

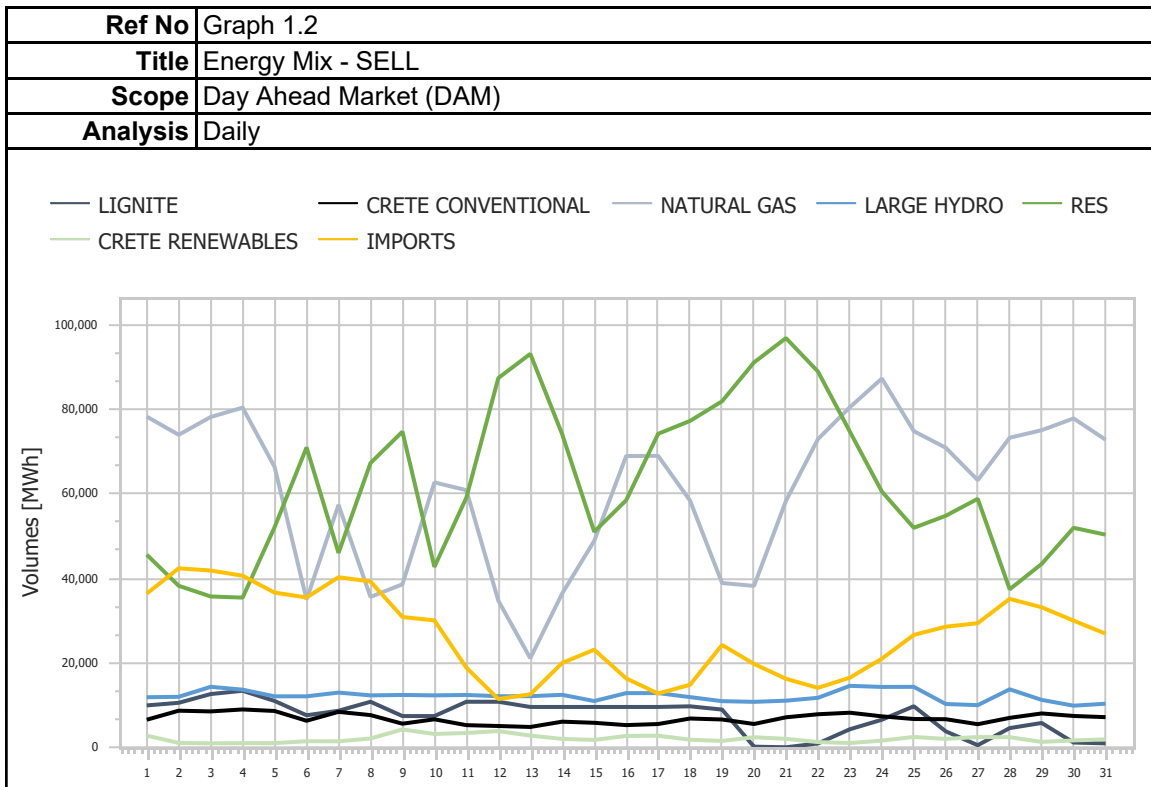
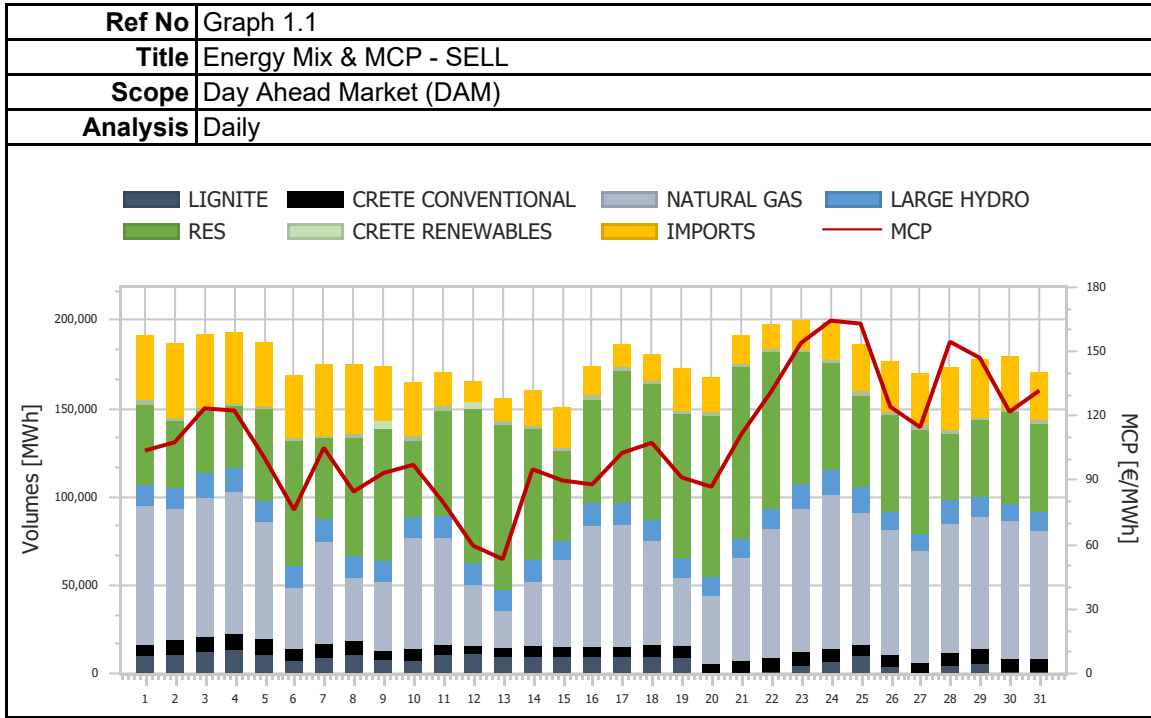
Market Monitoring Report

Monthly - Public - 2

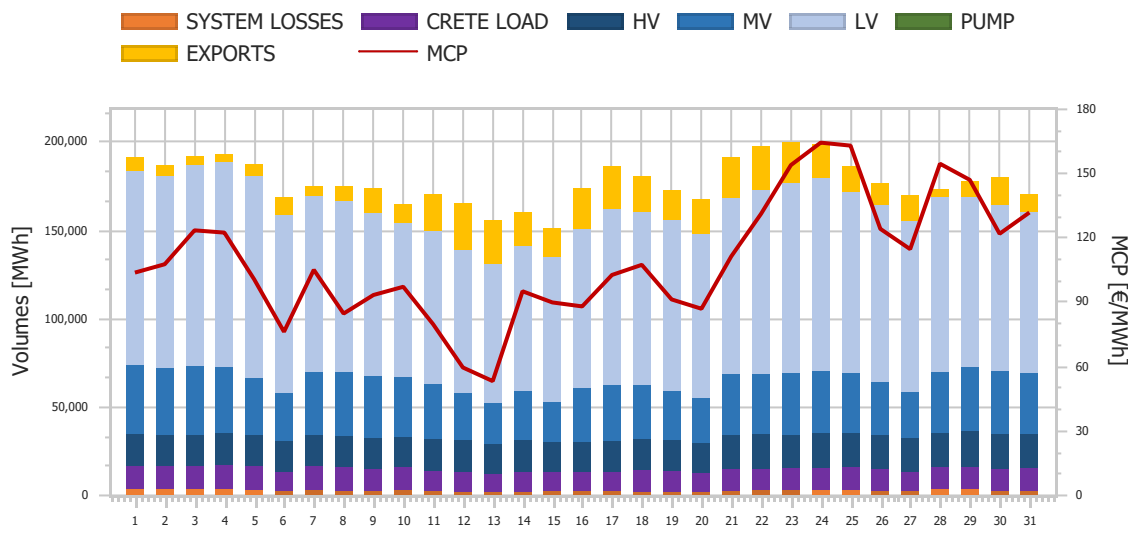
08-2023



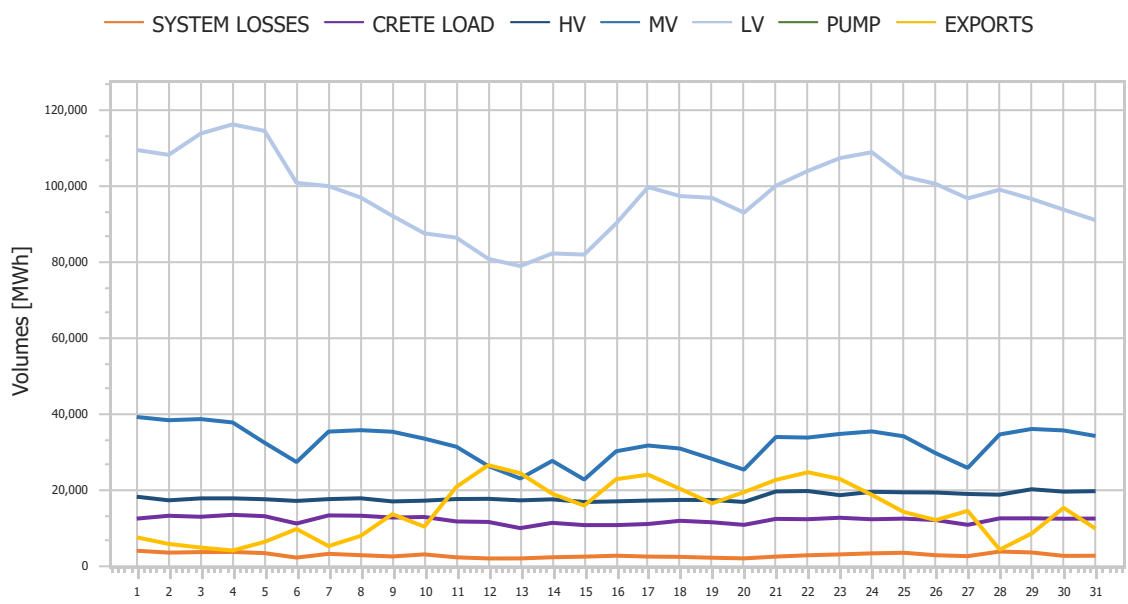
1. Day Ahead Market (DAM)



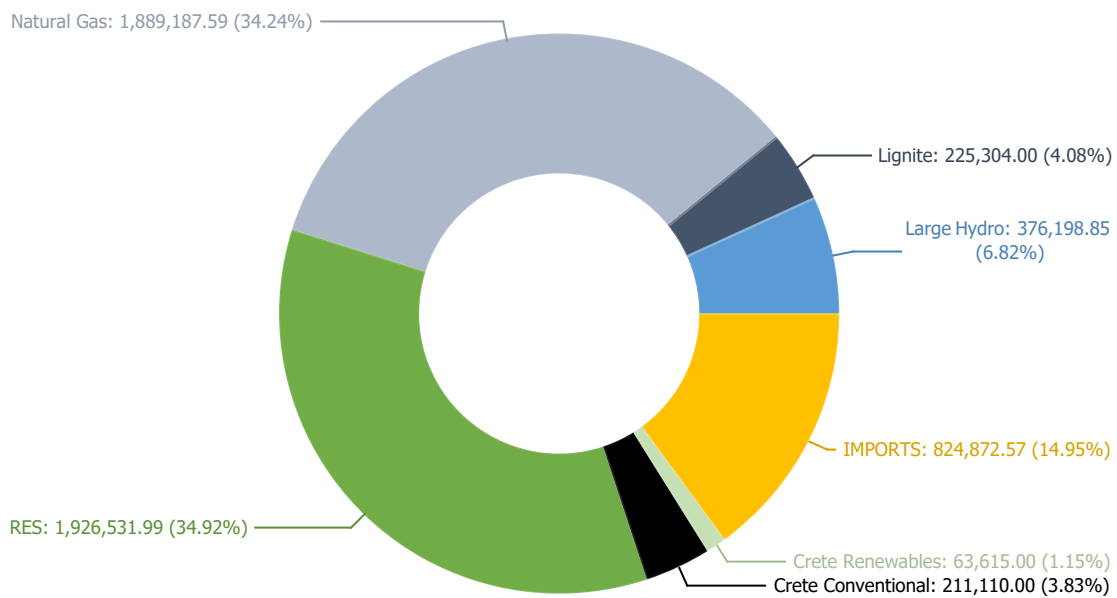
Ref No	Graph 1.3
Title	Energy Mix & MCP - BUY
Scope	Day Ahead Market (DAM)
Analysis	Daily



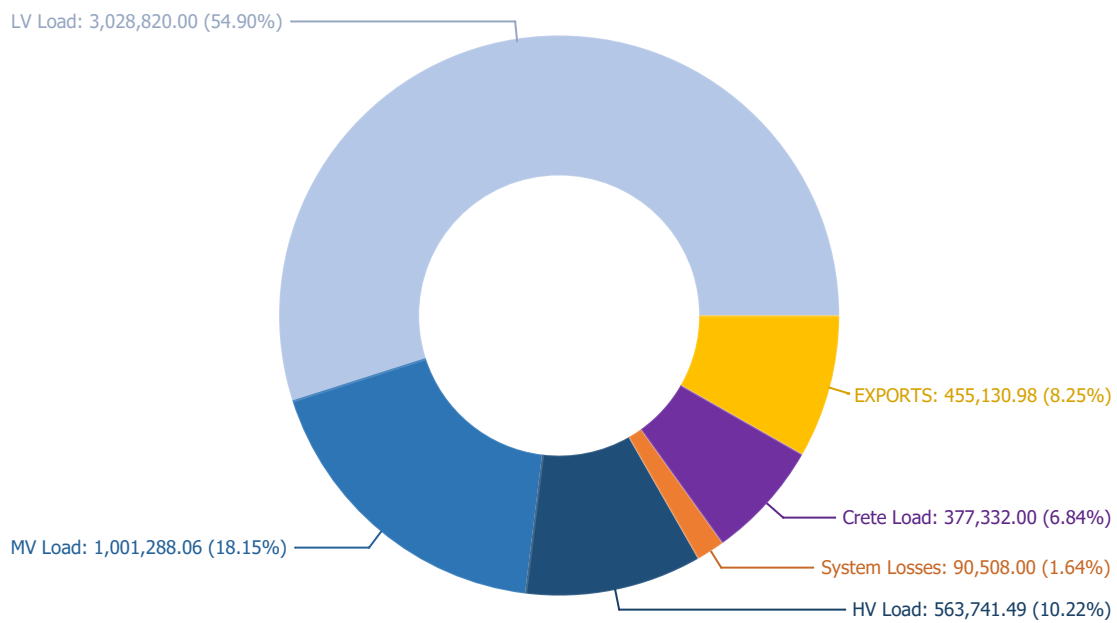
Ref No	Graph 1.4
Title	Energy Mix - BUY
Scope	Day Ahead Market (DAM)
Analysis	Daily



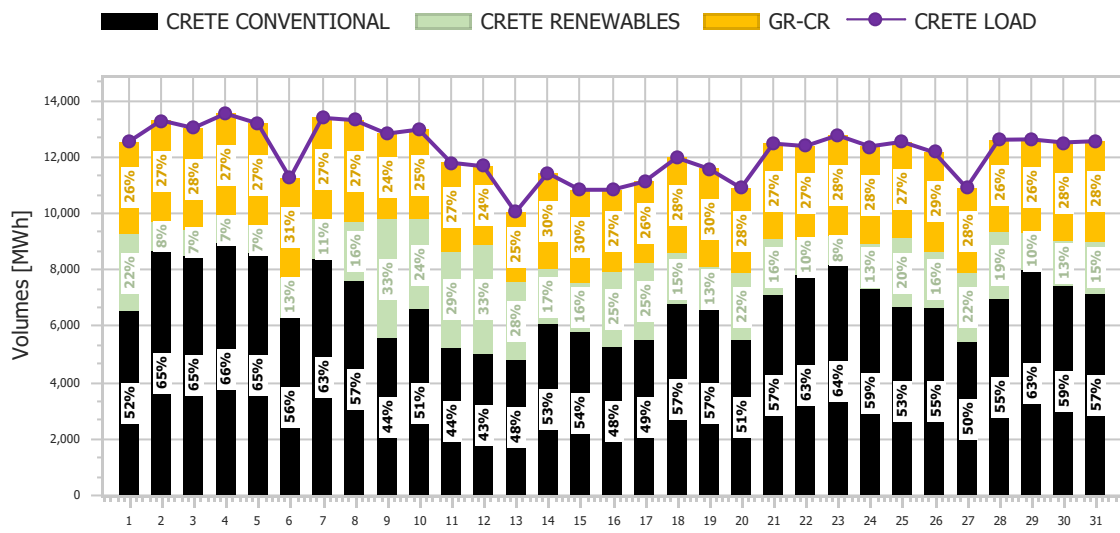
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Title	Energy Mix - SELL
Scope	Day Ahead Market (DAM)
Analysis	Daily



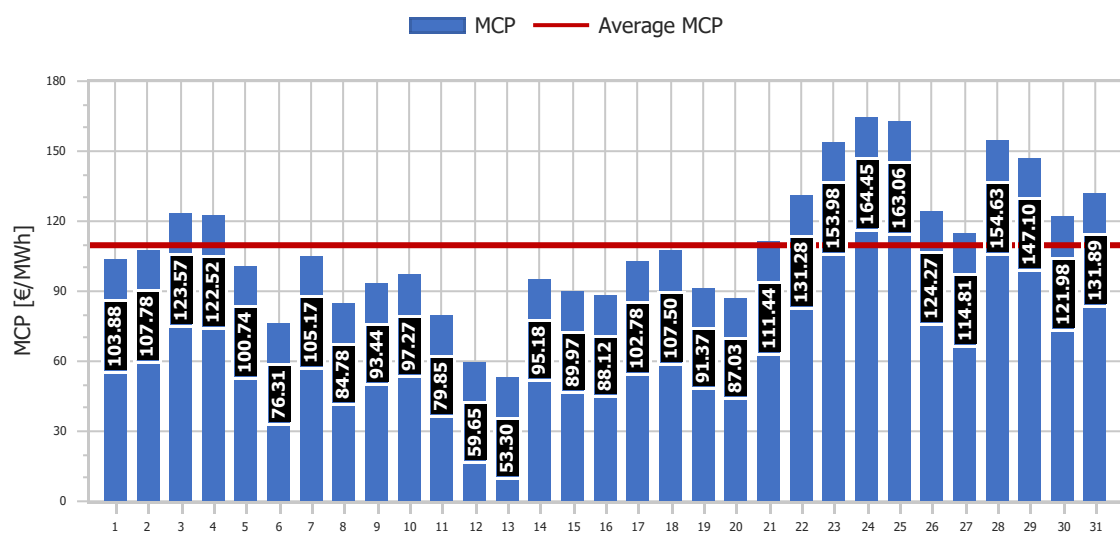
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Title	Energy Mix - BUY
Scope	Day Ahead Market (DAM)
Analysis	Daily



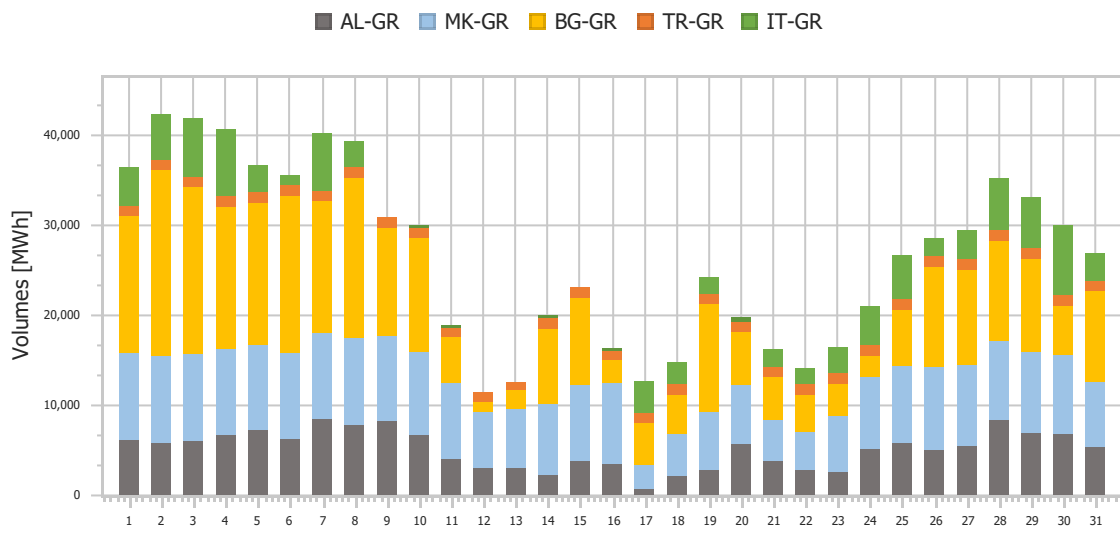
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Title	Crete Energy Mix
Scope	Day Ahead Market (DAM)
Analysis	Daily



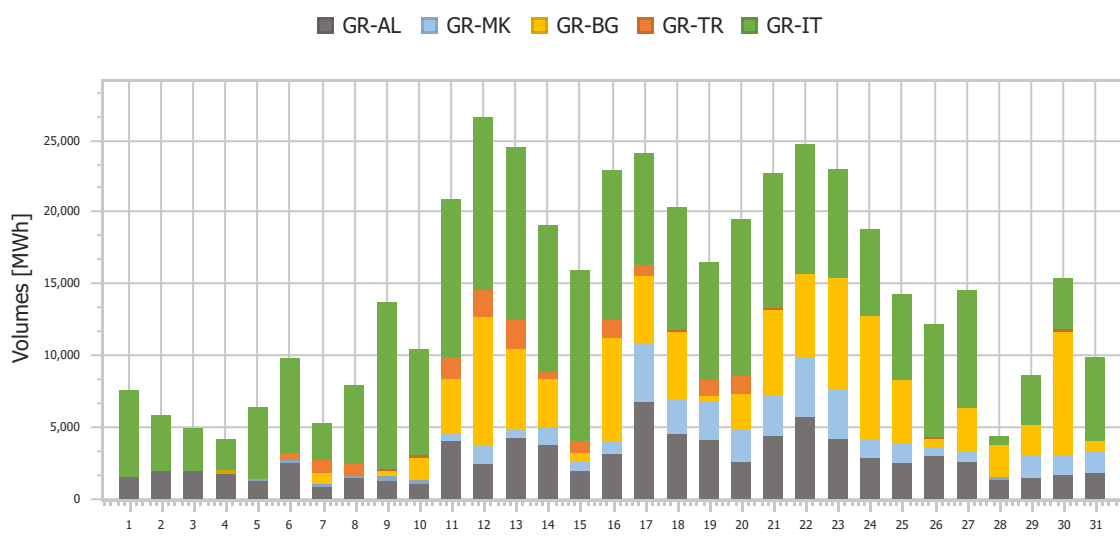
Ref No	Graph 1.8
Title	Market Clearing Price (MCP)
Scope	Day Ahead Market (DAM)
Analysis	Daily



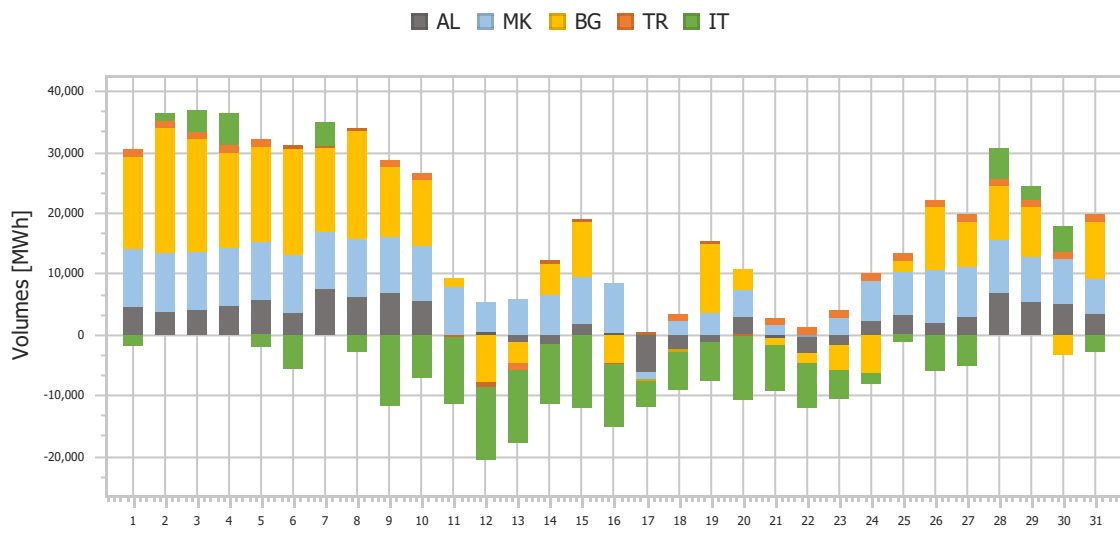
Ref No	Graph 1.9
Title	Imports per Border
Scope	Day Ahead Market (DAM)
Analysis	Daily



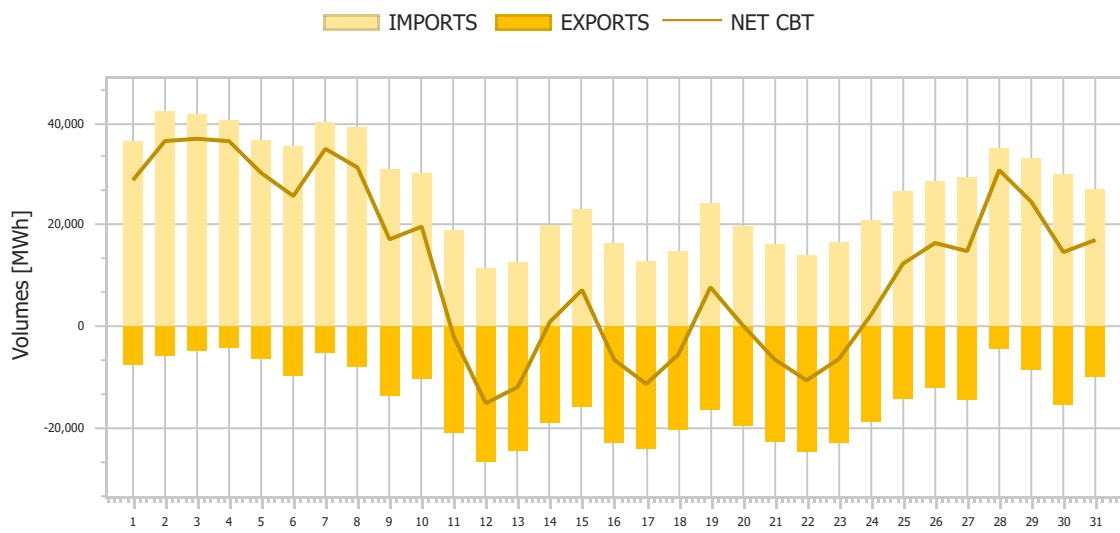
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Title	Exports per Border
Scope	Day Ahead Market (DAM)
Analysis	Daily



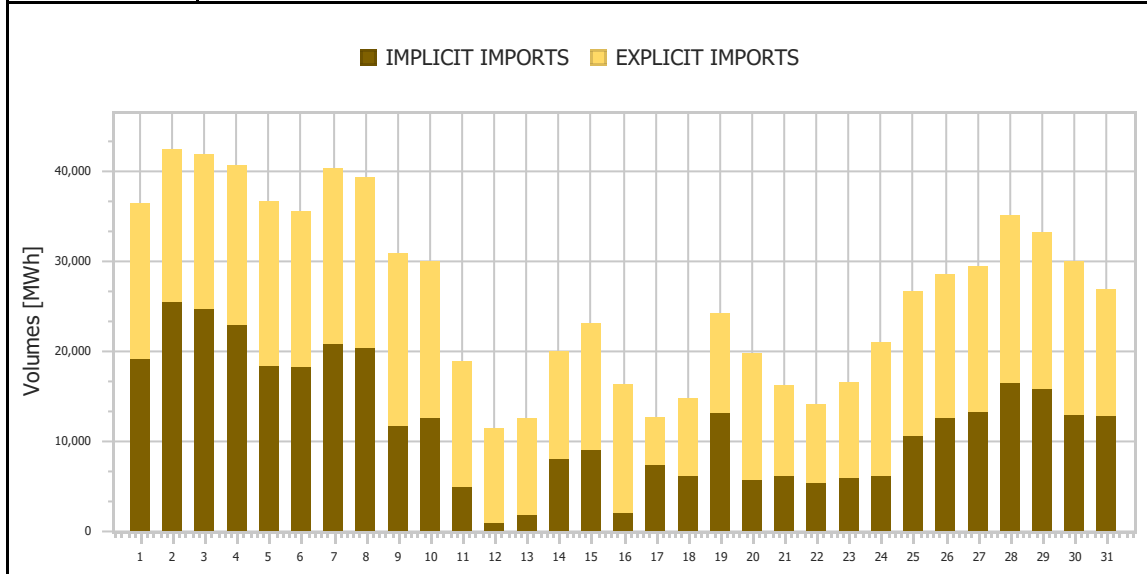
Ref No	Graph 1.11
Title	Net Imports per Border
Scope	Day Ahead Market (DAM)
Analysis	Daily



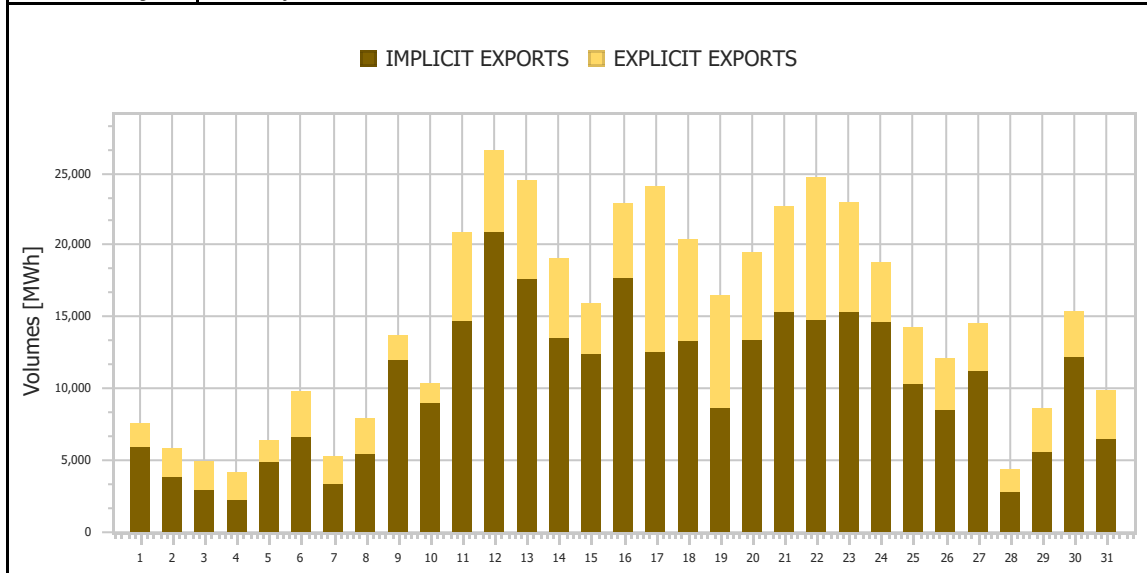
Ref No	Graph 1.12
Title	Total Imports & Exports
Scope	Day Ahead Market (DAM)
Analysis	Daily



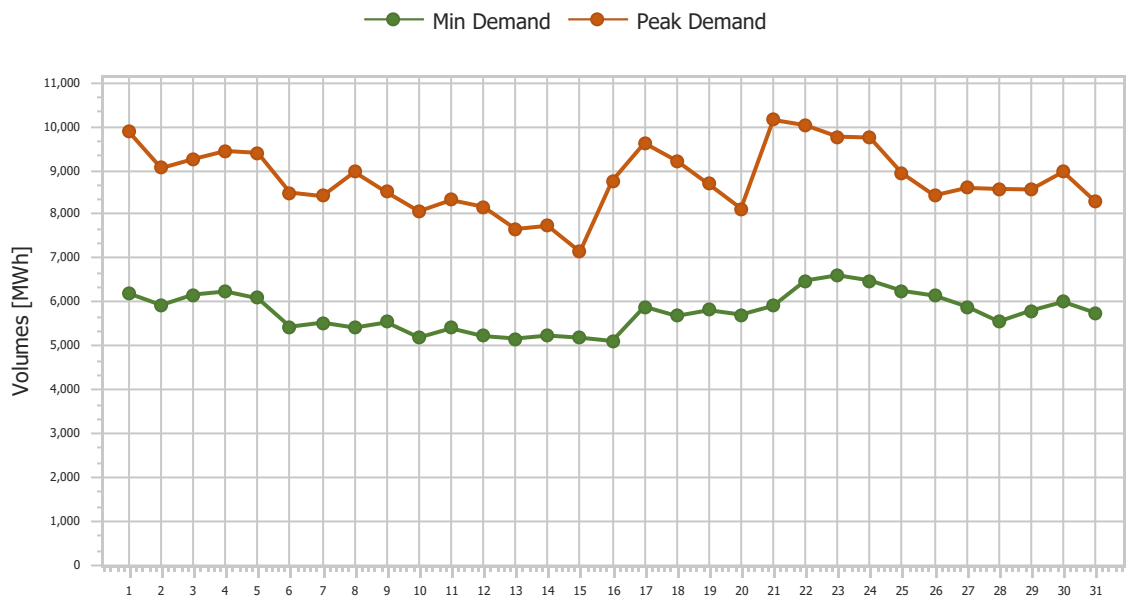
Ref No	Graph 1.13
Title	Imports (Implicit/Explicit)
Scope	Day Ahead Market (DAM)
Analysis	Daily



Ref No	Graph 1.14
Title	Exports (Implicit/Explicit)
Scope	Day Ahead Market (DAM)
Analysis	Monthly

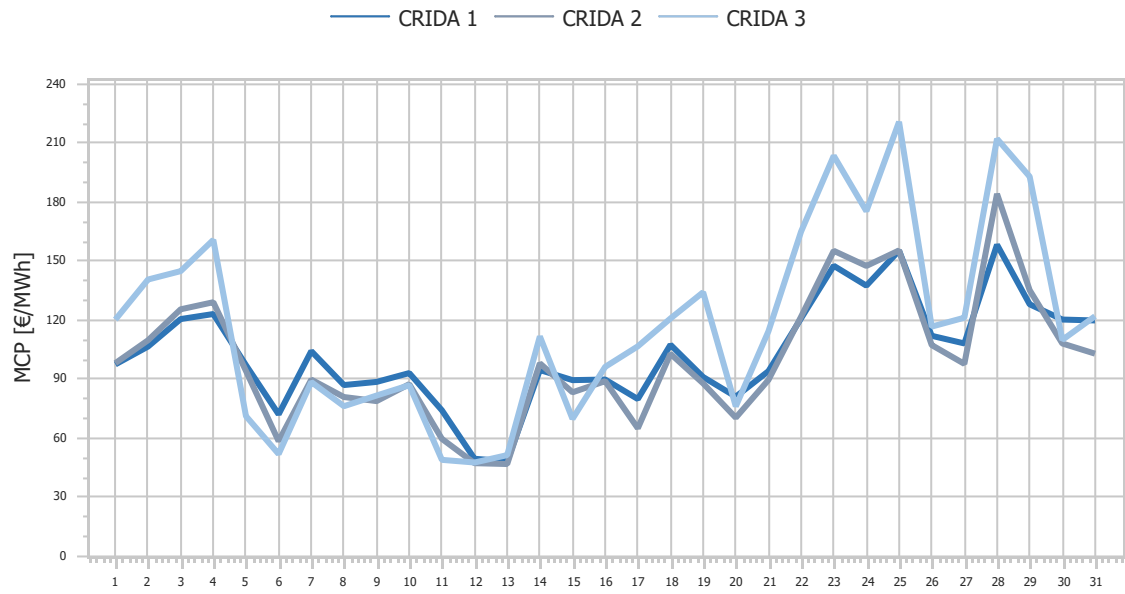


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Title	Min & Peak Demand
Scope	Day Ahead Market (DAM)
Analysis	Daily

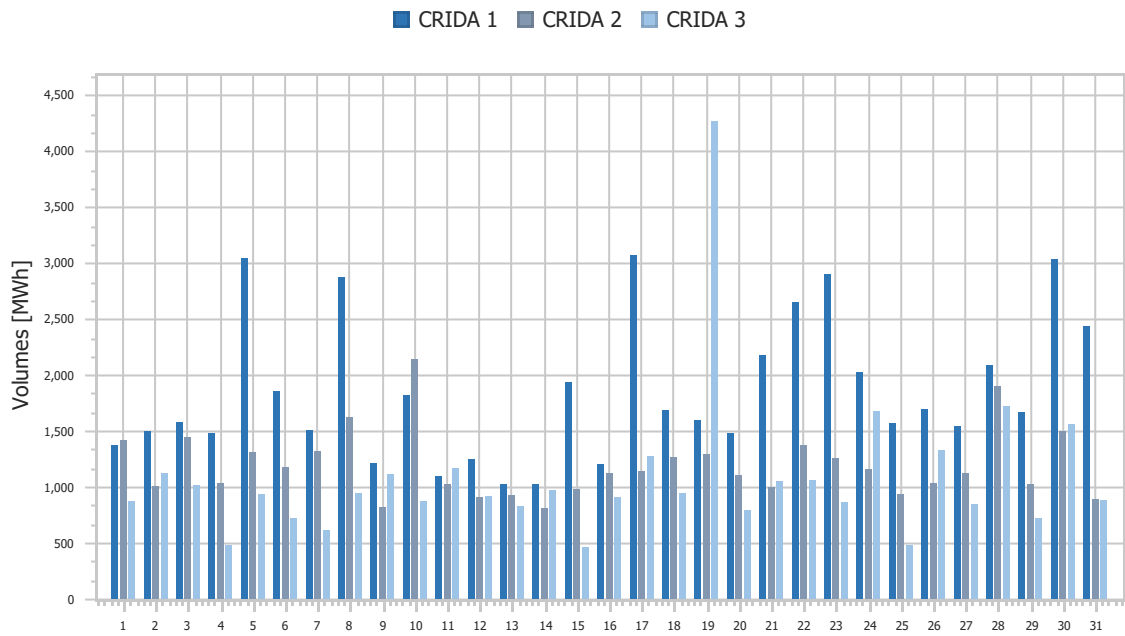


2. Intra-Day Market (IDM)

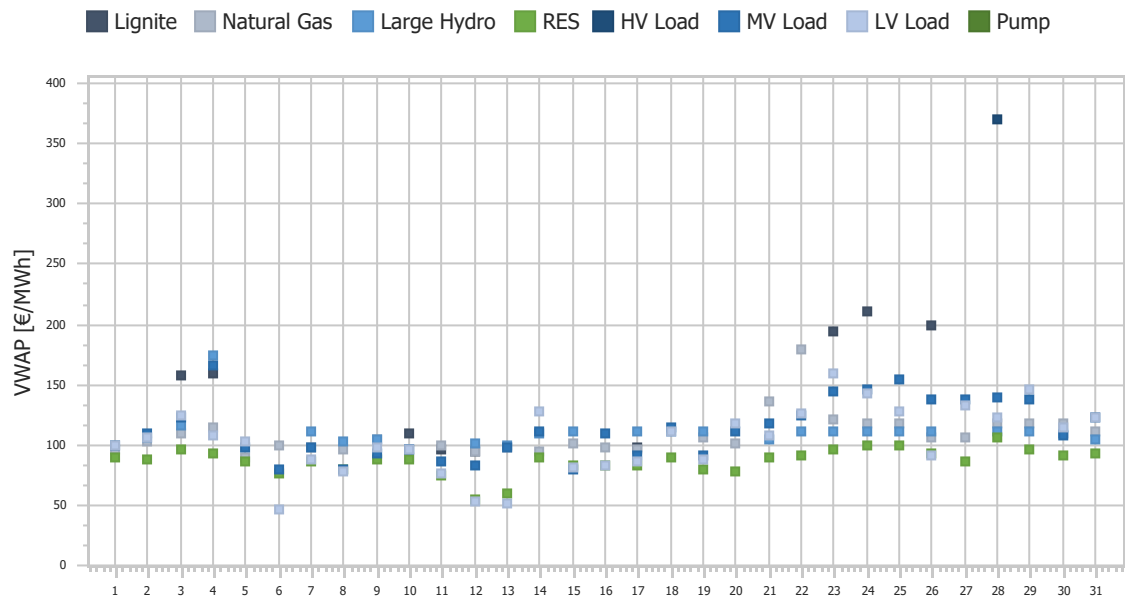
Ref No	Graph 2.1
Title	Market Clearing Price (MCP)
Scope	Complementary Regional Intraday Auctions
Analysis	Daily



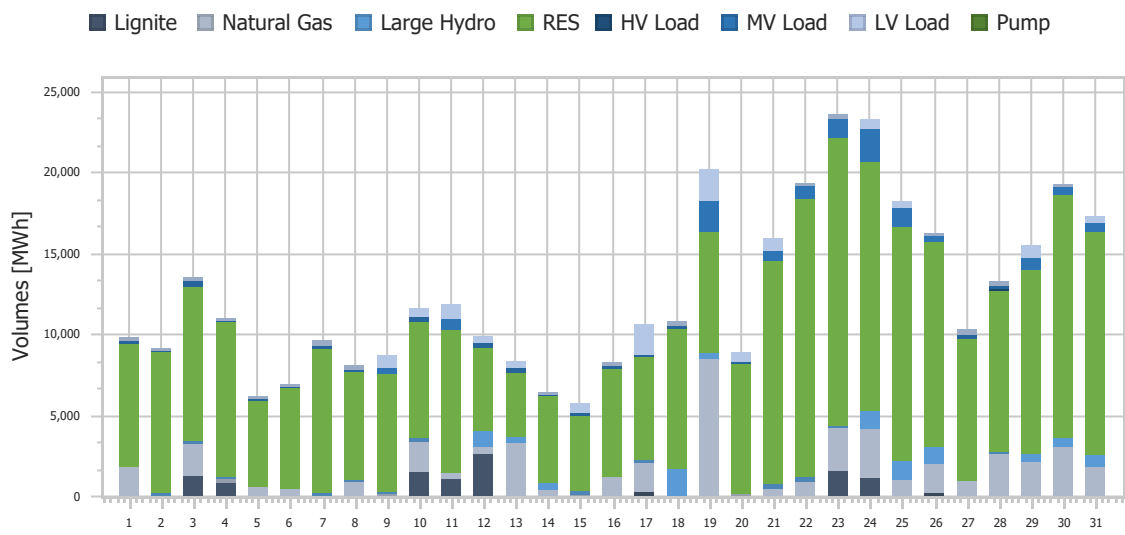
Ref No	Graph 2.2
Title	Transactions Volume
Scope	Complementary Regional Intraday Auctions
Analysis	Daily



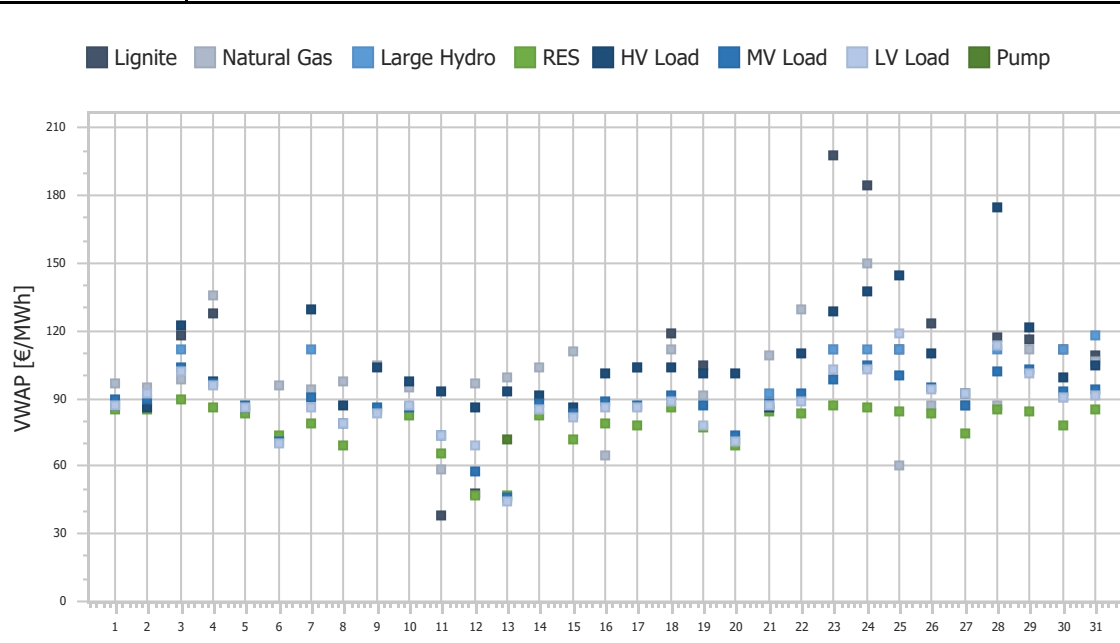
Ref No	Graph 2.3.1
Title	Volume-Weighted Average Price (VWAP) - SELL Side
Scope	Continuous Intra-Day Trading (XBID) - excl. CBT
Analysis	Daily



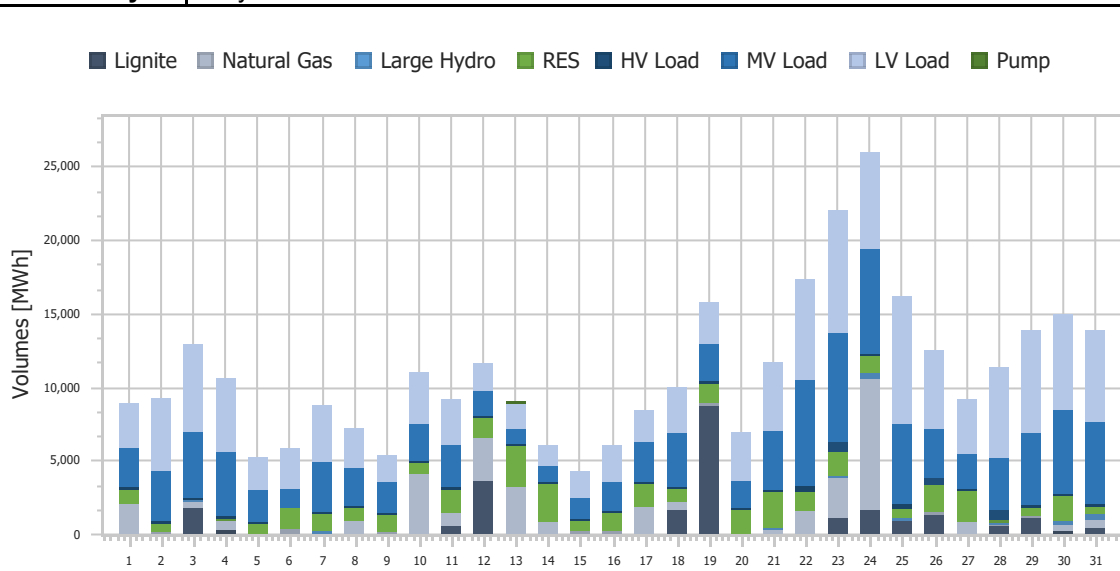
Ref No	Graph 2.3.2
Title	Transactions Volume - SELL Side
Scope	Continuous Intra-Day Trading (XBID) - excl. CBT
Analysis	Daily



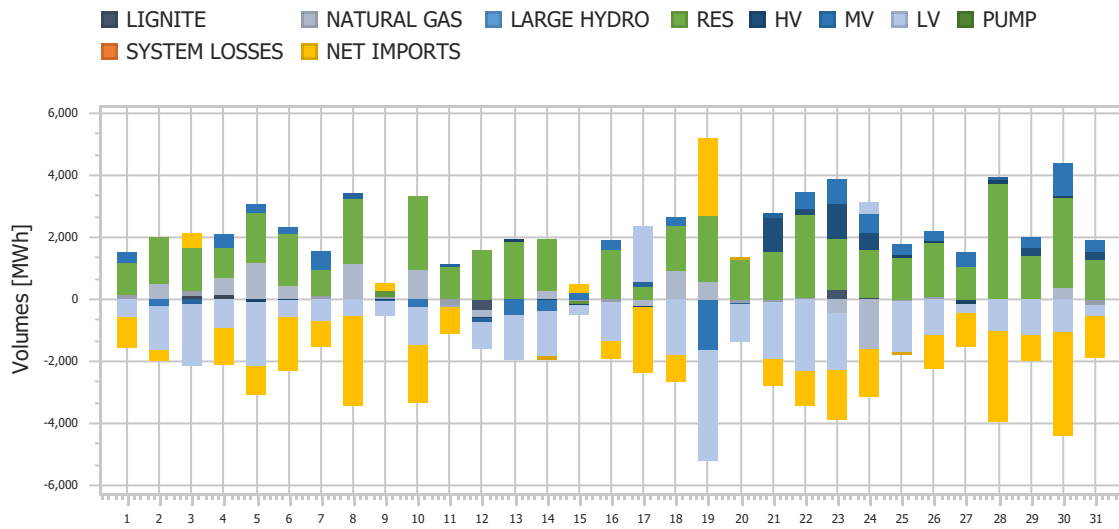
Ref No	Graph 2.3.3
Title	Volume-Weighted Average Price (VWAP) - BUY Side
Scope	Continuous Intra-Day Trading (XBID) - excl. CBT
Analysis	Daily



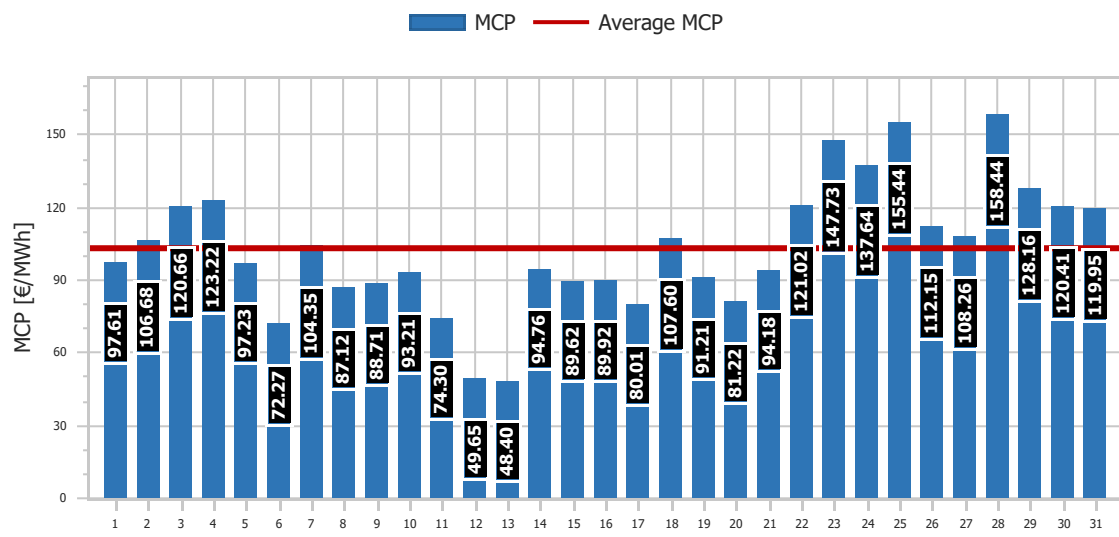
Ref No	Graph 2.3.4
Title	Transactions Volume - BUY Side
Scope	Continuous Intra-Day Trading (XBID) - excl. CBT
Analysis	Daily



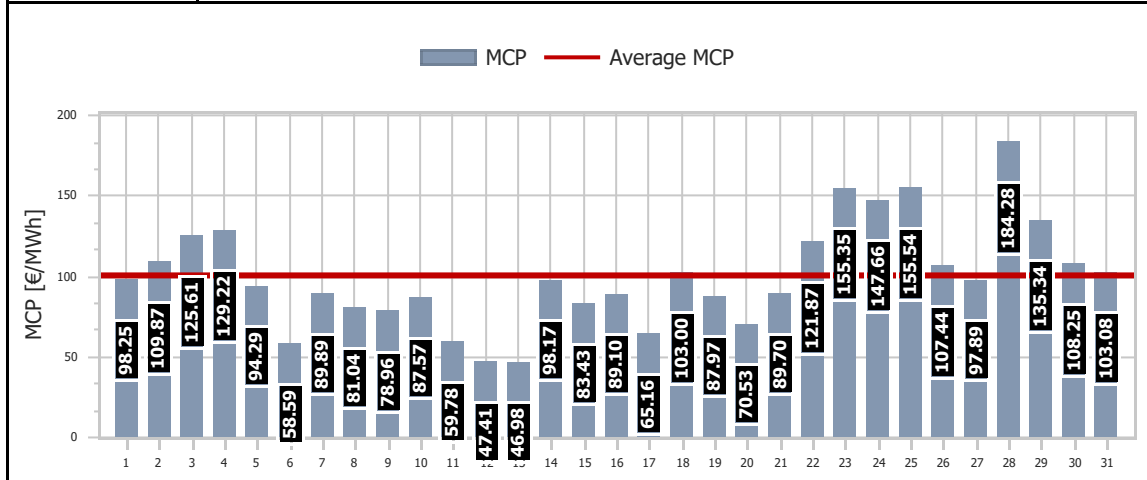
Ref No	Graph 2.4
Title	Energy Mix changes
Scope	Complementary Regional Intraday Auctions
Analysis	Daily



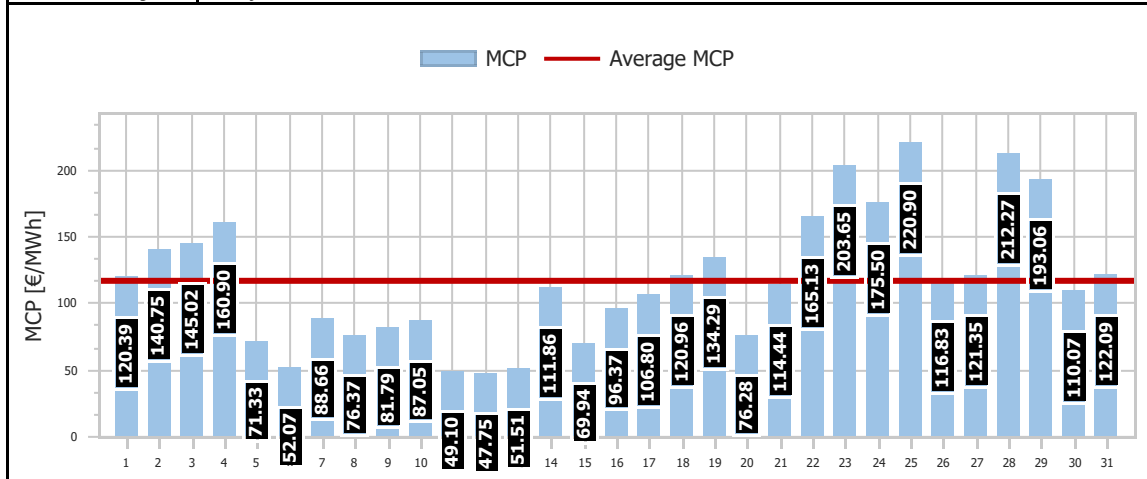
Ref No	Graph 2.5.1
Title	CRIDA1 - Market Clearing Price
Scope	Complementary Regional Intraday Auctions
Analysis	Daily



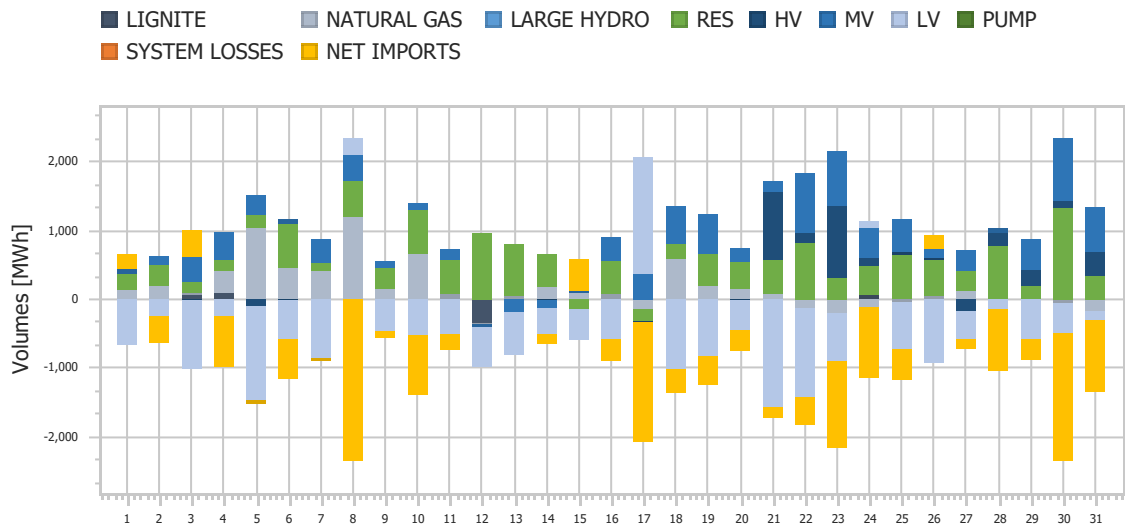
Ref No	Graph 2.5.2
Title	CRIDA2 - Market Clearing Price
Scope	Complementary Regional Intraday Auctions
Analysis	Daily



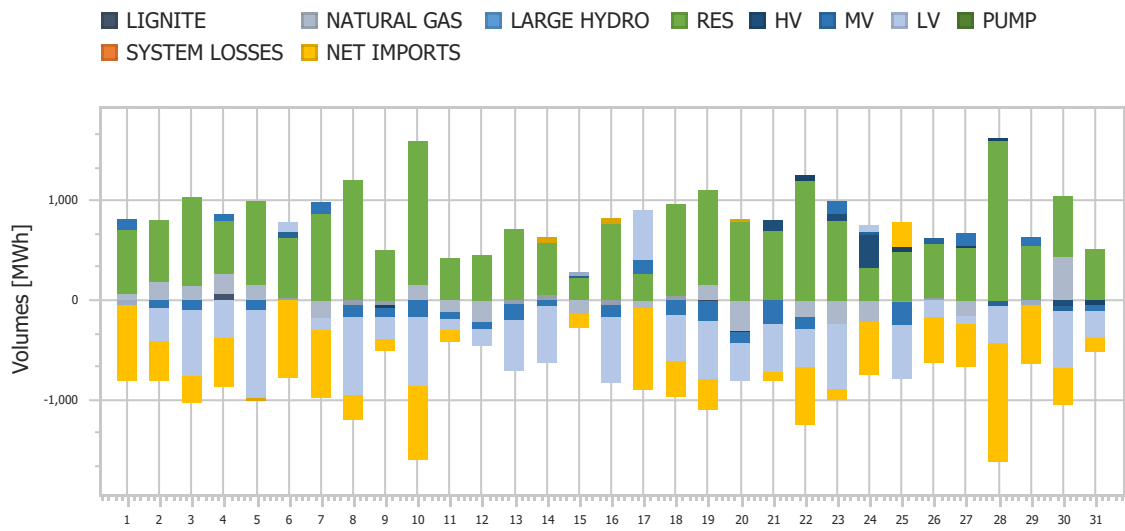
Ref No	Graph 2.5.3
Title	CRIDA3 - Market Clearing Price
Scope	Complementary Regional Intraday Auctions
Analysis	Daily



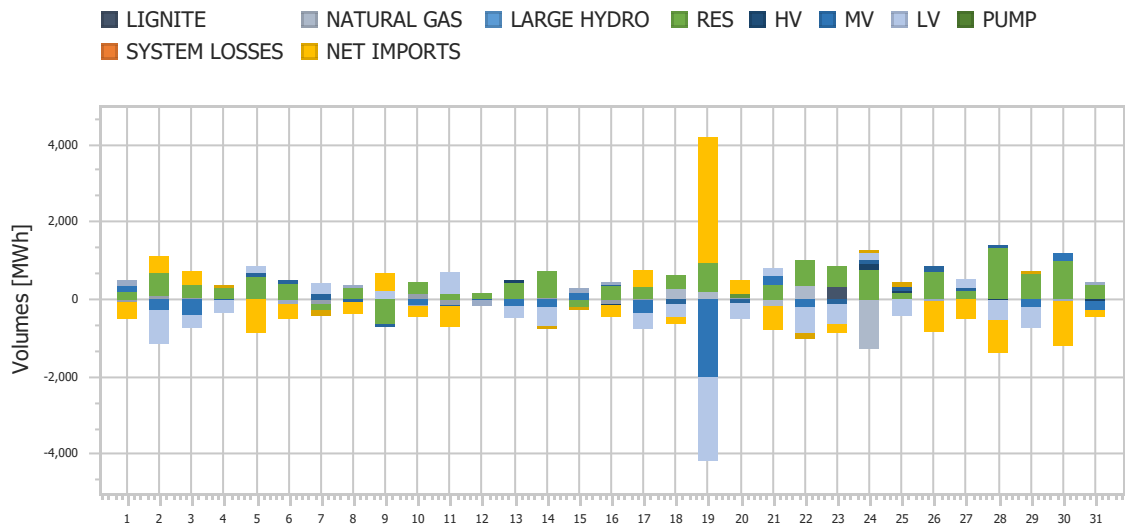
Ref No	Graph 2.6.1
Title	CRIDA1 - Energy Mix Changes
Scope	Complementary Regional Intraday Auctions
Analysis	Daily



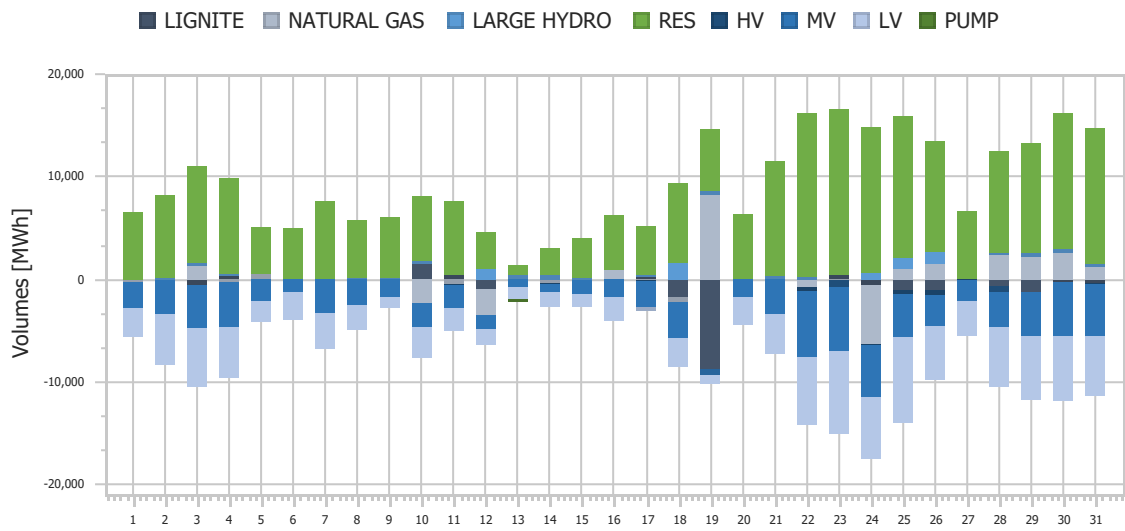
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Title	CRIDA2 - Energy Mix Changes
Scope	Complementary Regional Intraday Auctions
Analysis	Daily



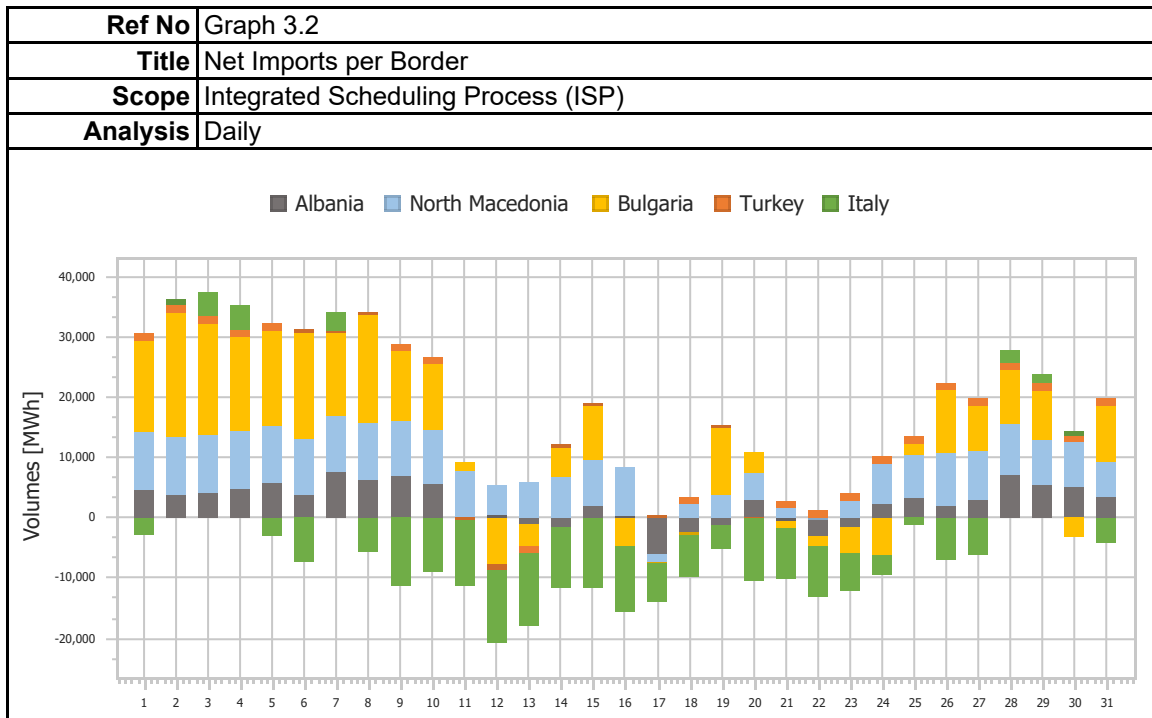
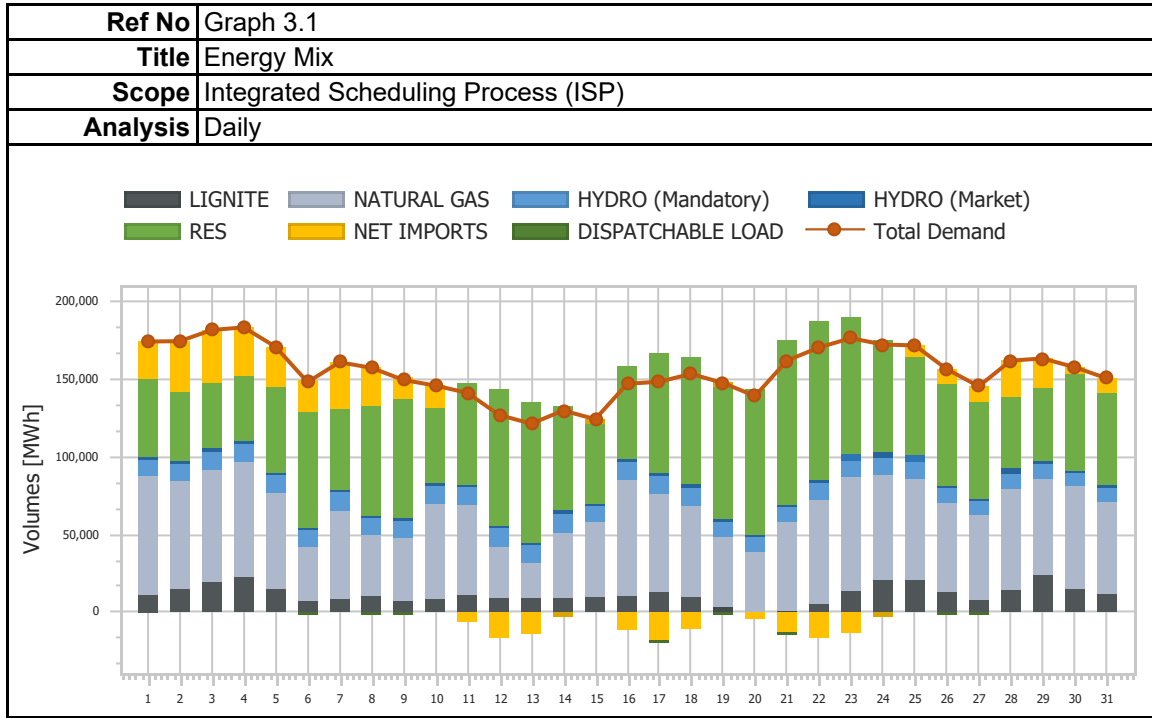
Ref No	Graph 2.6.3
Title	CRIDA3 - Energy Mix Changes
Scope	Complementary Regional Intraday Auctions
Analysis	Daily



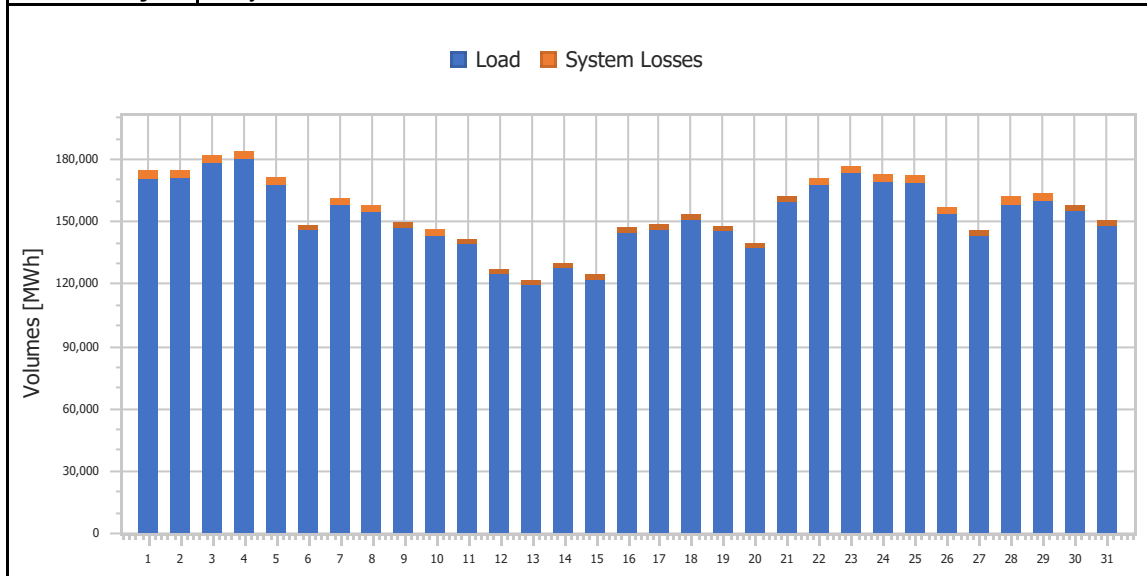
Ref No	Graph 2.7
Title	XBID - Energy Mix Changes
Scope	Continuous Intra-Day Trading (XBID) - excl. CBT
Analysis	Daily



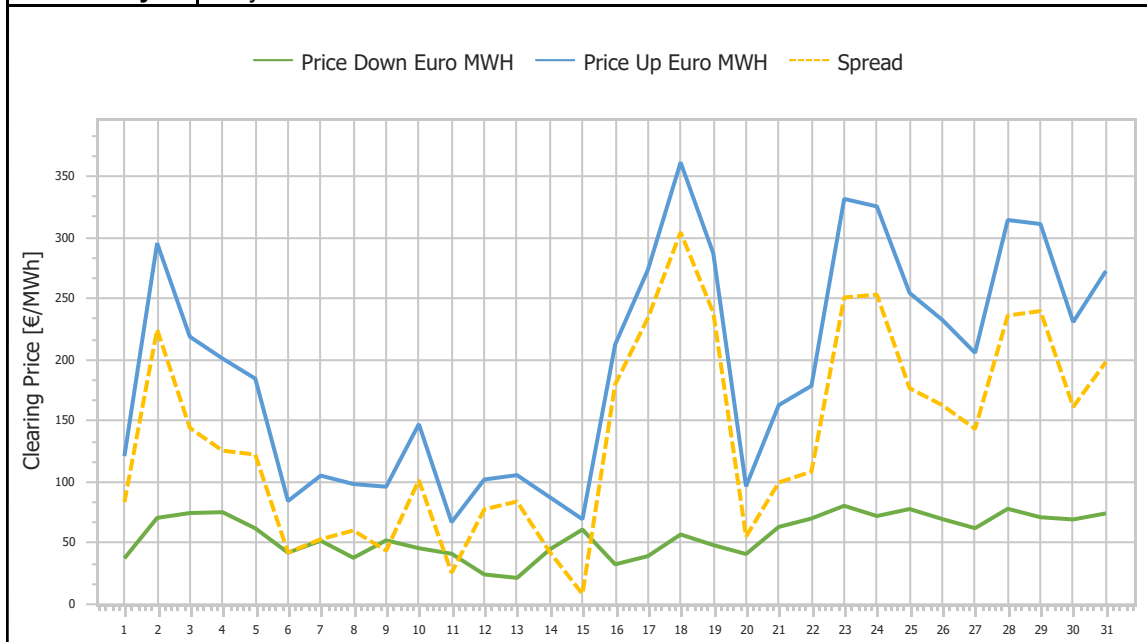
3. Integrated Scheduling Process (ISP)



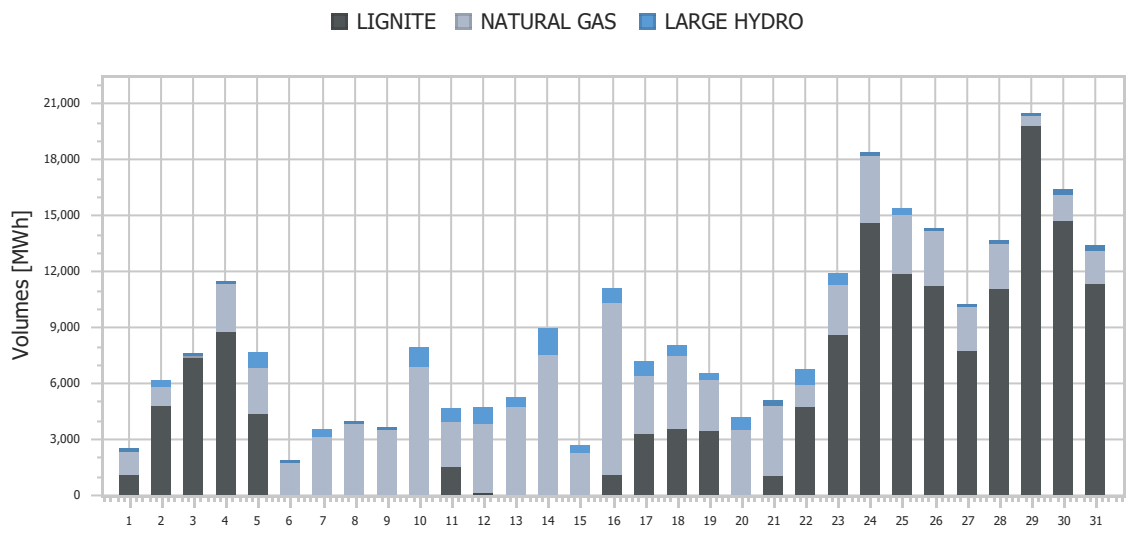
Ref No	Graph 3.3
Title	Demand & System Losses
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



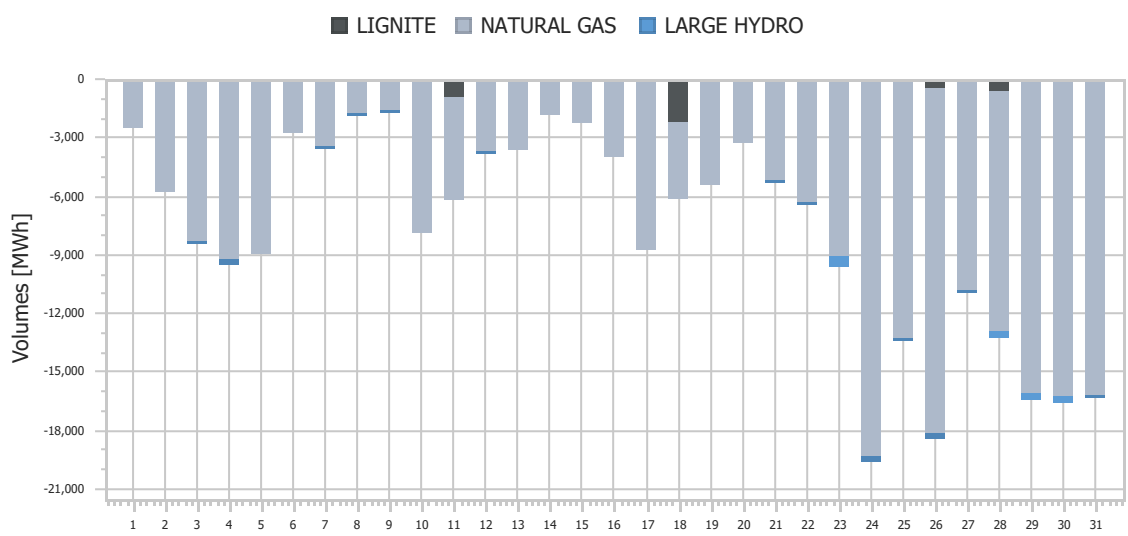
Ref No	Graph 3.4
Title	Clearing Prices
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



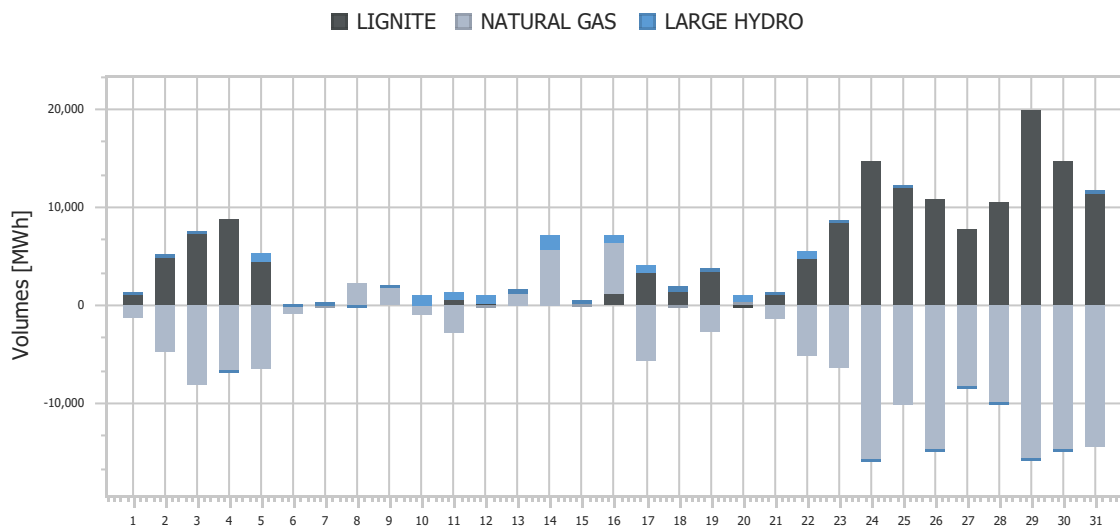
Ref No	Graph 3.5
Title	Upward Activated Balancing energy
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



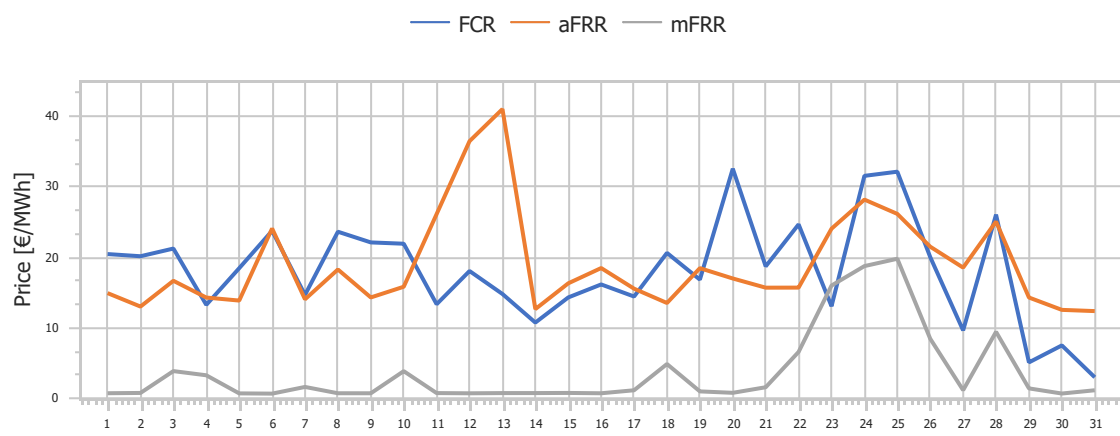
Ref No	Graph 3.6
Title	Downward Activated Balancing energy
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



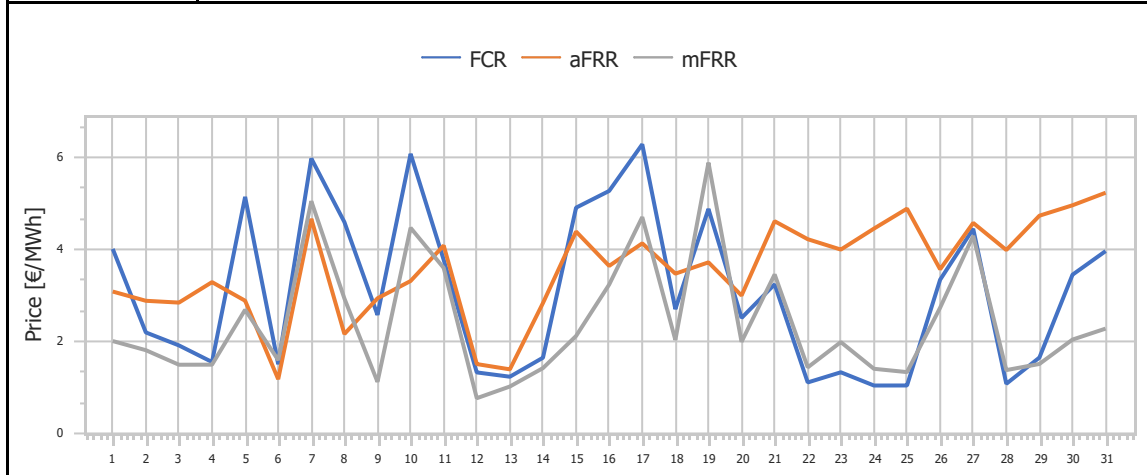
Ref No	Graph 3.7
Title	Net Activated Balancing energy
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



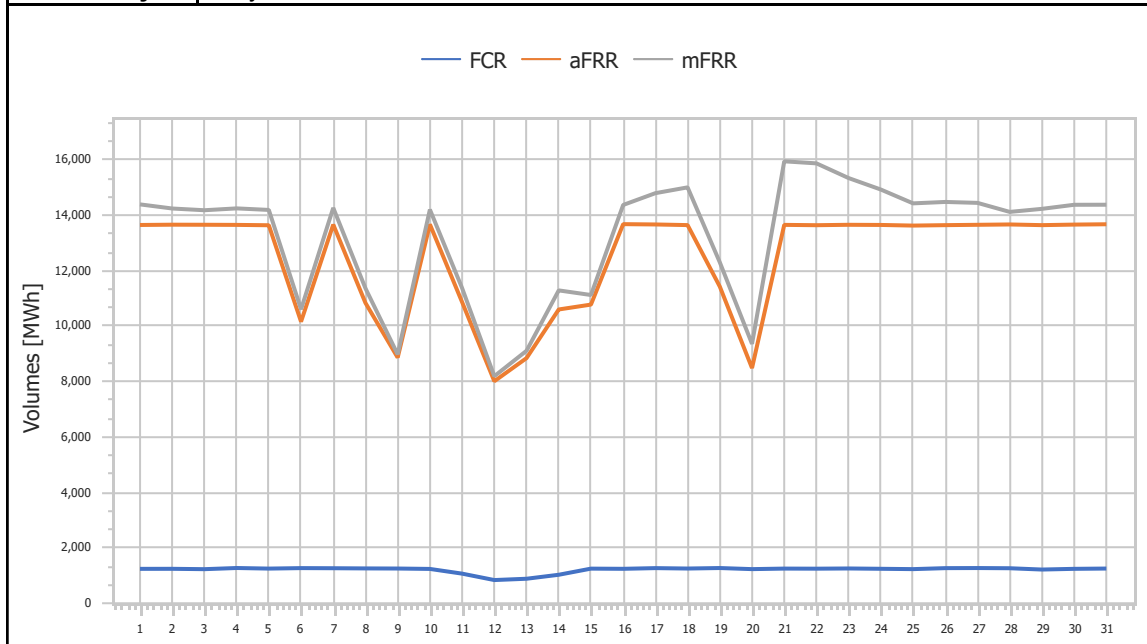
Ref No	Graph 3.8
Title	Upward Capacity Reserves Prices
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



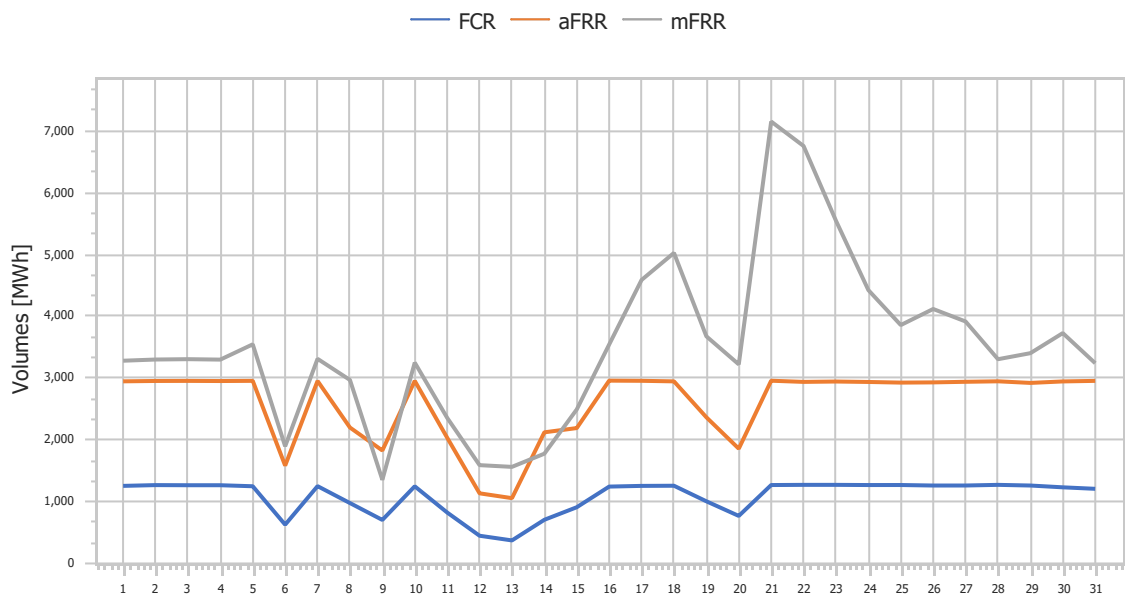
Ref No	Graph 3.9
Title	Downward Capacity Reserves Prices
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



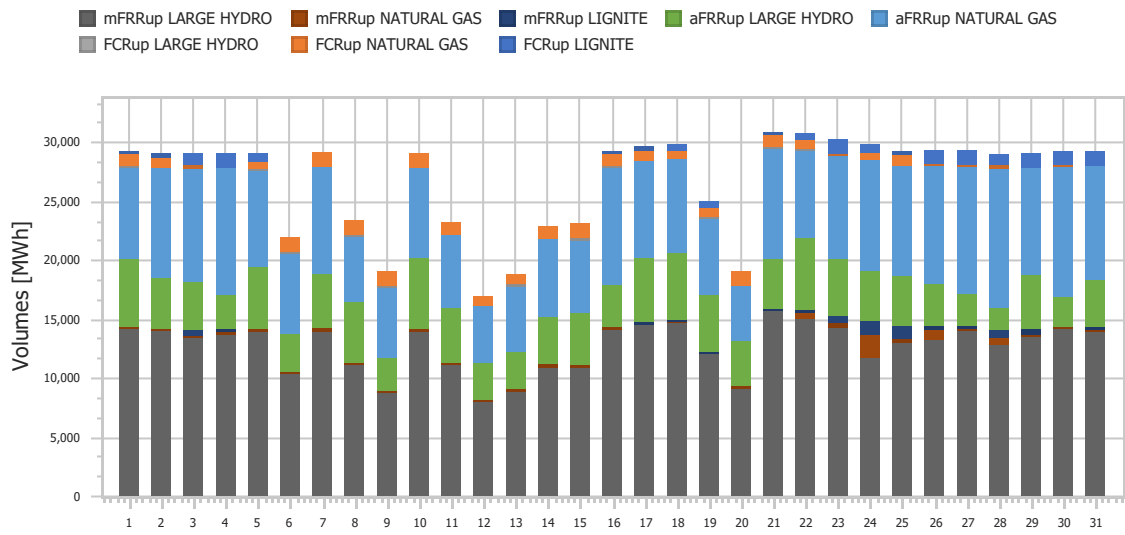
Ref No	Graph 3.10
Title	Upward Capacity Reserves Volumes
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily

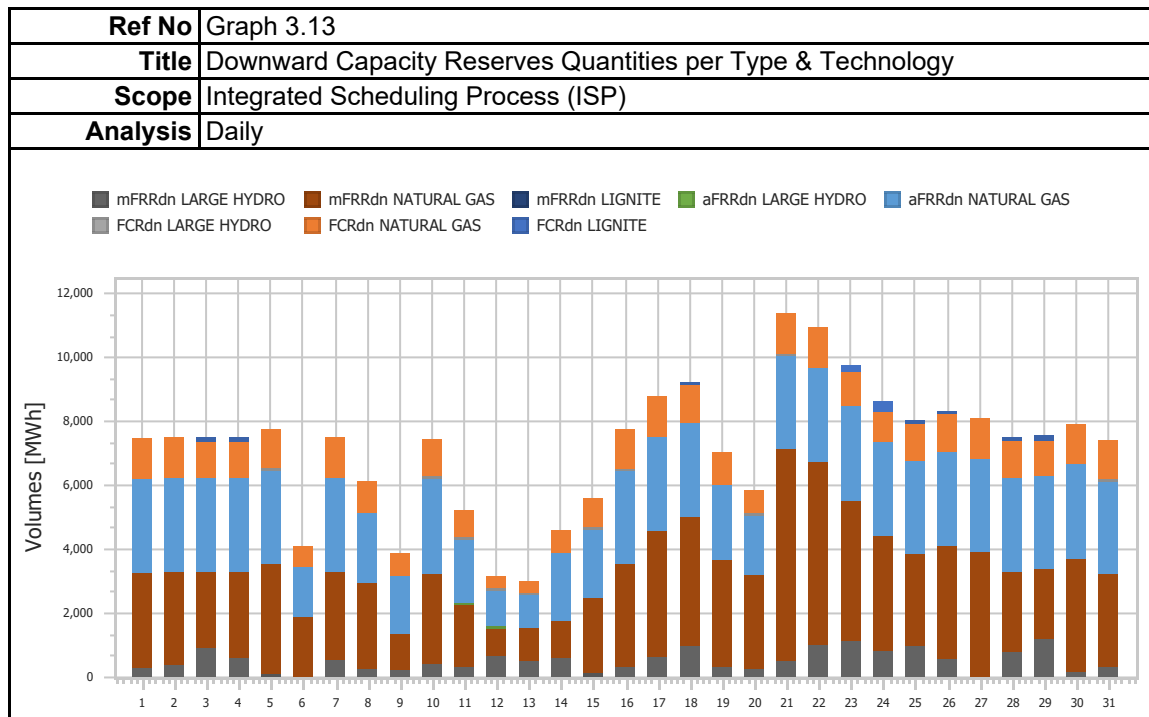


Ref No	Graph 3.11
Title	Downward Capacity Reserves Volumes
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily

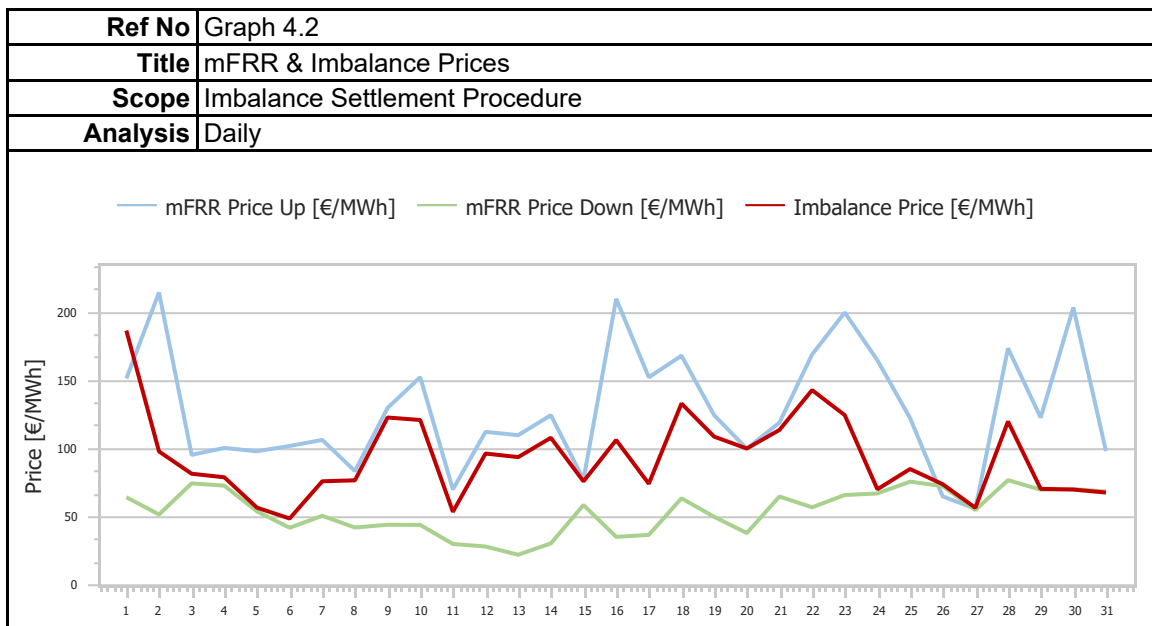
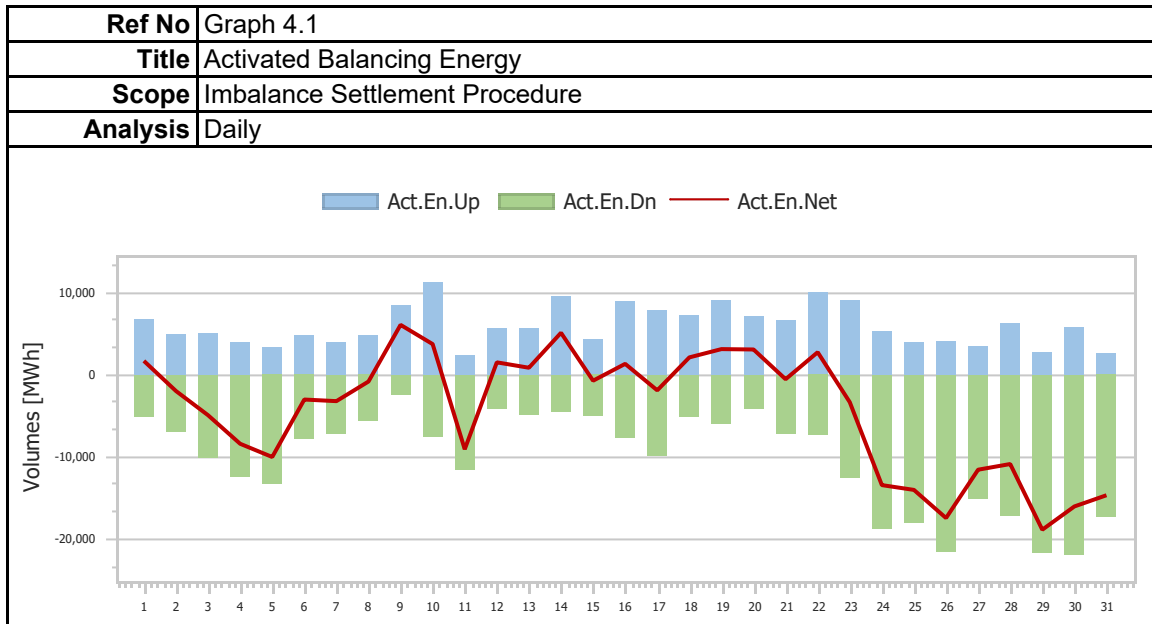


Ref No	Graph 3.12
Title	Upward Capacity Reserves Volumes per Technology
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily

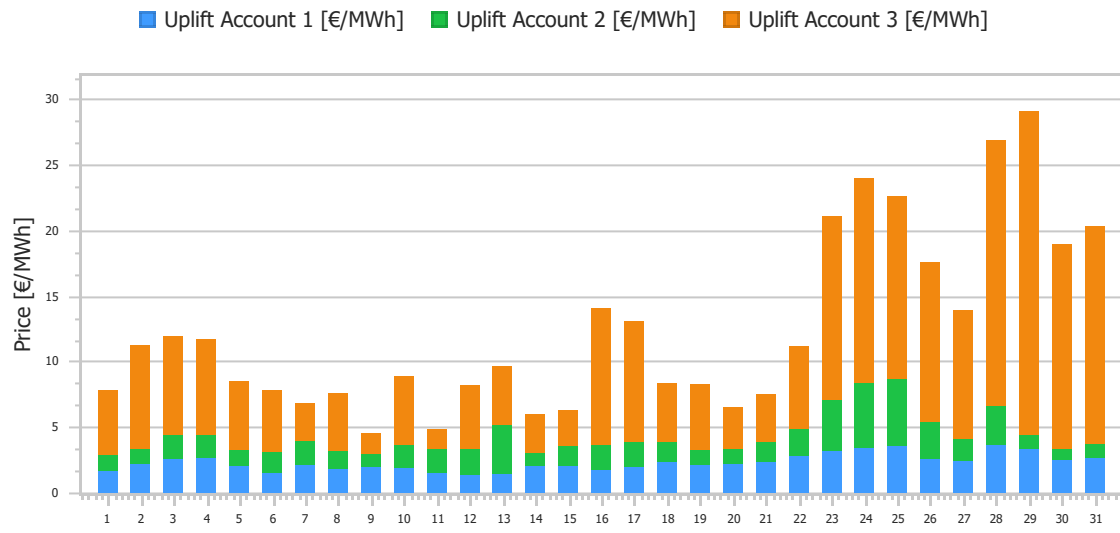




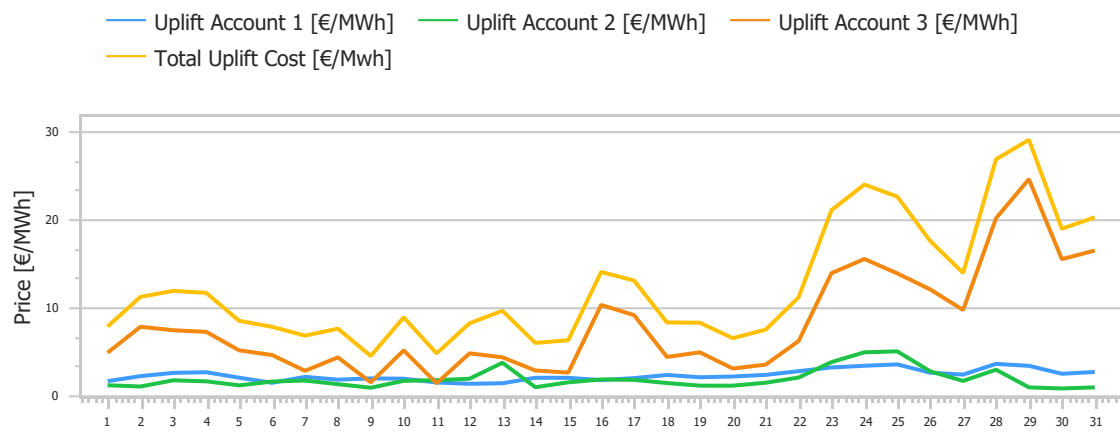
4. Imbalance Settlement Procedure



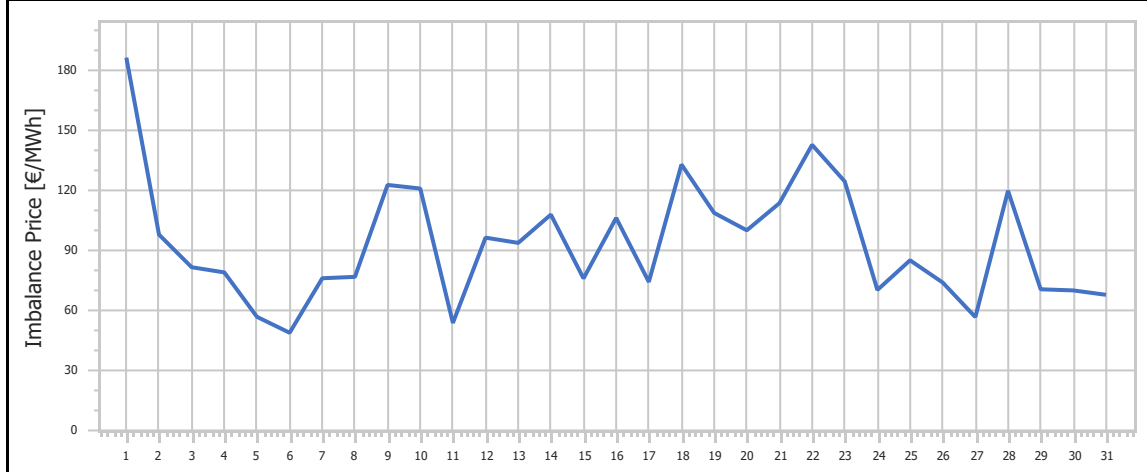
Ref No	Graph 4.3
Title	Uplift Accounts Cost
Scope	Imbalance Settlement Procedure
Analysis	Daily



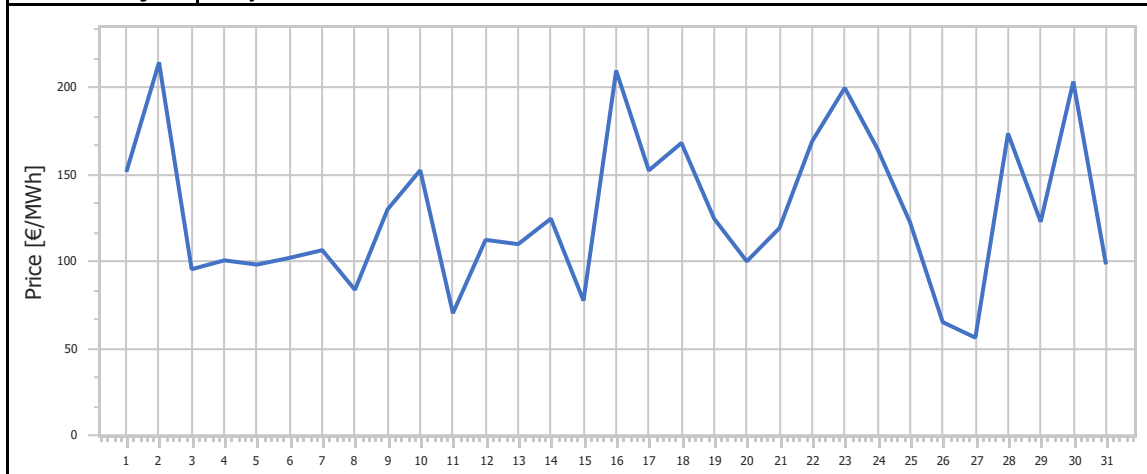
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Title	Uplift Accounts Cost
Scope	Imbalance Settlement Procedure
Analysis	Daily



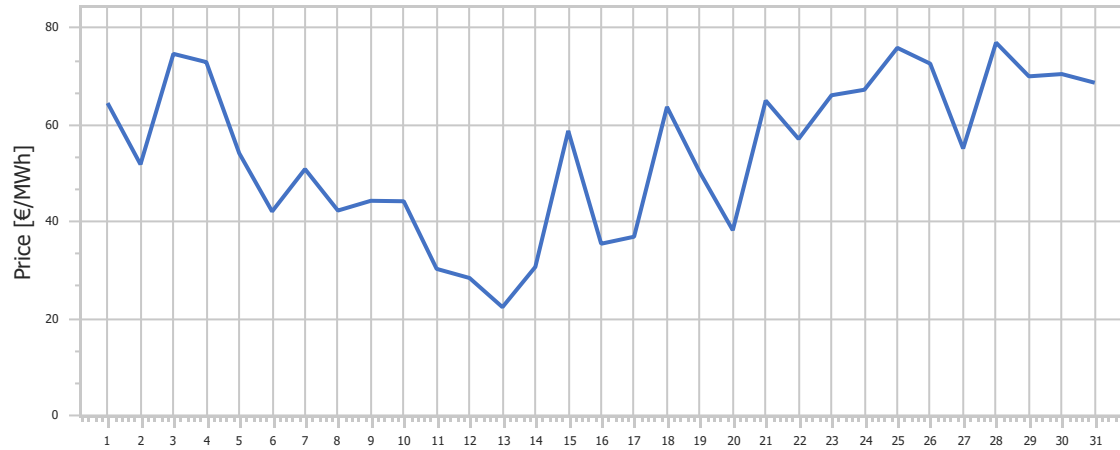
Ref No	Graph 4.5
Title	Imbalance Price
Scope	Imbalance Settlement Procedure
Analysis	Daily



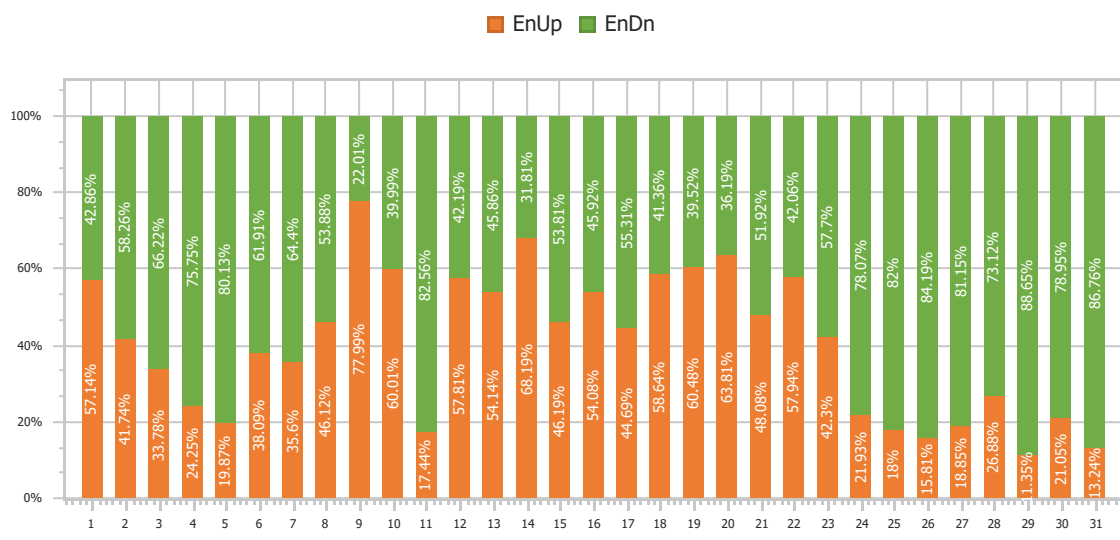
Ref No	Graph 4.6
Title	mFRR Up Price
Scope	Imbalance Settlement Procedure
Analysis	Daily



Ref No	Graph 4.7
Title	mFRR Down Price
Scope	Imbalance Settlement Procedure
Analysis	Daily

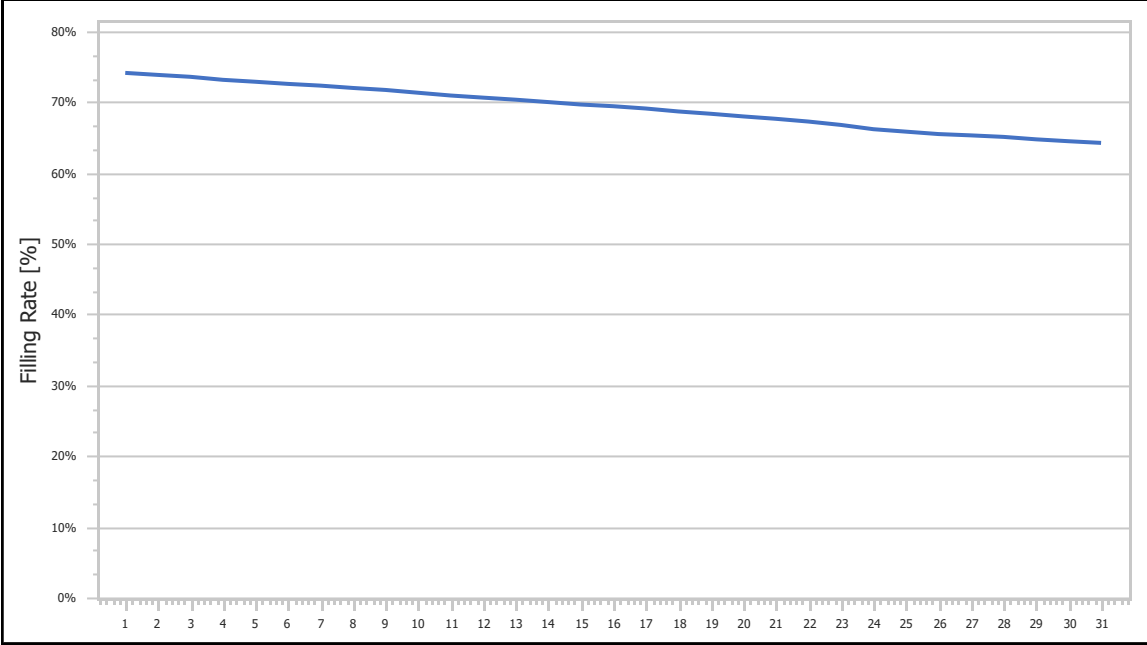


Ref No	Graph 4.8
Title	Balancing Energy Activation Direction
Scope	Imbalance Settlement Procedure
Analysis	Daily

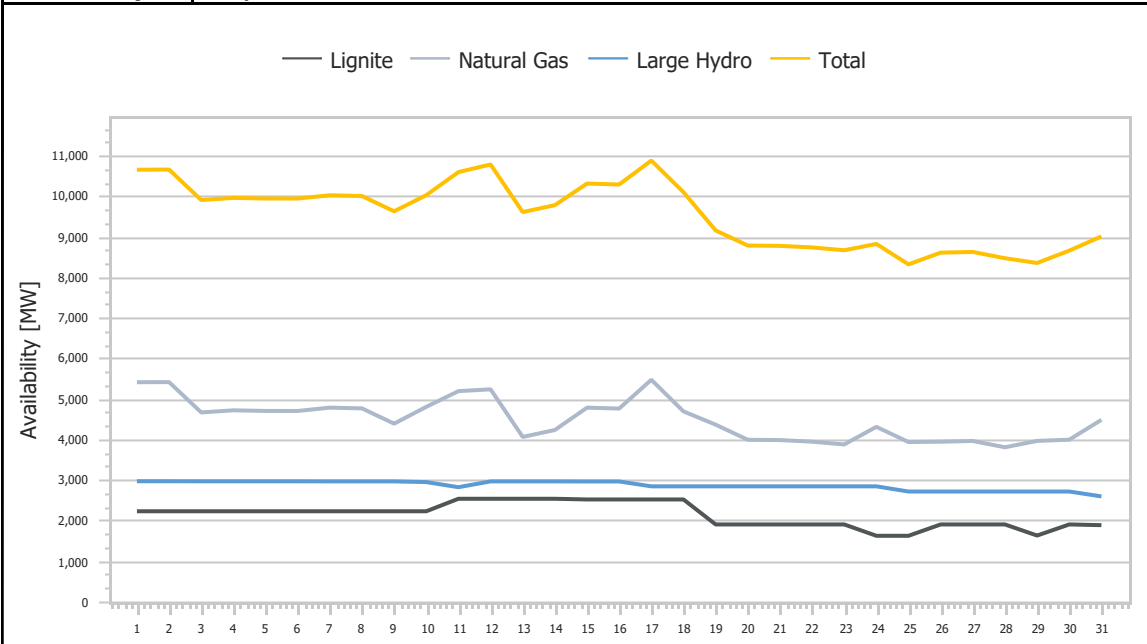


5. General Market Data

Ref No	Graph 5.1
Title	Reservoir Filling Rate
Scope	General Market Data
Analysis	Daily



Ref No	Graph 5.2
Title	Availability of Dispatchable Units per Type
Scope	General Market Data
Analysis	Daily



1. Statistics

Ref No	Table 1.1
Title	Market Shares per Aggregated Classification - SELL
Scope	Day Ahead Market (DAM)
Analysis	Monthly

Classification	Quantity [MWh]	Share [%]	Value [EUR]	Share [%]
Lignite	225,304.000	4.08%	25,263,930.78€	4.13%
Crete Conventional	211,110.000	3.83%	24,383,593.30€	3.99%
Natural Gas	1,889,187.587	34.24%	227,596,353.03€	37.24%
Large Hydro	376,198.851	6.82%	52,647,628.96€	8.61%
RES	1,926,531.993	34.92%	181,204,357.04€	29.65%
Crete Renewables	63,615.000	1.15%	6,156,755.68€	1.01%
Imports	824,872.573	14.95%	93,888,775.00€	15.36%
Total	5,516,820.004	100.00%	611,141,393.79€	100.00%

Ref No	Table 1.2
Title	Statistics per Aggregated Classification - SELL
Scope	Day Ahead Market (DAM)
Analysis	Monthly

	MCP [€/MWh]	Total [MWh]	Lignite [MWh]	CR Conv [MWh]	Natural Gas [MWh]	Hydro [MWh]	RES [MWh]	CR RES [MWh]	Imports [MWh]
Total	-	5,516,820.00	225,304.00	211,110.00	1,889,187.59	376,198.85	1,926,531.99	63,615.00	824,872.57
Average	109.33	177,961.94	7,510.13	6,810.00	60,941.54	12,135.45	62,146.19	2,052.10	26,608.79
Min	53.30	151,041.68	151.00	4,810.00	21,091.76	9,848.00	35,431.76	930.00	11,428.80
Min day	13/08/2023	15/08/2023	20/08/2023	13/08/2023	13/08/2023	30/08/2023	04/08/2023	03/08/2023	12/08/2023
Max	164.45	199,743.29	13,376.00	8,956.00	87,310.07	14,551.40	96,882.08	4,220.00	42,371.50
Max day	24/08/2023	23/08/2023	04/08/2023	04/08/2023	24/08/2023	23/08/2023	21/08/2023	09/08/2023	02/08/2023
Spread	111.15	48,701.60	13,225.00	4,146.00	66,218.31	4,703.40	61,450.32	3,290.00	30,942.70
Standard Deviation	27.69	12,343.90	3,747.89	1,180.20	17,484.64	1,277.17	18,152.90	841.50	9,673.81

Ref No	Table 1.3
Title	Market Shares per Aggregated Classification - BUY
Scope	Day Ahead Market (DAM)
Analysis	Monthly

Classification	Quantity [MWh]	Share [%]	Value [EUR]	Share [%]
System Losses	90,508.000	1.64%	10,764,273.78€	1.76%
Crete Load	377,332.000	6.84%	41,928,175.02€	6.86%
HV Load	563,741.492	10.22%	61,397,394.82€	10.05%
MV Load	1,001,288.058	18.15%	111,336,077.51€	18.22%
LV Load	3,028,820.003	54.90%	339,742,642.21€	55.59%
PUMP	-	0.00%	- €	0.00%
Exports	455,130.979	8.25%	45,972,846.21€	7.52%
Total	5,516,820.532	100.00%	611,141,409.55€	100.00%

Ref No	Table 1.4
Title	Statistics per Aggregated Classification - BUY
Scope	Day Ahead Market (DAM)
Analysis	Monthly

	MCP [€/MWh]	Total [MWh]	Sys Losses [MWh]	CR Load [MWh]	HV [MWh]	MV [MWh]	LV [MWh]	Exports [MWh]
Total	-	5,516,820.53	90,508.00	377,332.00	563,741.49	1,001,288.06	3,028,820.00	455,130.98
Average	109.33	177,961.95	2,919.61	12,172.00	18,185.21	32,299.61	97,703.87	14,681.64
Min	53.30	151,041.80	2,060.00	10,037.00	16,907.03	22,816.01	78,967.76	4,157.30
Min day	13/08/2023	15/08/2023	12/08/2023	13/08/2023	15/08/2023	15/08/2023	13/08/2023	04/08/2023
Max	164.45	199,743.23	4,095.00	13,535.00	20,263.10	39,268.20	116,253.08	26,597.70
Max day	24/08/2023	23/08/2023	01/08/2023	04/08/2023	29/08/2023	01/08/2023	04/08/2023	12/08/2023
Spread	111.15	48,701.44	2,035.00	3,498.00	3,356.07	16,452.18	37,285.32	22,440.40
Standard Deviation	27.69	12,343.89	576.63	893.84	1,026.89	4,492.19	9,795.98	6,990.21

2. Market Shares

Ref No	Table 2.1.1			
Title	Market Shares - Upward Capacity Reserves Volumes per Type			
Scope	Balancing Market (BM)			
Analysis	Monthly			
Type	Quantity [MW]	Share [%]	Value [EUR]	Share [%]
aFRR	1,498,302.200	66.66%	6,205,083.38€	68.09%
FCR	127,782.770	5.68%	829,116.09€	9.10%
mFRR	621,638.830	27.66%	2,078,668.19€	22.81%
Total	2,247,723.810	100.00%	9,112,867.67€	100.00%

Ref No	Table 2.1.2			
Title	Market Shares - Downward Capacity Reserves per Type			
Scope	Balancing Market(BM)			
Analysis	Monthly			
Type	Quantity [MW]	Share [%]	Value [EUR]	Share [%]
aFRR	315,299.740	45.18%	337,520.01€	44.15%
FCR	86,018.790	12.33%	136,477.26€	17.85%
mFRR	296,503.170	42.49%	290,497.81€	38.00%
Total	697,821.700	100.00%	764,495.07€	100.00%

Ref No	Table 2.1.3			
Title	Market Shares - Upward Activated Balancing Energy per Type			
Scope	Balancing Market (BM)			
Analysis	Monthly			
Type	Quantity [MWh]	Share [%]	Value [EUR]	Share [%]
aFRR	43,761.870	23.91%	7,606,780.03€	23.70%
mFRR	139,296.610	76.09%	24,485,100.18€	76.30%
Total	183,058.480	100.00%	32,091,880.21€	100.00%

Ref No	Table 2.1.4			
Title	Market Shares - Downward Activated Balancing Energy per Type			
Scope	Balancing Market (BM)			
Analysis	Monthly			
Type	Quantity [MWh]	Share [%]	Value [EUR]	Share [%]
aFRR	36,916.990	11.59%	1,799,020.28€	9.57%
mFRR	281,492.990	88.41%	16,997,075.76€	90.43%
Total	318,409.980	100.00%	18,796,096.04€	100.00%

3. Market Overview

Ref No	Table 3.1
Title	Total Transactions Quantity per Market
Scope	DAM, IDM, Balancing Energy Market - SELL Side
Analysis	Monthly

Market	Quantity [MWh]	Share [%]
DAM	5,516,820.00	93.52%
CRIDA1	57,679.86	0.98%
CRIDA2	37,296.90	0.63%
CRIDA3	33,656.47	0.57%
XBID*	388,889.60	6.59%
IDM (Total)	517,522.84	8.77%
Balancing Energy (Up)	183,058.48	3.10%
Balancing Energy (Dn)	318,409.98	5.40%
Balancing Energy (Total)	-135,351.50	-2.29%
Total	5,898,991.34	100.00%

* Excluding CBT

Ref No	Table 3.2
Title	Total Transactions Value per Market
Scope	DAM, IDM, Balancing Energy Market - SELL Side
Analysis	Monthly

Market	Value [EUR]	Share [%]
DAM	611,141,393.79€	89.25%
CRIDA1	6,091,413.83€	0.89%
CRIDA2	3,696,902.38€	0.54%
CRIDA3	4,047,807.86€	0.59%
XBID*	36,592,948.00€	5.34%
IDM (Total)	50,429,072.07€	7.36%
Balancing Capacity (Up)	9,112,867.67€	1.33%
Balancing Capacity (Dn)	764,495.07€	0.11%
Balancing Capacity (Total)	9,877,362.74€	1.44%
Balancing Energy (Up)	32,091,880.21€	4.69%
Balancing Energy (Dn)	18,796,096.04€	2.74%
Balancing Energy (Total)	13,295,784.17€	1.94%
Balancing Market (Total)	23,173,146.91€	3.38%
Total	684,743,612.77€	100.00%

* Excluding CBT