of neutrality account DA East

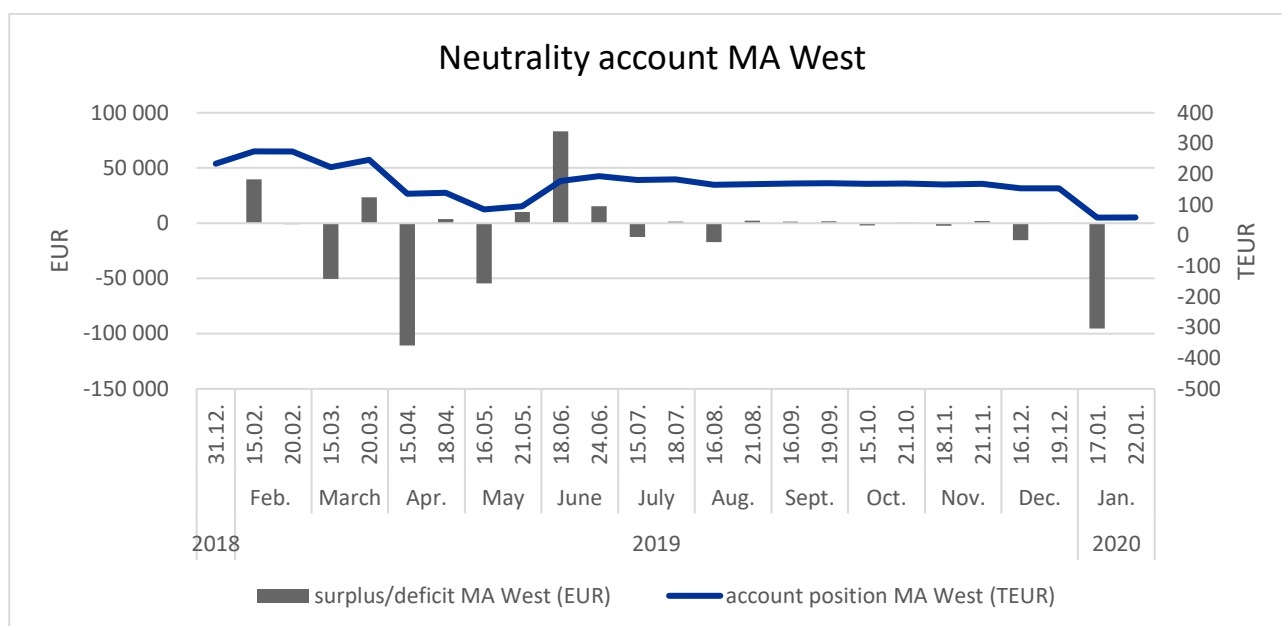


Figure 6: Development of neutrality account MA West

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 market areas Tyrol and Vorarlberg).

4 Balancing incentive markups

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

4.1 Method for balancing incentive markups in 2019

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

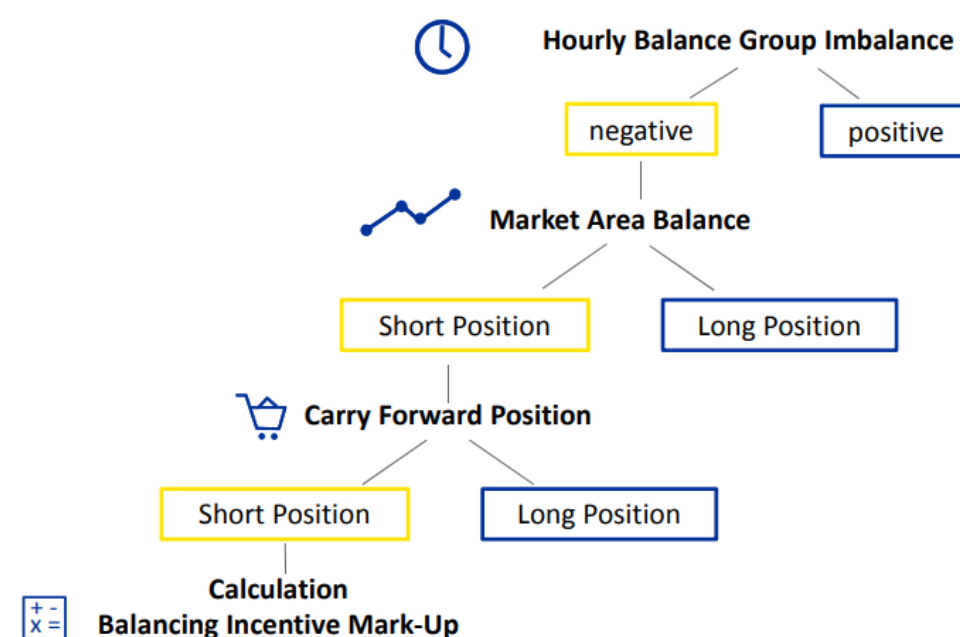


Figure 7 Balancing incentive markup method

The current balancing incentive markup 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 1 January to 31 December 2019

As planned, the rate scale in force since 1 June 2017 was not changed in 2019.

Hourly deviations of a short position in kWh	Amount of balancing incentive markup in eurocents
Volumes between 0 and 400,000 kWh	0.09 cent/kWh
Volumes > 400,000 kWh	0.9 cent/kWh

Table 4: 2019 rate scale

4.2 Balancing incentive markups charged in 2019

In 2019, the MAM charged the volumes and amounts (in Euro, excl. VAT) listed below by month and scale:

Month 2019	BIM markup by scale - 0.09 cent/kWh		BIM by scale 0.9 cent/kWh		Total BIM	
	kWh	€	kWh	€	kWh	€
January	6 978 483	6,280.62	1 348 434	12,135.90	8 326 917	18,416.52
February	7 546 103	6,791.49	2 094 627	18,851.64	9 640 730	25,643.13
March	8 350 772	7,515.72	0	0.00	8 350 772	7,515.72
April	11 331 475	10,198.37	6 093 416	54,840.74	17 424 891	65,039.11
May	5 544 239	4,989.82	806 652	7,259.87	6 350 891	12,249.69
June	14 839 937	13,355.86	754 586	6,791.28	15 594 523	20,147.14
July	22 325 822	20,093.25	0	0.00	22 325 822	20,093.25
August	41 667 280	37,500.59	2 309 284	20,783.56	43 976 564	58,284.15
September	46 001 720	41,401.56	9 037 186	81,334.68	55 038 906	122,736.24
October	17 461 727	16,203.83	5 541 063	49,869.57	24 062 059	66,073.40
November	7 879 683	7,091.69	1 679 193	15,112.74	9 558 876	22,204.43
December	5 820 096	5,238.09	0	0.00	5 820 096	5,238.09
Total	195 747 337	176,660.89	29 664 441	266,979.98	226 471 047	443,640.87

Table 5: Balancing incentive markups charged in 2019

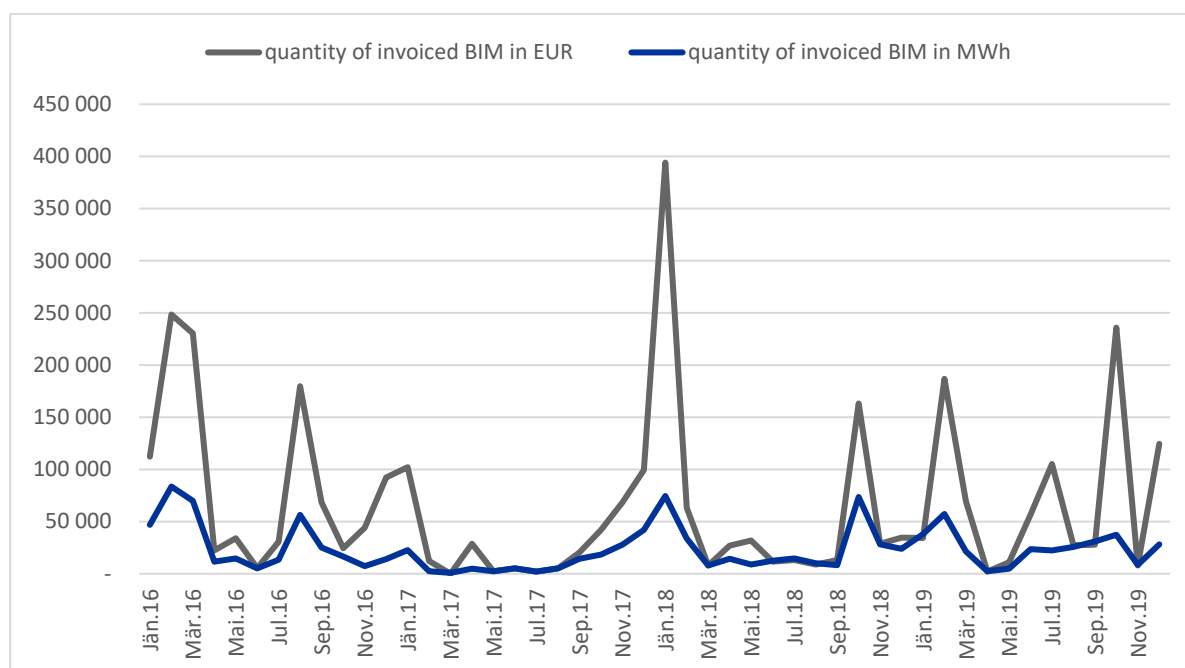


Figure 8: Comparison of balancing incentive markups, 2016-2019

In 2019, a total of **137 invoices were issued to 38 BGRs**.

The current method stipulates that monthly balancing incentive markups below EUR 50 and below EUR 500 since 1 October 2019 for a given BG will not be charged. From January until end of September 2019, no balancing incentive markups were charged in 90 cases due to this provision; from October to December 2019, 76 invoices were not charged.

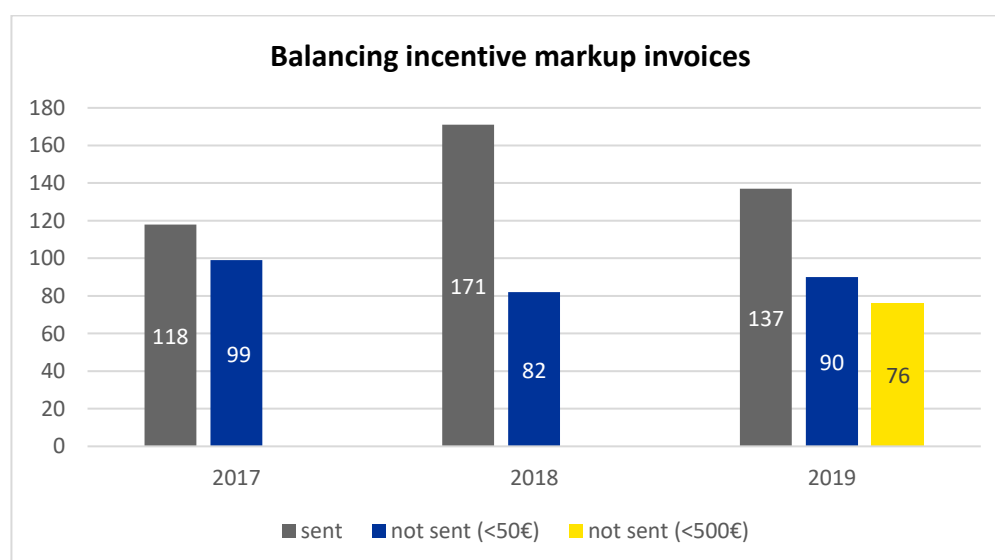


Figure 9: Balancing incentive markup invoices

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 the corresponding volumes at the VTP and subtracted the sum from the balancing energy fund.

4.4 Balancing energy fund

At the end of December 2019, the amounts in the balancing energy fund are as follows:

Balancing energy fund as of 31 December 2018	1,162,123.68 €
Total of BIM (Jan. 2019 -December 2019)	443,640.87 €
Settlement of BGR carry-forward accounts (Jan. 2019 – December 2019)	-477.72 €
Balancing energy fund as of 31 December 2019	1,605,286.83 €

Table 6: Balancing energy fund, 2019

5 Conclusions and summary

The 2019 balancing report shows that balancing activities carried out by AGGM and the charged amounts for balancing incentive markups remained steady in comparison with previous years.

5.1 Balancing activities

From January to December 2019, the MAM did not perform any extraordinary call-offs for unbalanced BGs.

On 1 April 2019, AGGM's operational dispatching activities in its role as DAM were outsourced successfully to service provider Gas Connect Austria GmbH. The changeover has been prepared intensively, leading to no negative impacts for the nomination and schedule management for BGRs or any balancing measures.

5.2 Balancing incentive markups

In general, there were no conspicuous imbalances in 2019. Individual high imbalances (short positions) caused by the BGR's nomination management lie within their own sphere of responsibility. Transparency regarding the balancing incentive markups is ensured by publishing the allocation data reports, which are available to BGRs and can be found in the login section of AGGM's Platform.

The rate scale applied to the balancing incentive markup for 2019 was retained. There are no plans to change the rate scale for the moment. On the one hand, the incentive system with the current rate scale works well and on the other hand there will be essential amendments as of October 2021 with an adapted balancing regime. AGGM will inform the market in time.

As of 1 October 2019, the threshold for the issue of balancing incentive markup invoices has been increased from € 50 to € 500. The modification of the threshold was based on an analysis of historical invoices. The aim was to find the threshold value that would significantly reduce the number of invoices for the period under review but would keep the total amount of euros to be paid by all BGRs at about the same level. The intention was to reduce the administrative effort on both sides and to maintain the incentive for balanced BG nominations. The threshold of € 500 meets these criteria best.

The cumulative revenues from balancing incentive markups will be adjusted and returned to the market as required by law at the end of the third regulatory period in 2020.