

Market Monitoring Report

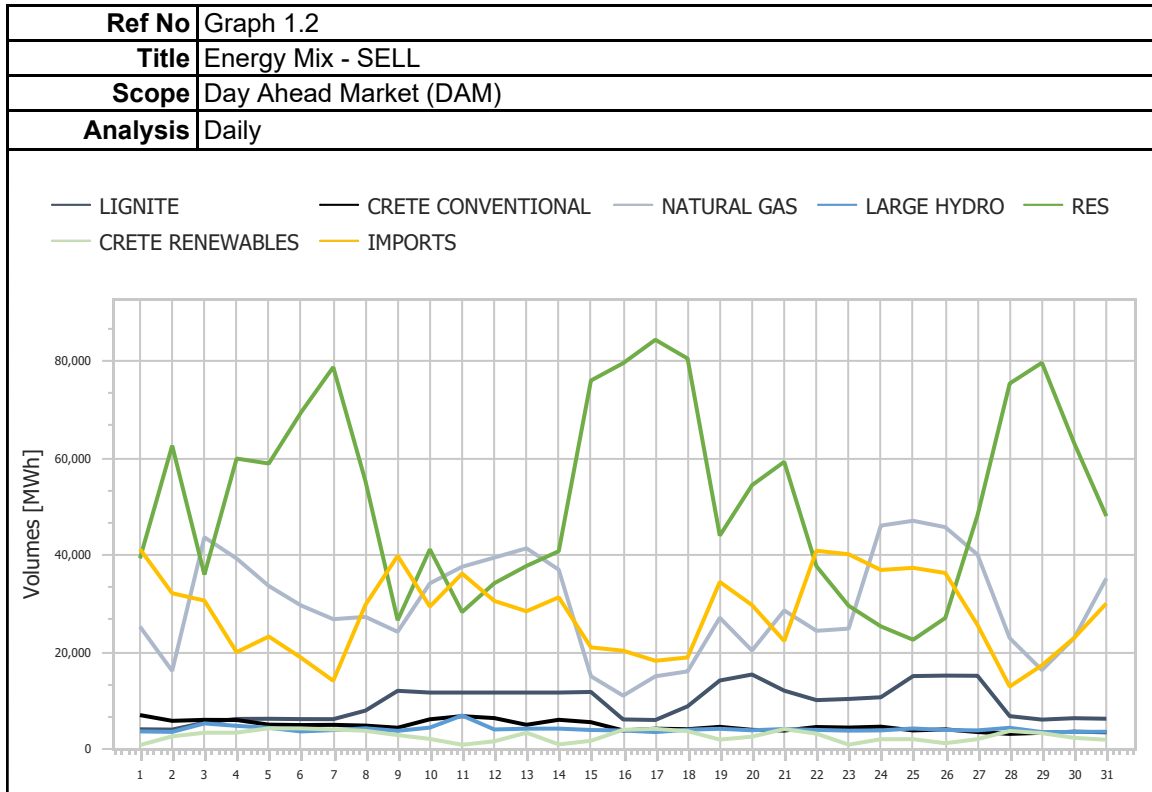
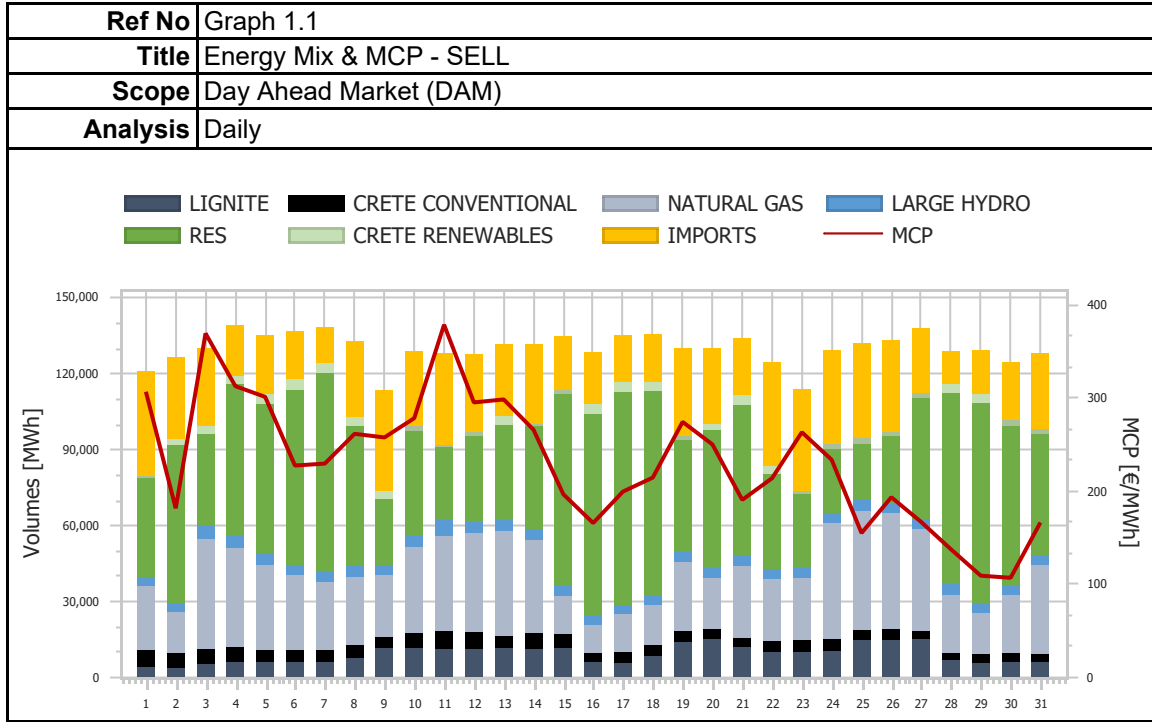
Monthly - Public - 2

10-2022

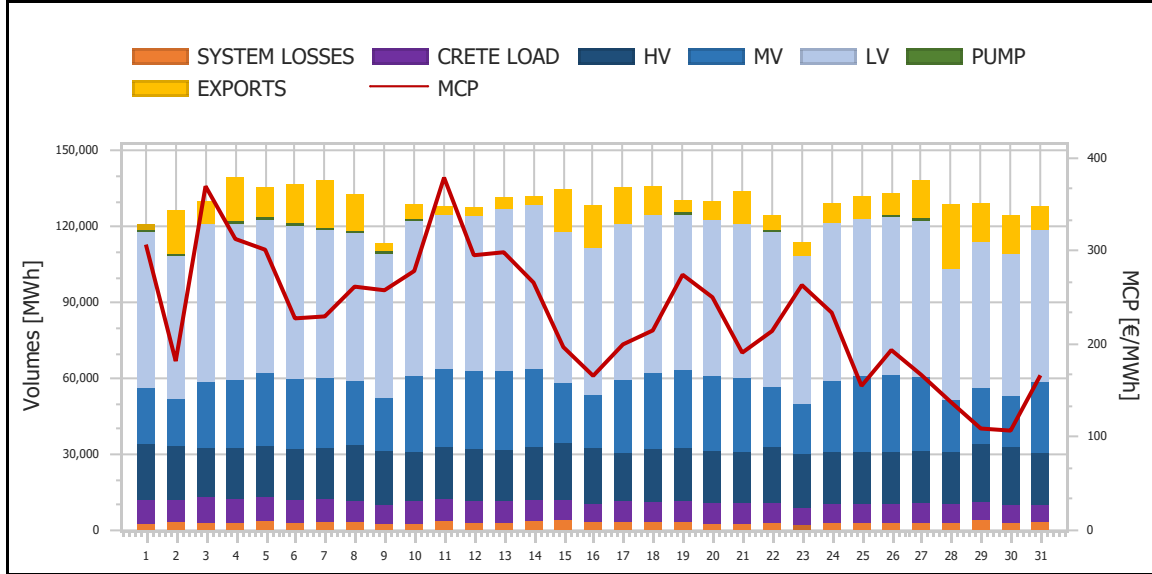


ΡΥΘΜΙΣΤΙΚΗ ΑΡΧΗ ΕΝΕΡΓΕΙΑΣ
REGULATORY AUTHORITY FOR ENERGY

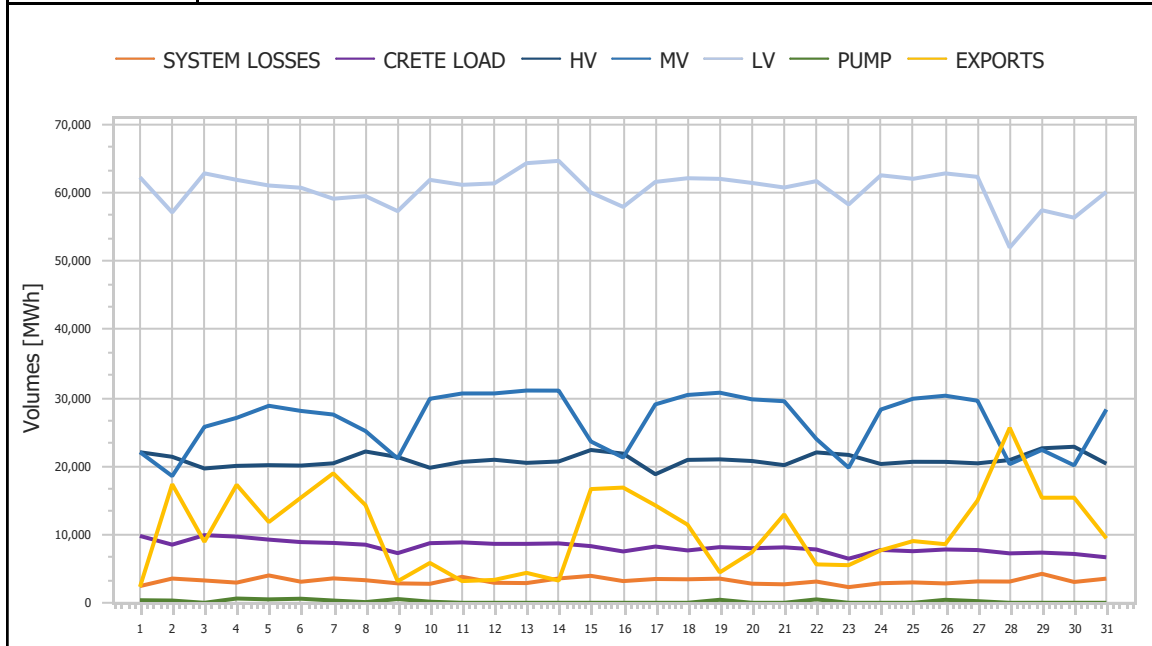
1. Day Ahead Market (DAM)



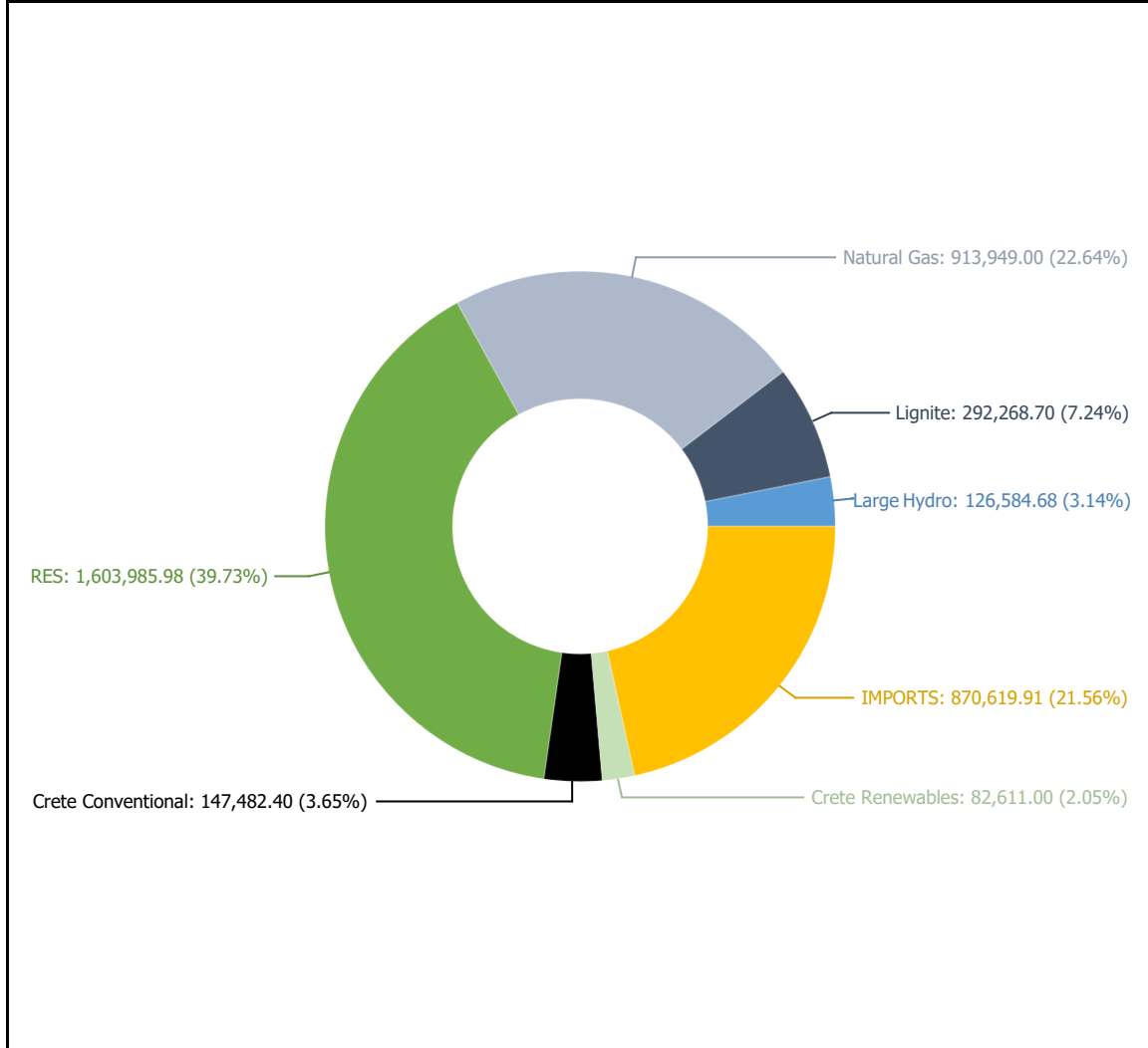
Ref No	Graph 1.3
Title	Energy Mix & MCP - BUY
Scope	Day Ahead Market (DAM)
Analysis	Daily



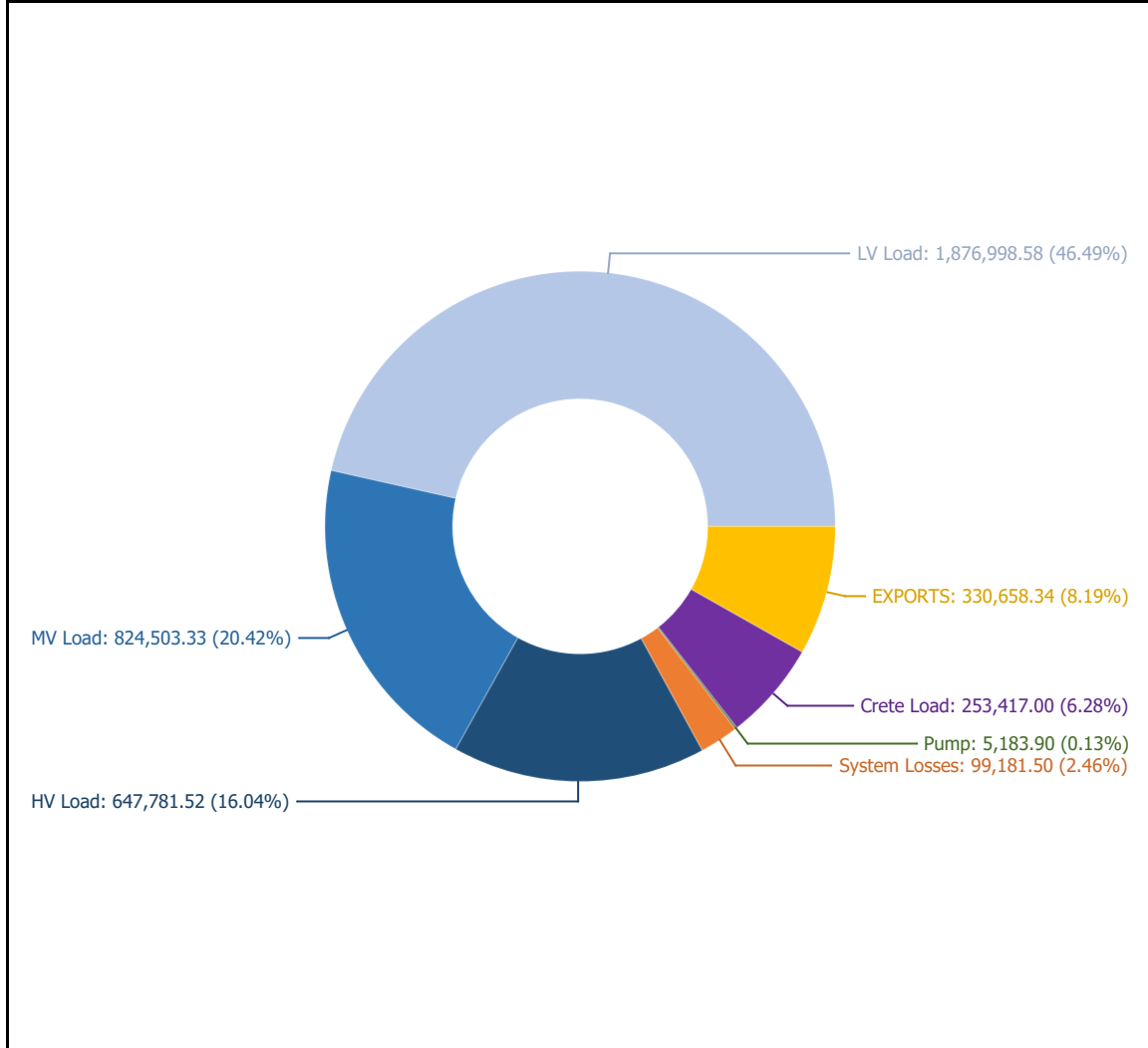
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Title	Energy Mix - BUY
Scope	Day Ahead Market (DAM)
Analysis	Daily

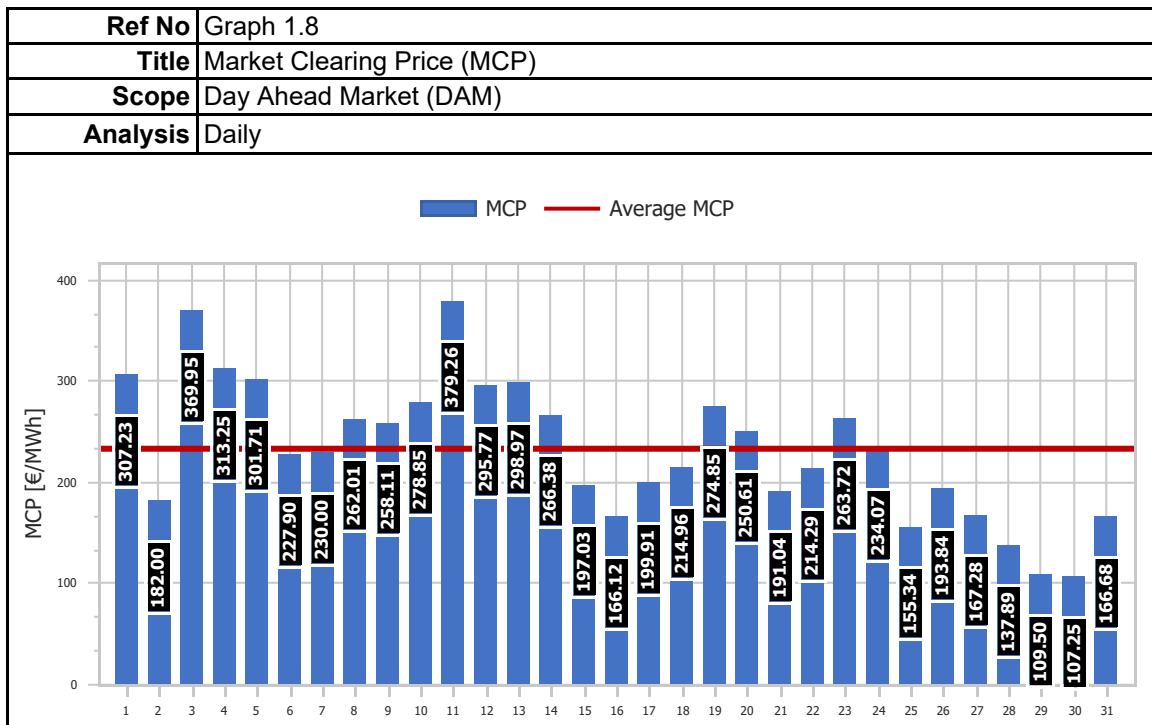
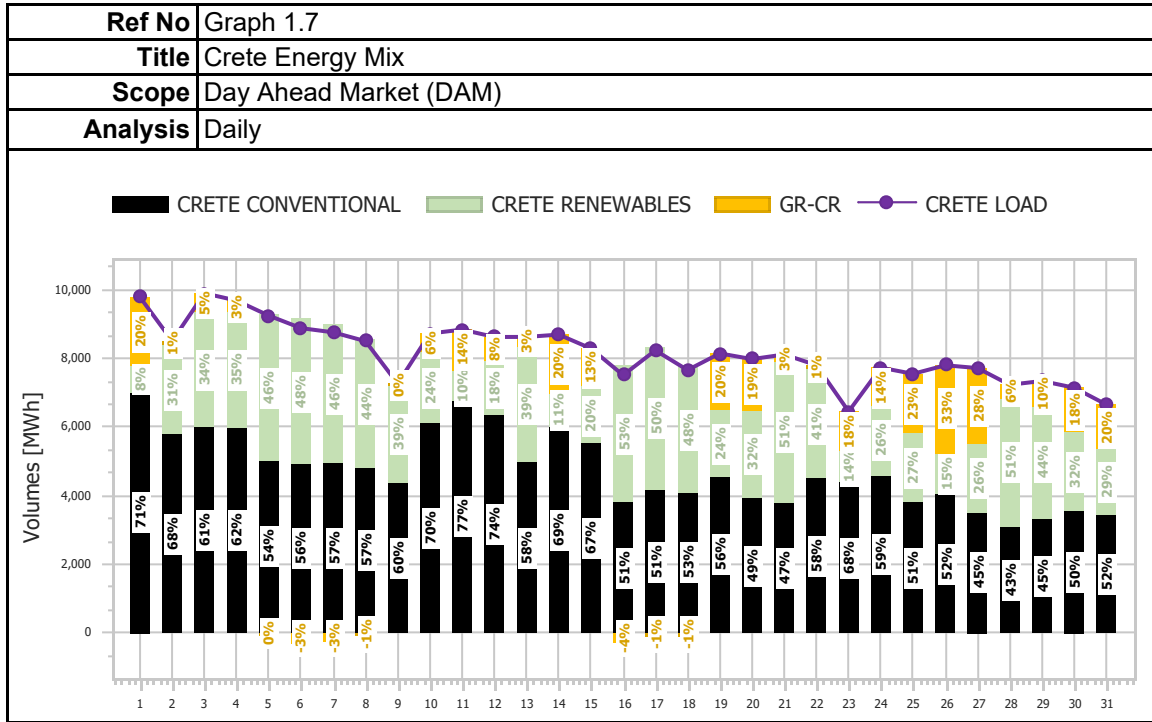


Ref No	Graph 1.5
Title	Energy Mix - SELL
Scope	Day Ahead Market (DAM)
Analysis	Daily

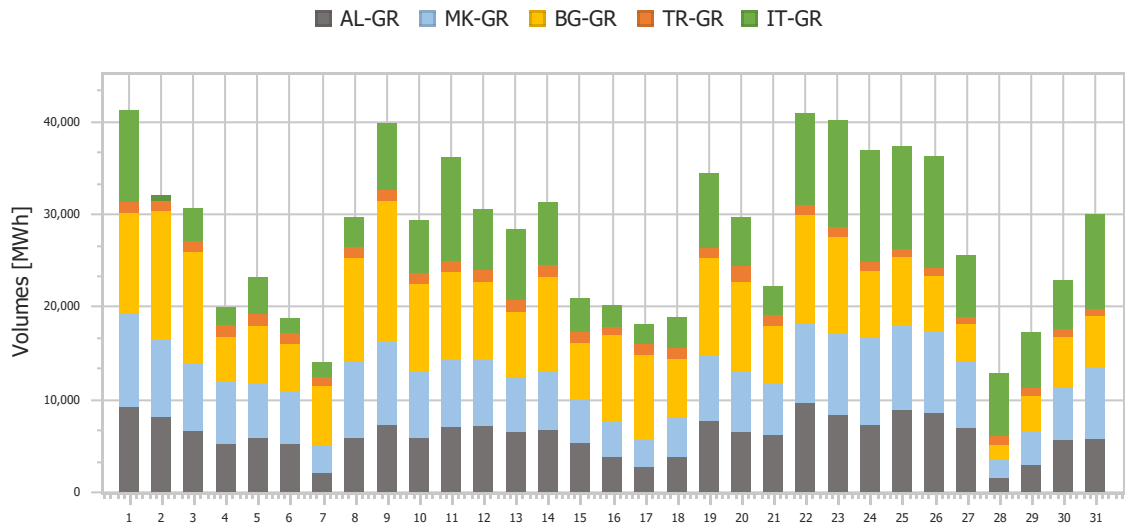


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Title	Energy Mix - BUY
Scope	Day Ahead Market (DAM)
Analysis	Daily

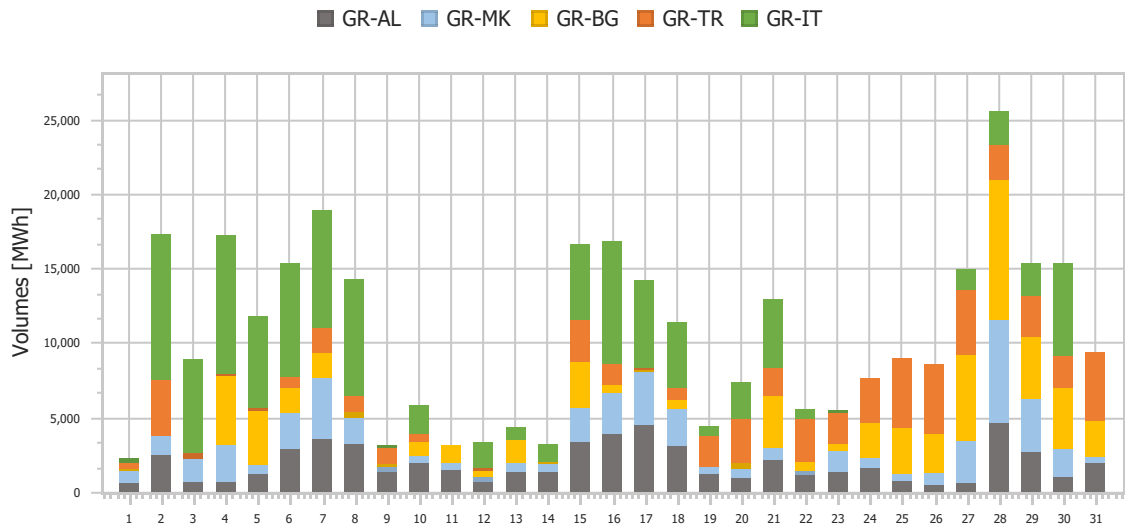




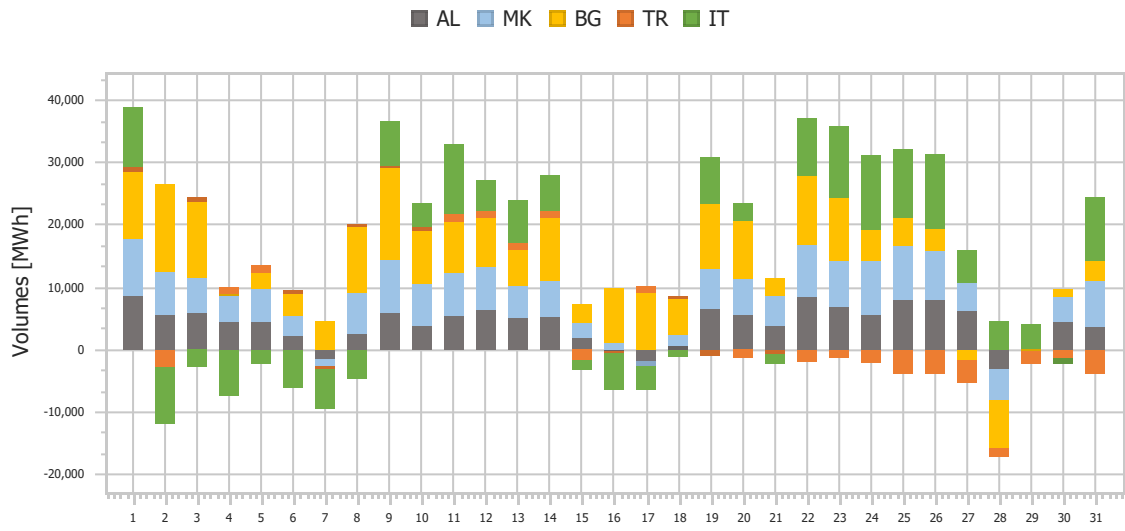
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Title	Imports per Border
Scope	Day Ahead Market (DAM)
Analysis	Daily



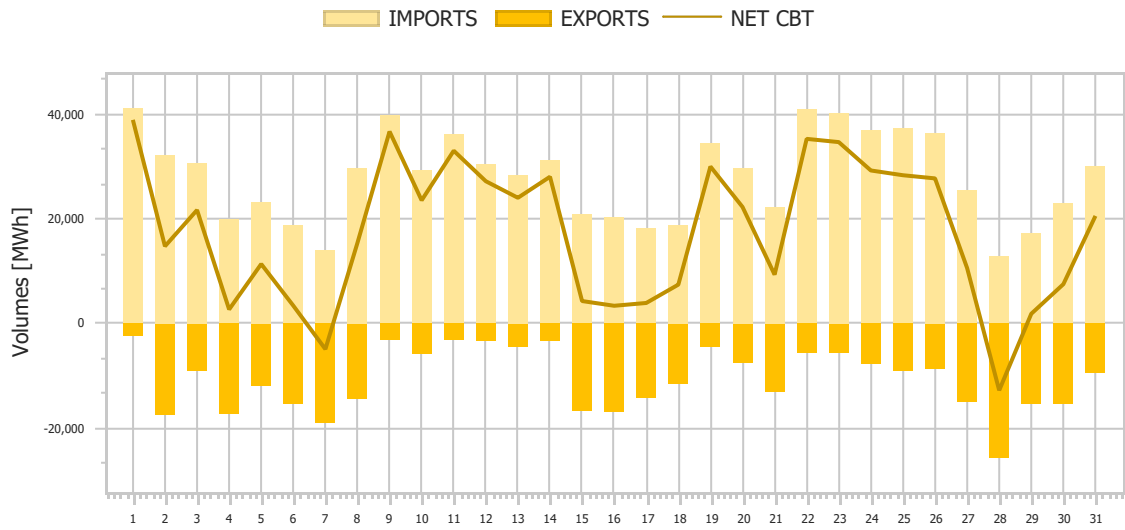
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Title	Exports per Border
Scope	Day Ahead Market (DAM)
Analysis	Daily



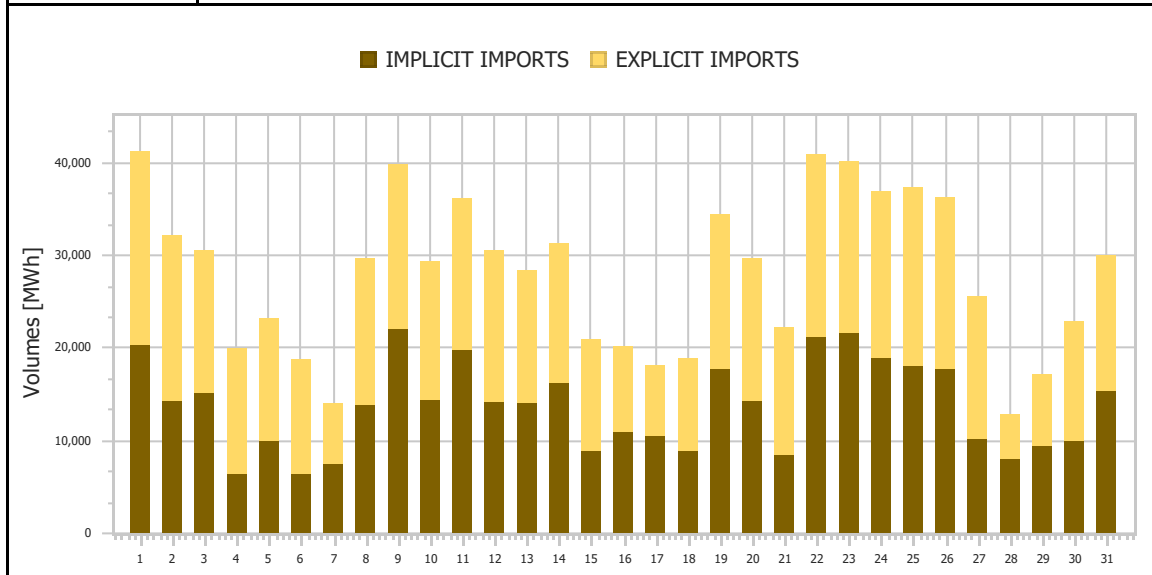
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Title	Net Imports per Border
Scope	Day Ahead Market (DAM)
Analysis	Daily



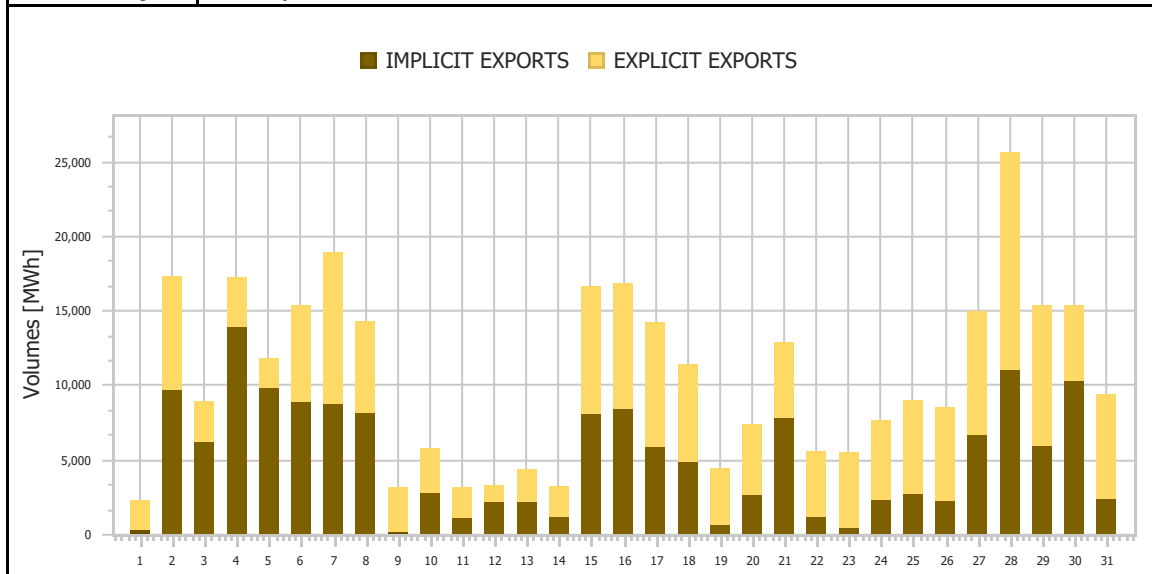
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Title	Total Imports & Exports
Scope	Day Ahead Market (DAM)
Analysis	Daily

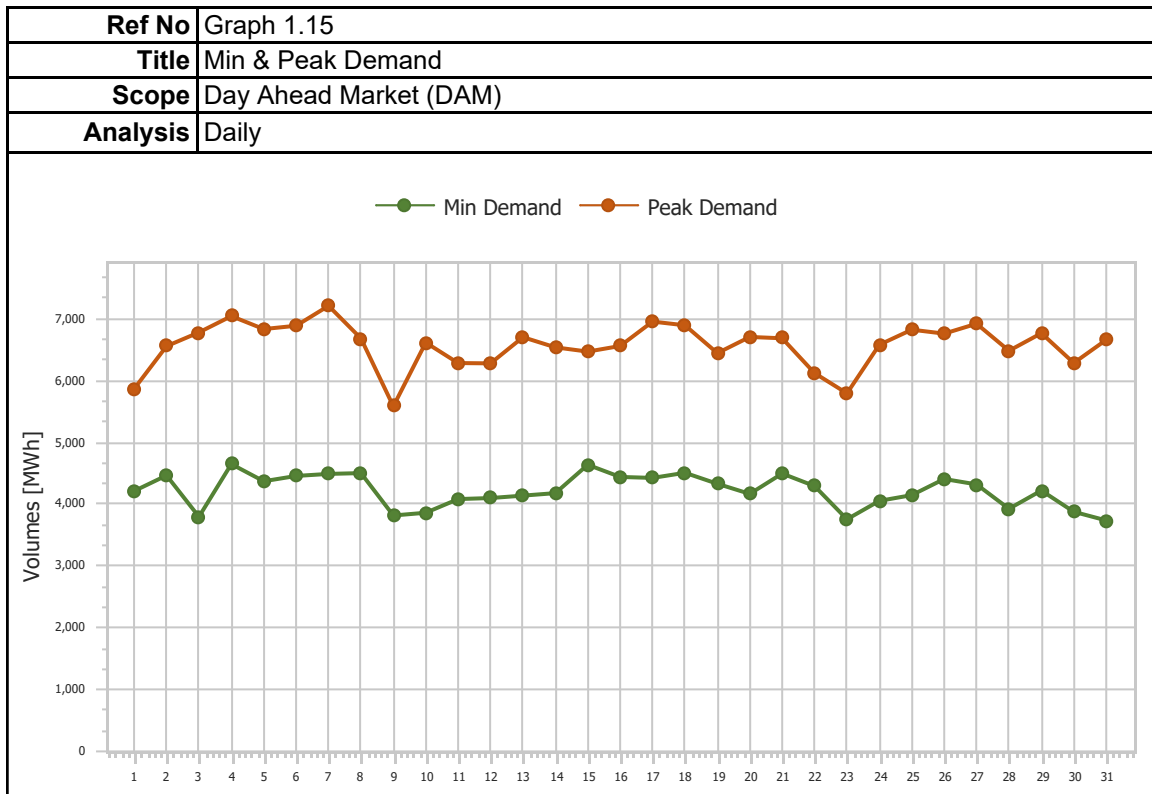


Ref No	Graph 1.13
Title	Imports (Implicit/Explicit)
Scope	Day Ahead Market (DAM)
Analysis	Daily

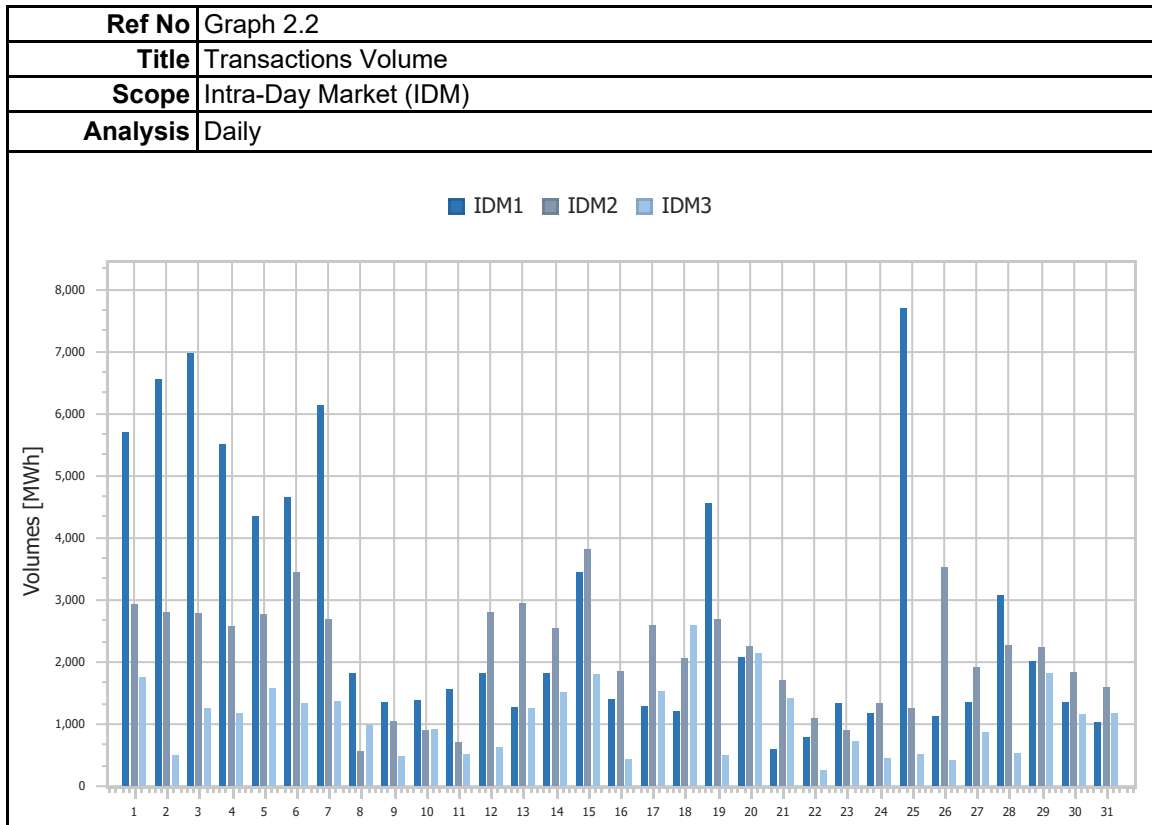
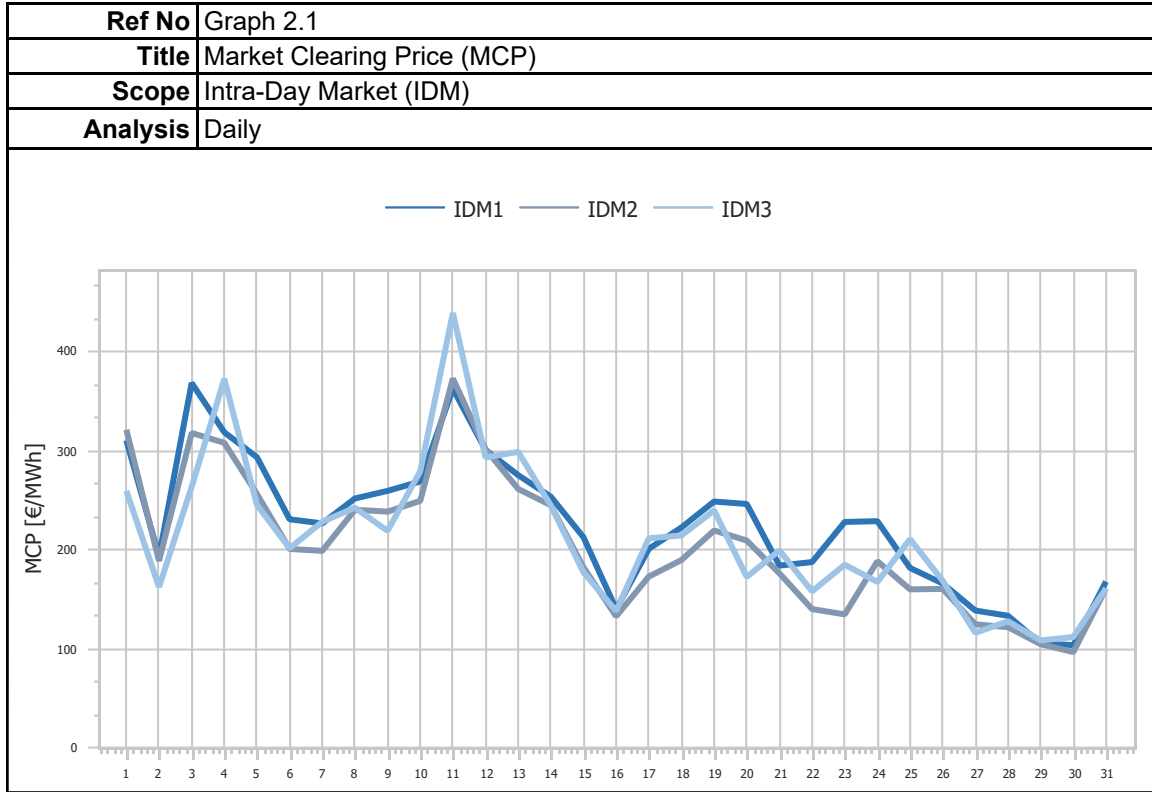


Ref No	Graph 1.14
Title	Exports (Implicit/Explicit)
Scope	Day Ahead Market (DAM)
Analysis	Monthly

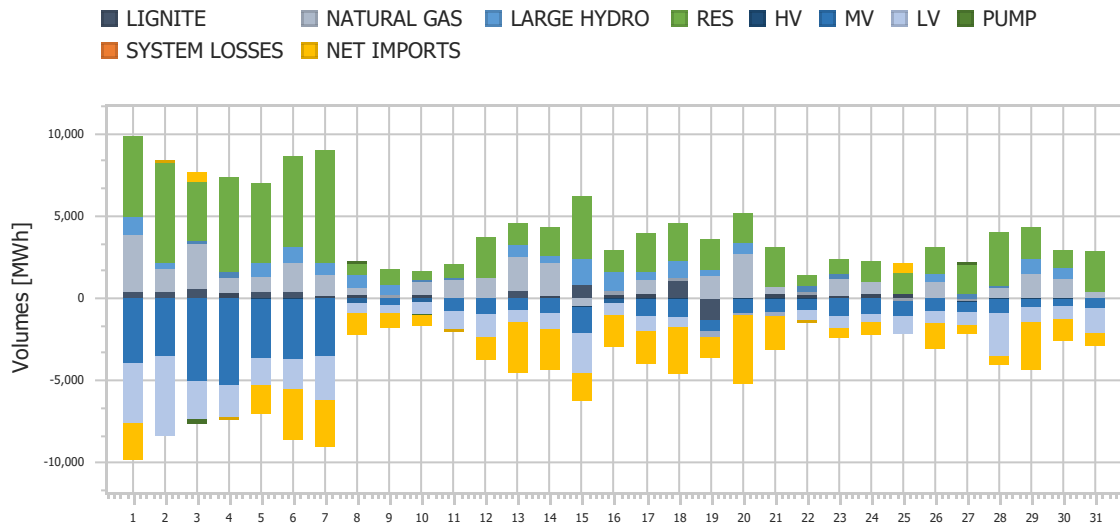




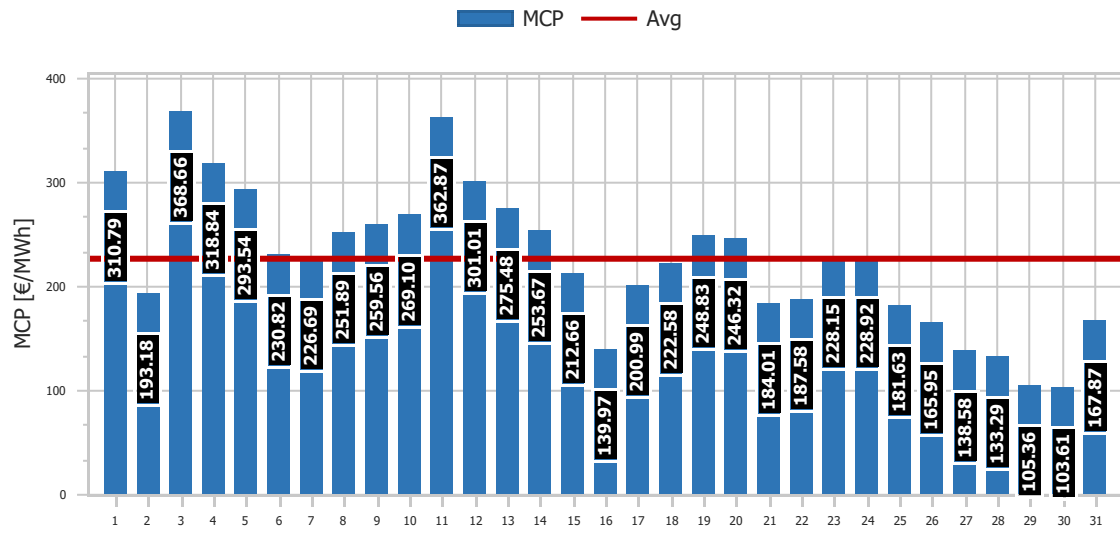
2. Intra-Day Market (IDM)



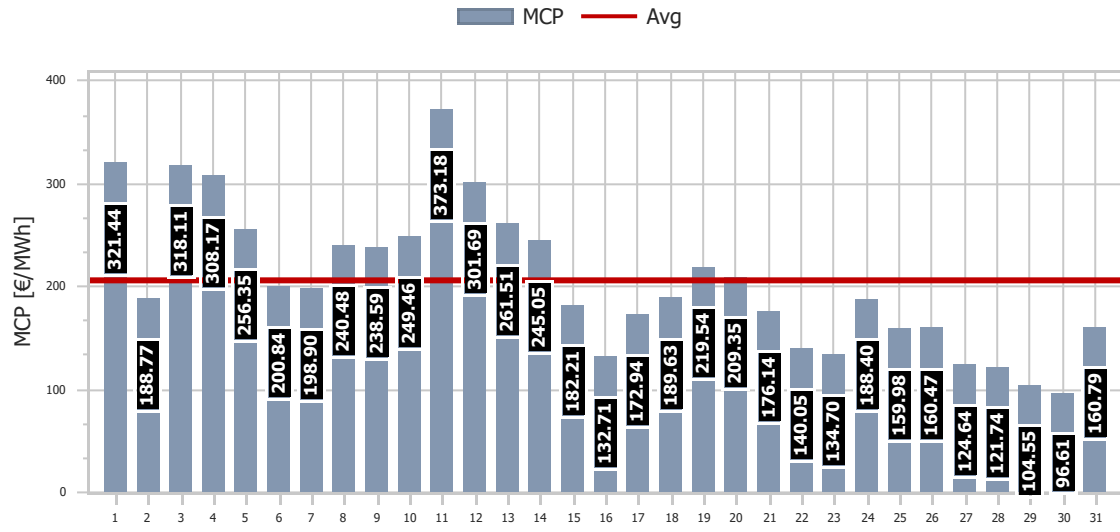
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Title	Energy Mix changes
Scope	Intra-Day Market (IDM)
Analysis	Daily



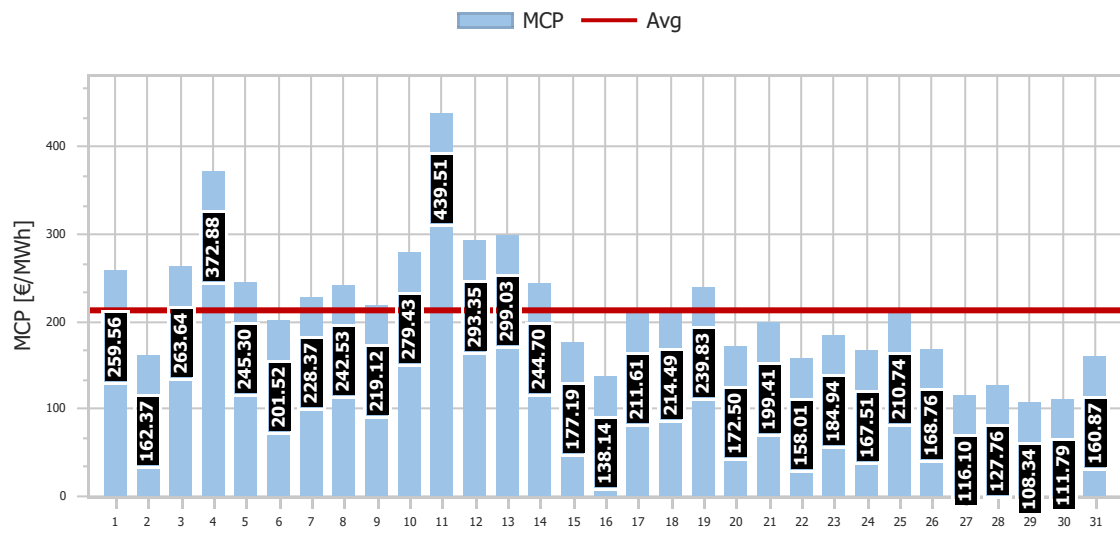
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Title	Market Clearing Price
Scope	Intra-Day Market Auction 1 (IDMA1)
Analysis	Daily

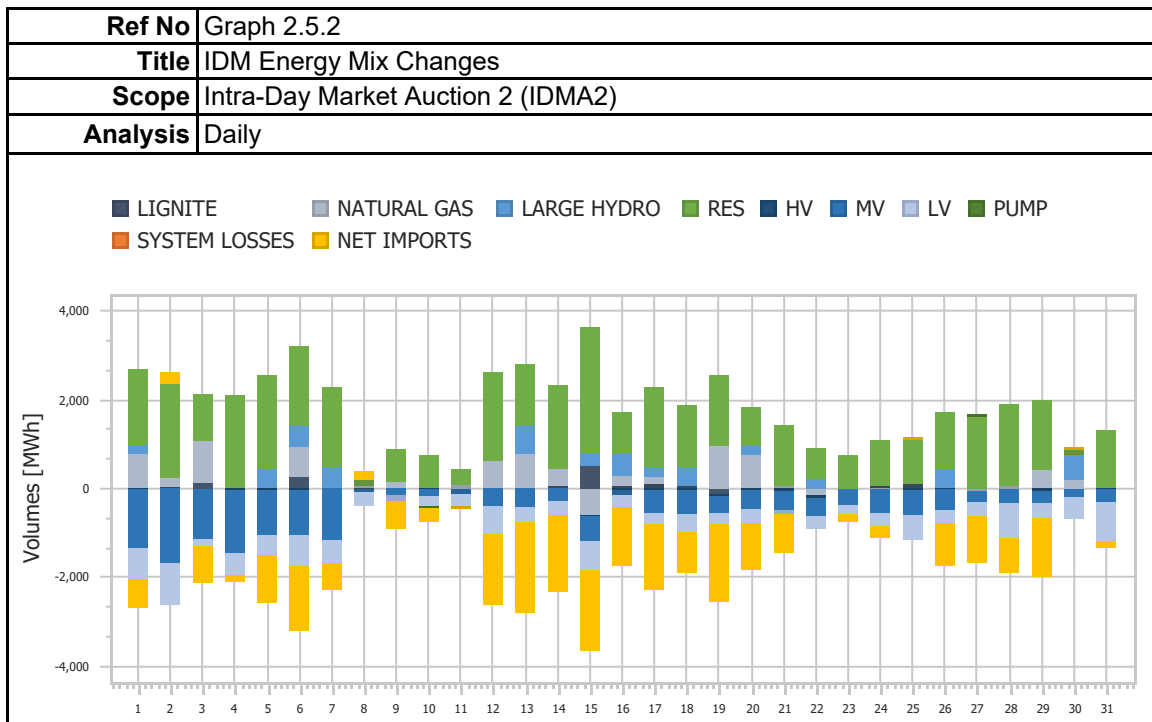
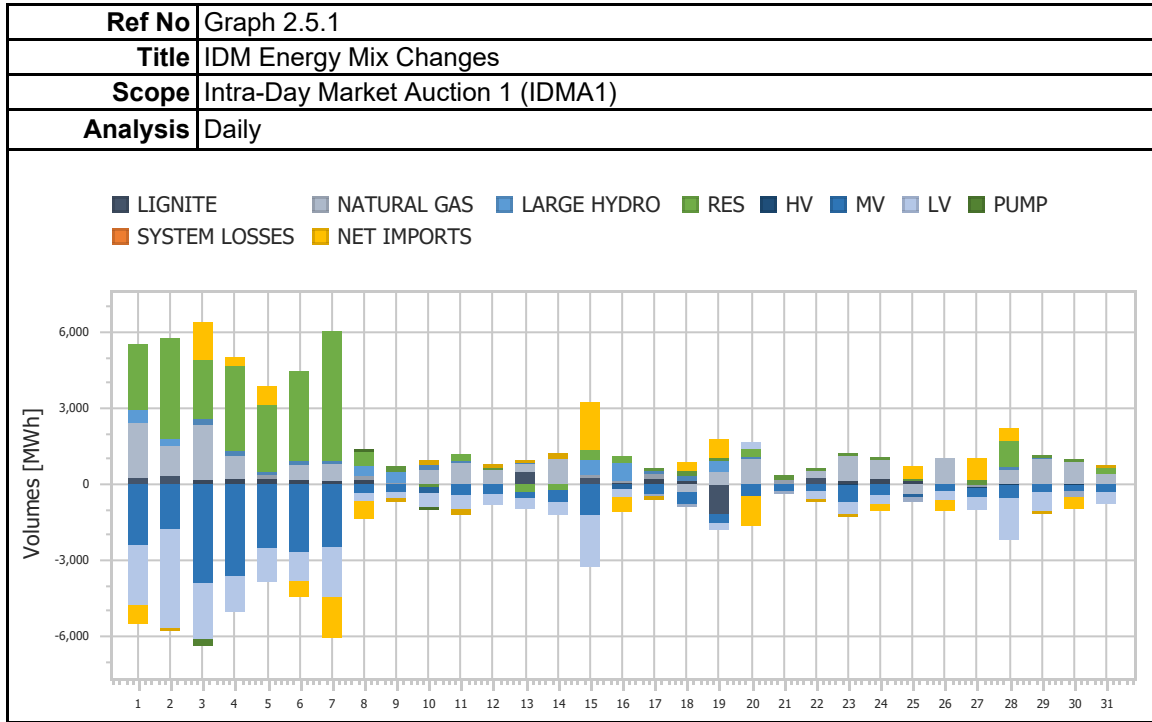


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Scope	Intra-Day Market Auction 2 (IDMA2)
Analysis	Daily

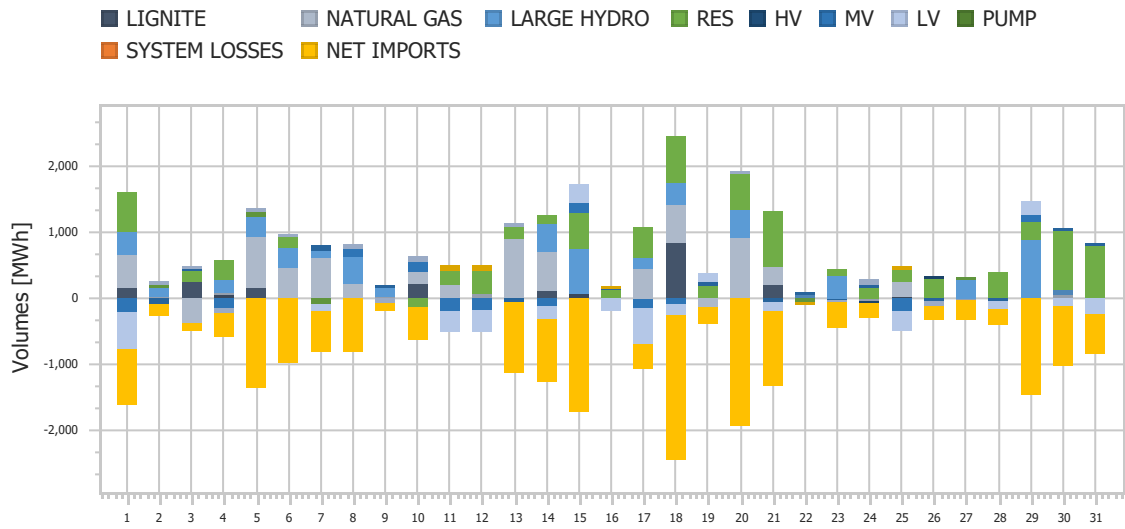


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Title	Market Clearing Price
Scope	Intra-Day Market Auction 3 (IDMA3)
Analysis	Daily

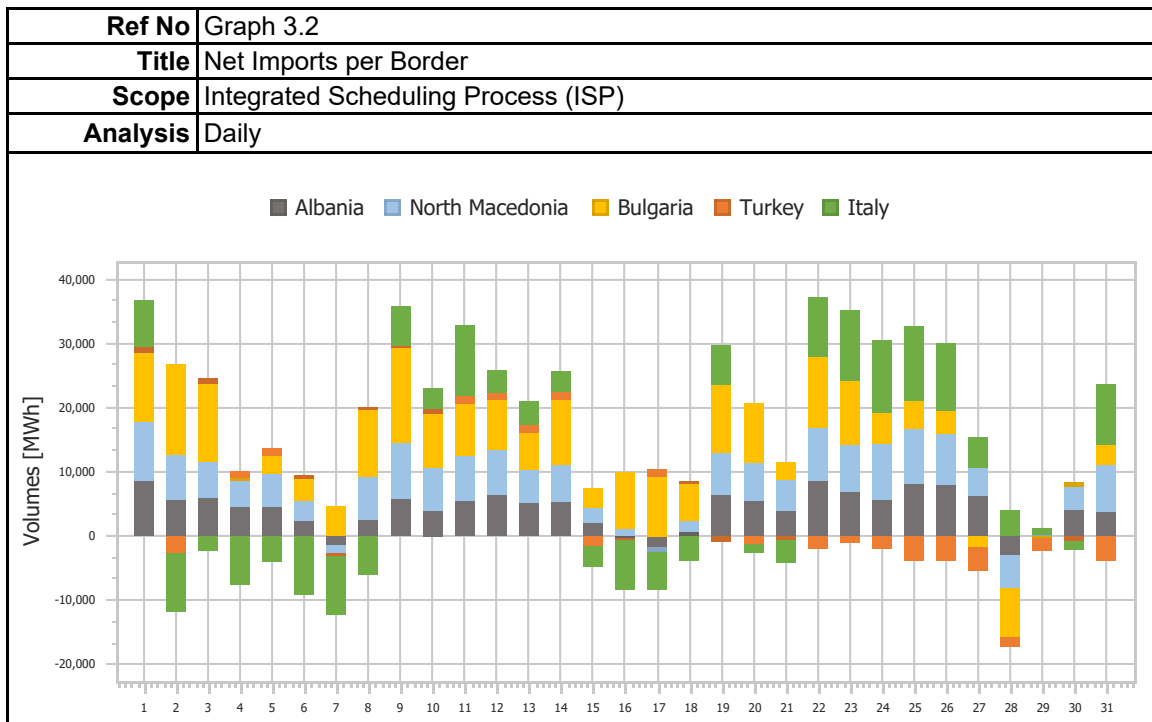
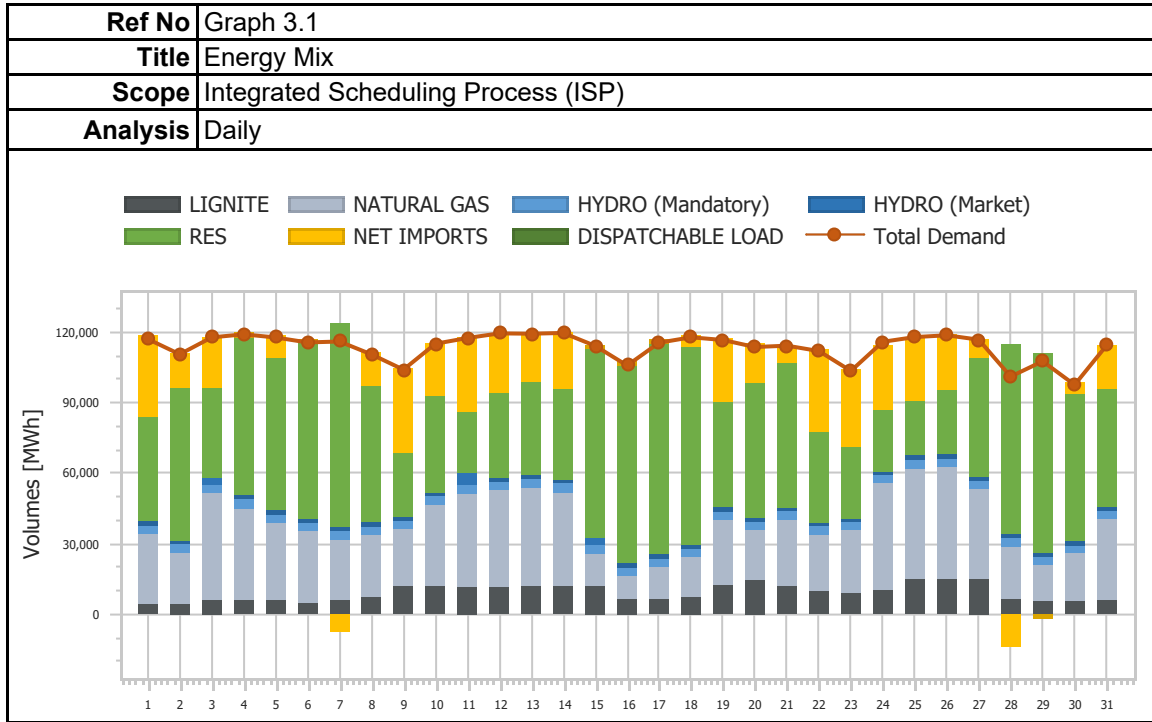




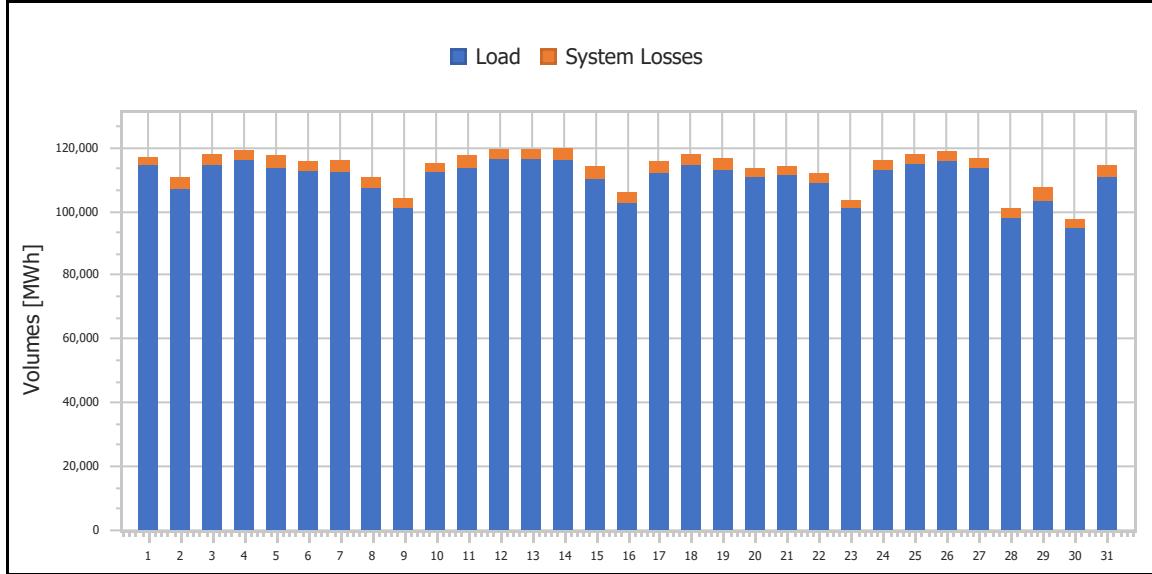
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Title	IDM Energy Mix Changes
Scope	Intra-Day Market Auction 3 (IDMA3)
Analysis	Daily



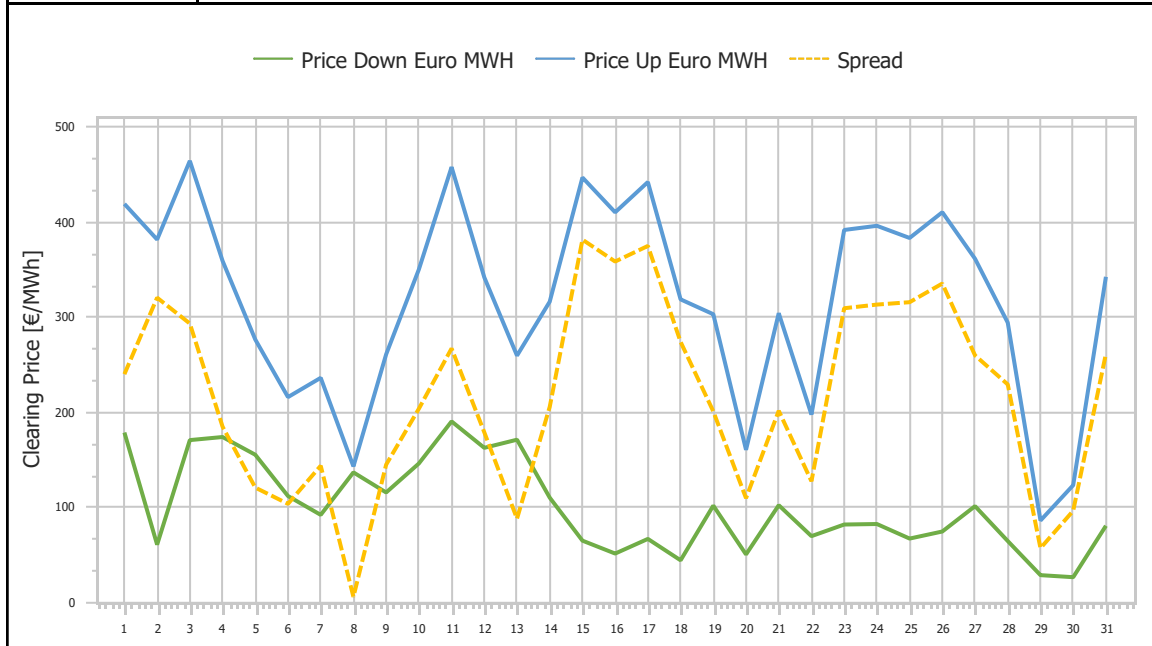
3. Integrated Scheduling Process (ISP)



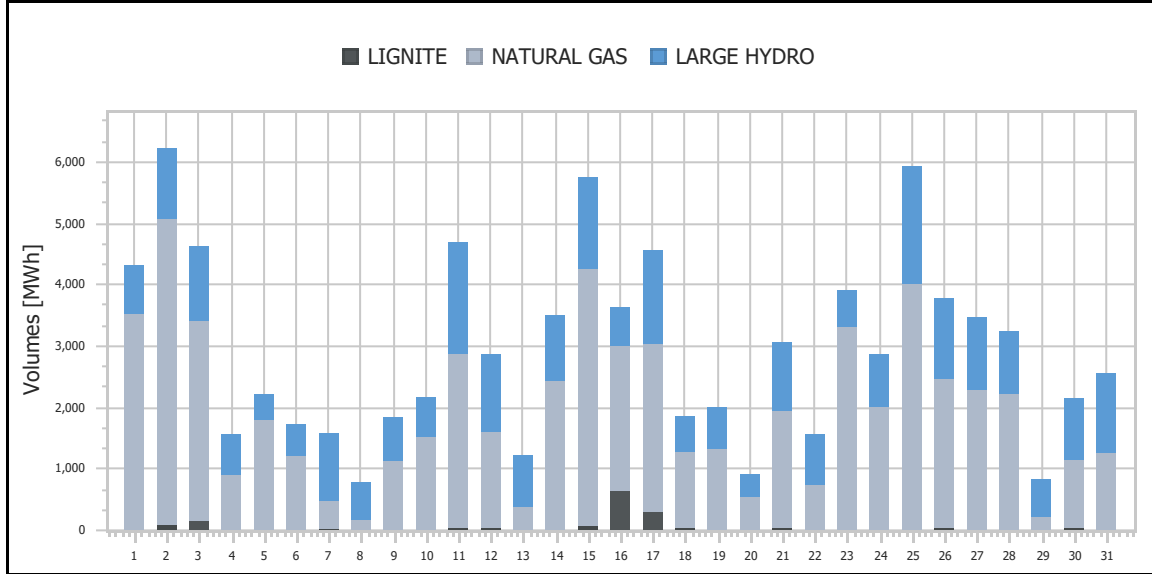
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Title	Demand & System Losses
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



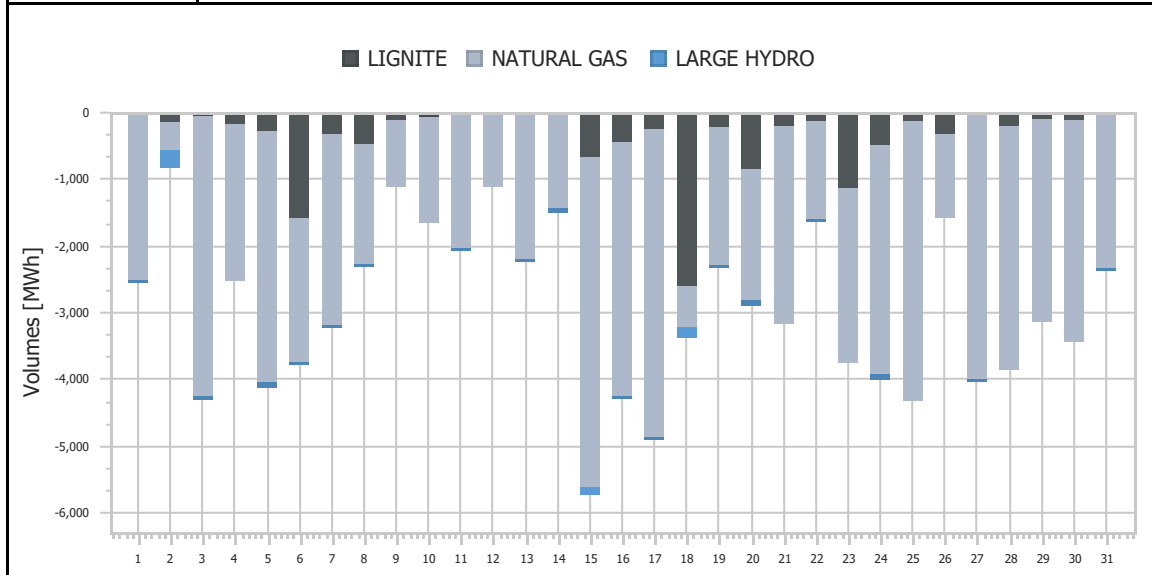
Ref No	Graph 3.4
Title	Clearing Prices
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



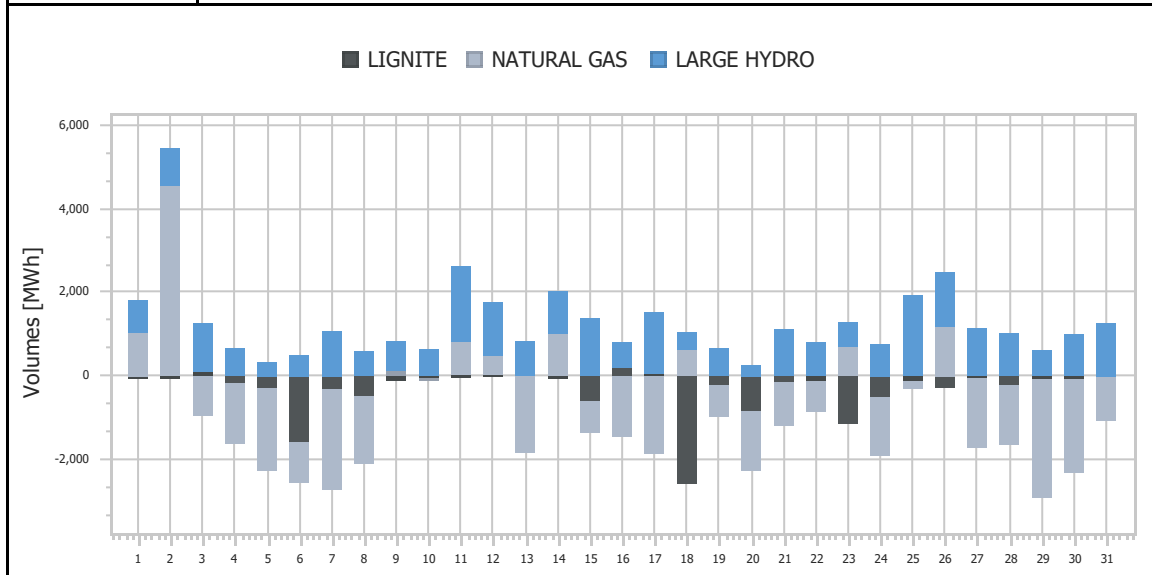
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Title	Upward Activated Balancing energy
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



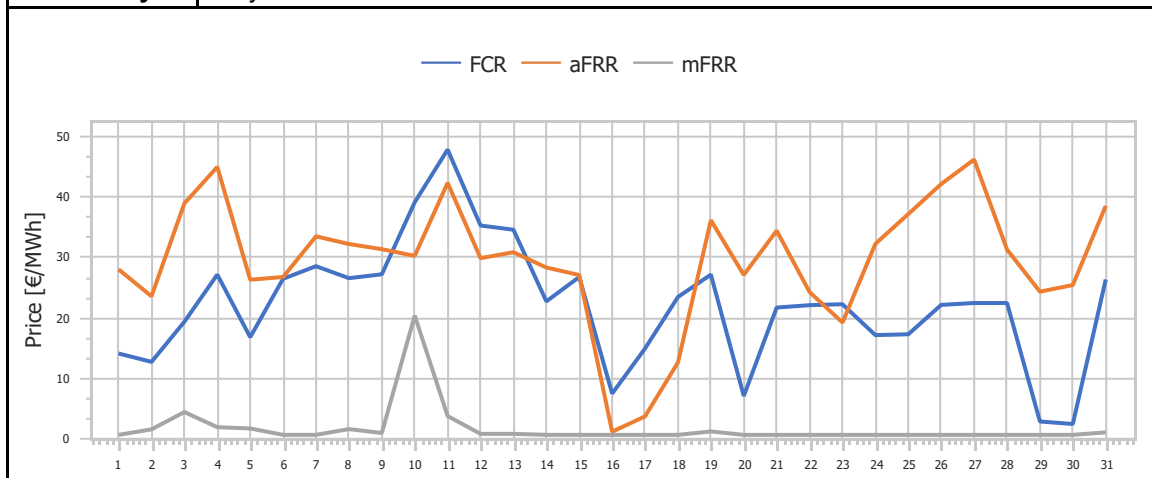
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Title	Downward Activated Balancing energy
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



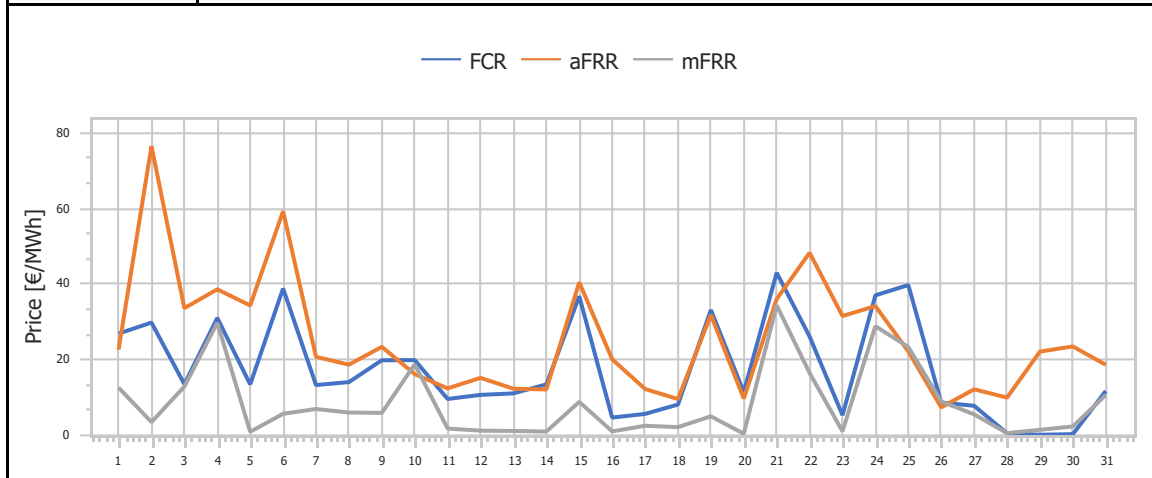
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Title	Net Activated Balancing energy
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



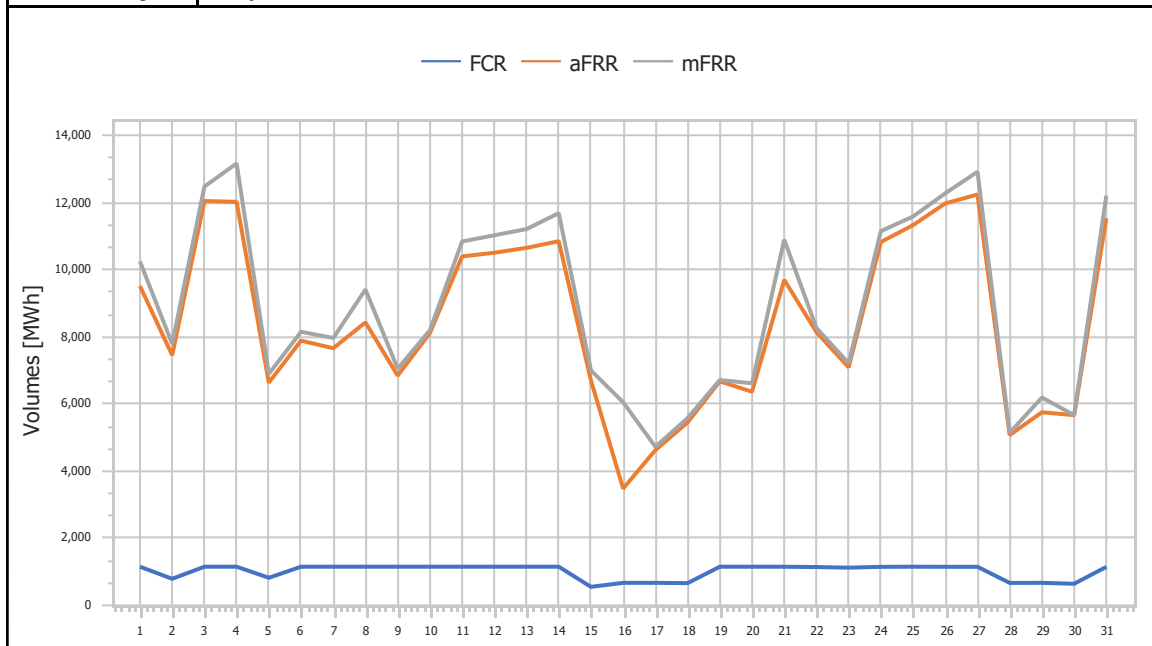
Ref No	Graph 3.8
Title	Upward Capacity Reserves Prices
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



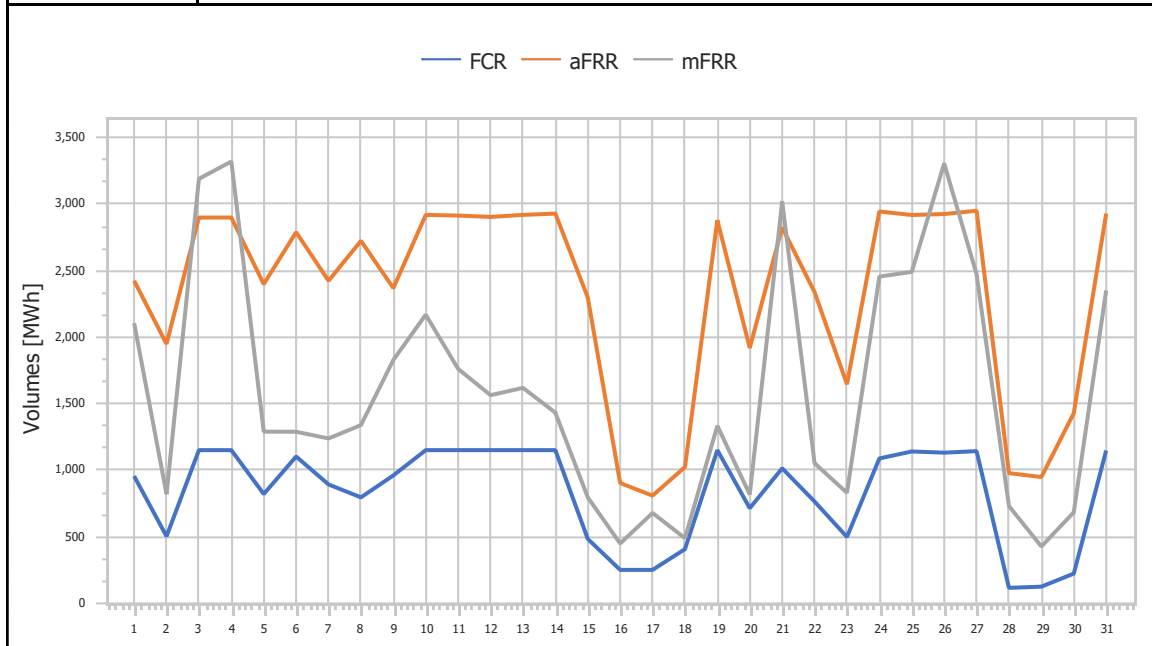
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Title	Downward Capacity Reserves Prices
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



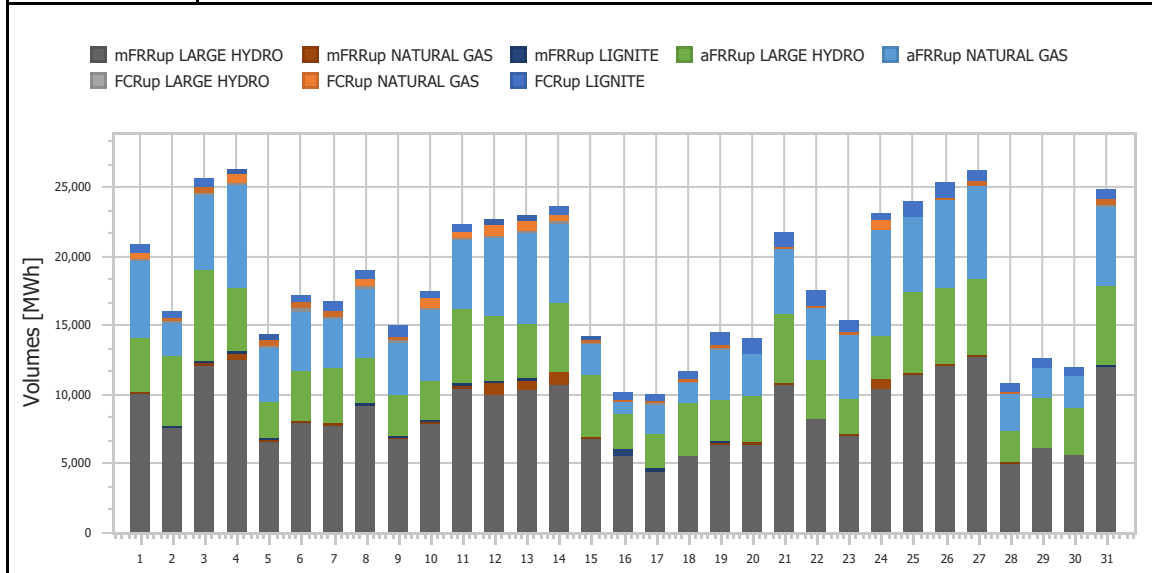
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Title	Upward Capacity Reserves Volumes
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



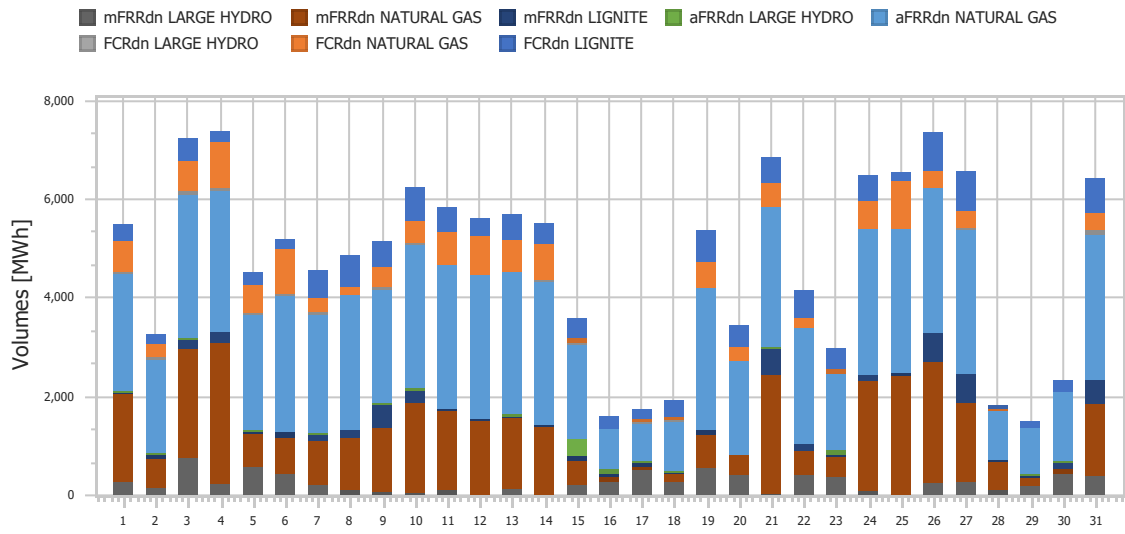
Ref No	Graph 3.11
Title	Downward Capacity Reserves Volumes
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



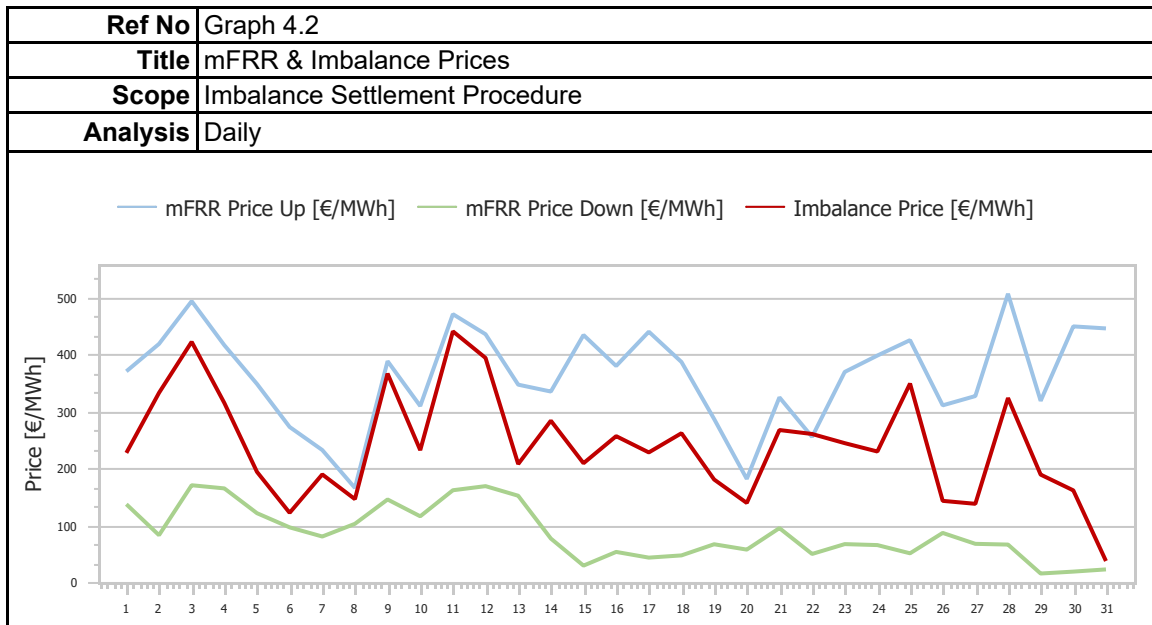
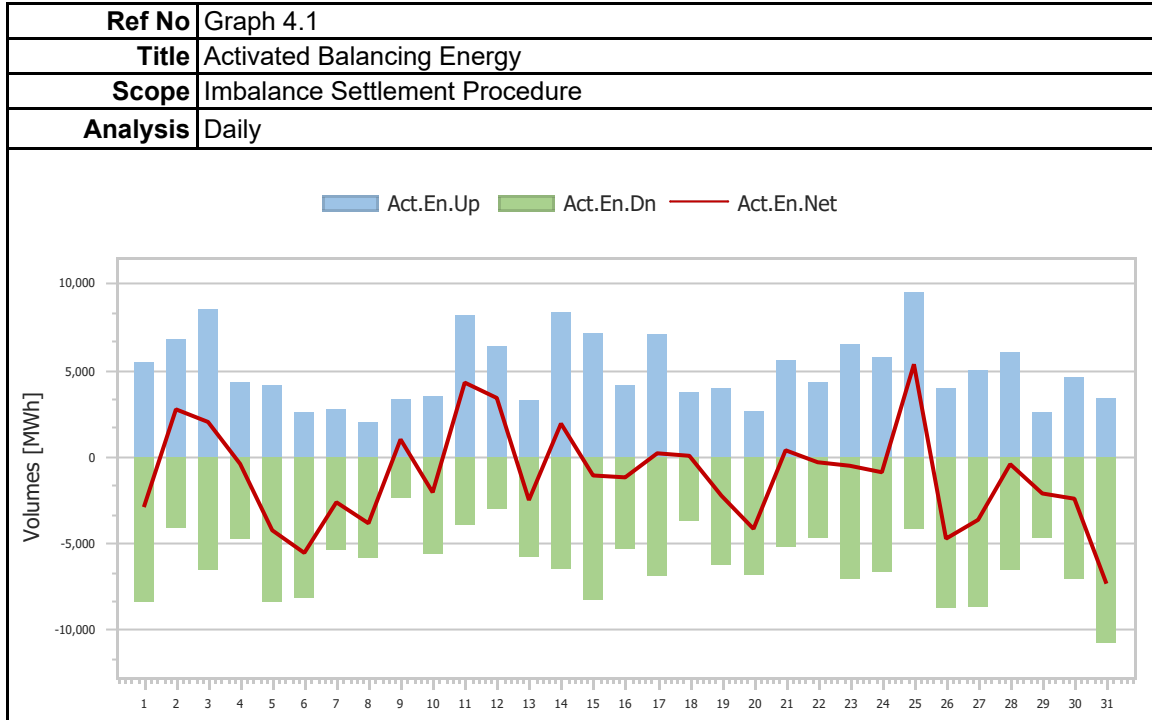
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Title	Upward Capacity Reserves Volumes per Technology
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



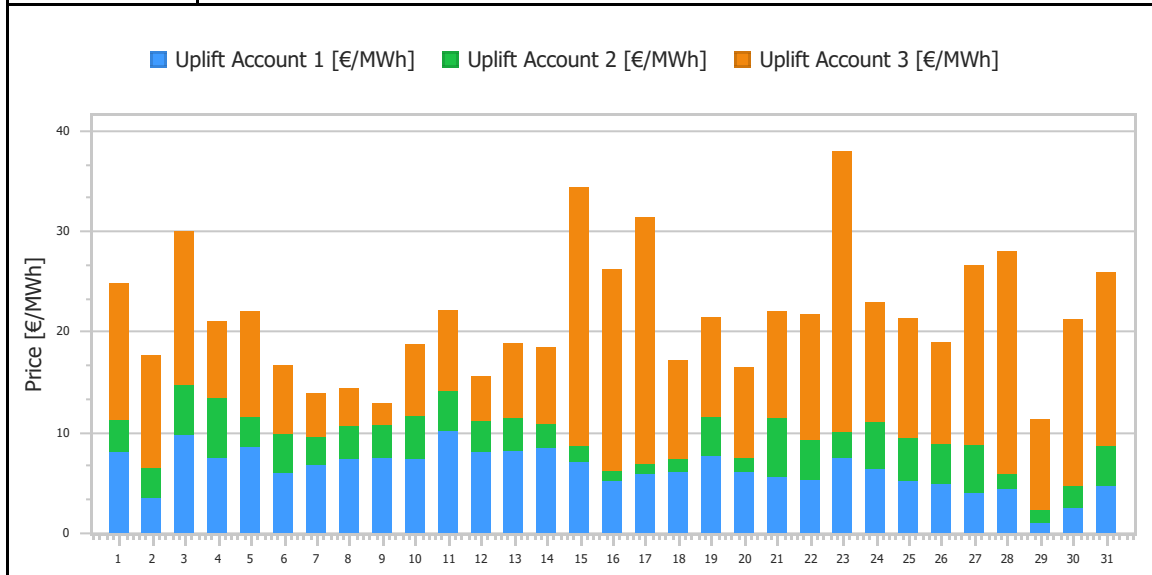
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Title	Downward Capacity Reserves Quantities per Type & Technology
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



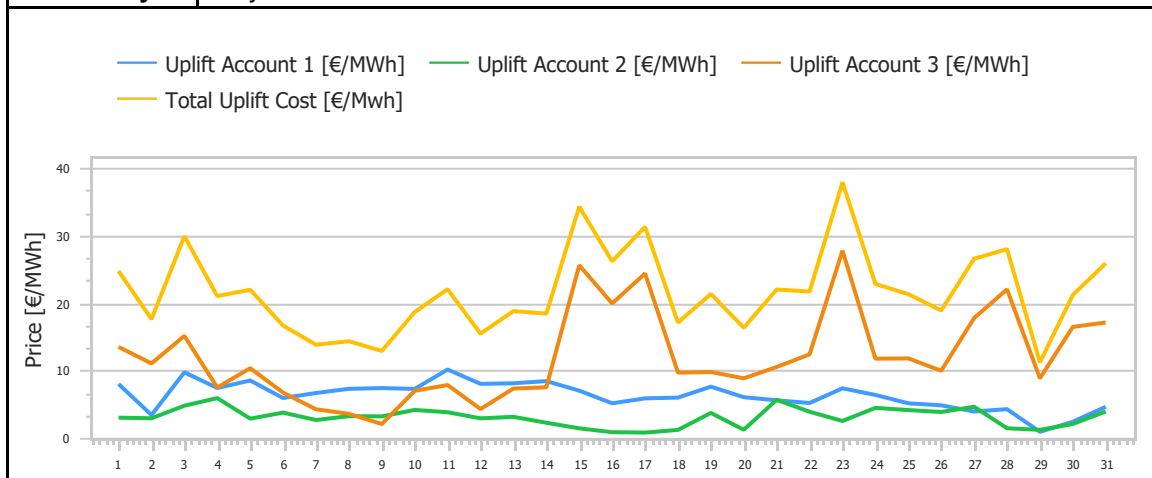
4. Imbalance Settlement Procedure



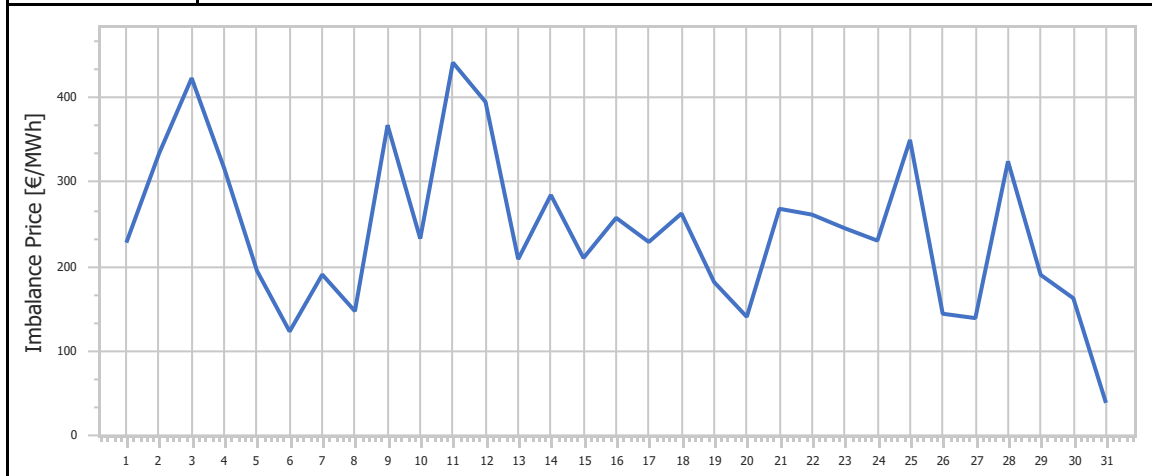
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Title	Uplift Accounts Cost
Scope	Imbalance Settlement Procedure
Analysis	Daily



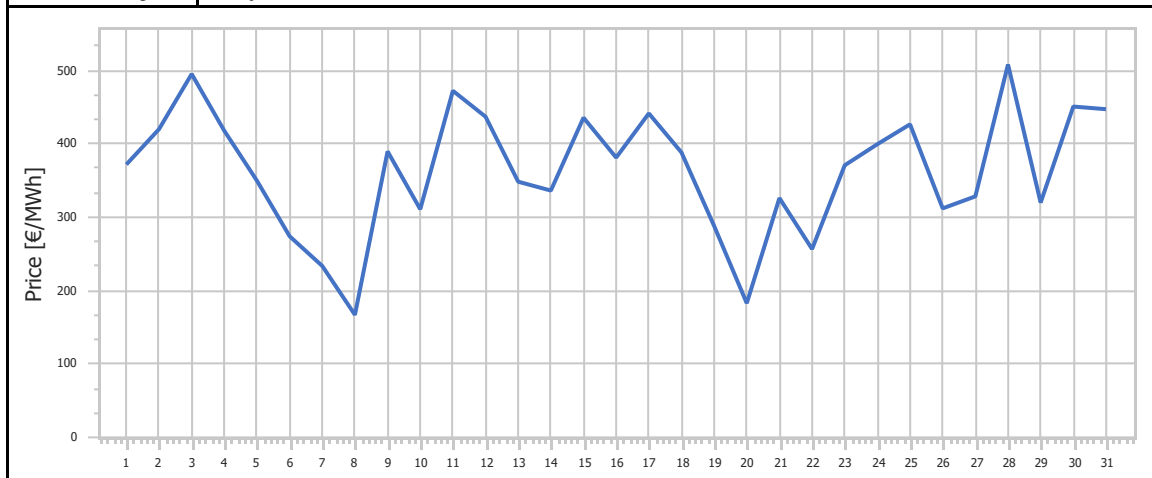
Ref No	Graph 4.4
Title	Uplift Accounts Cost
Scope	Imbalance Settlement Procedure
Analysis	Daily



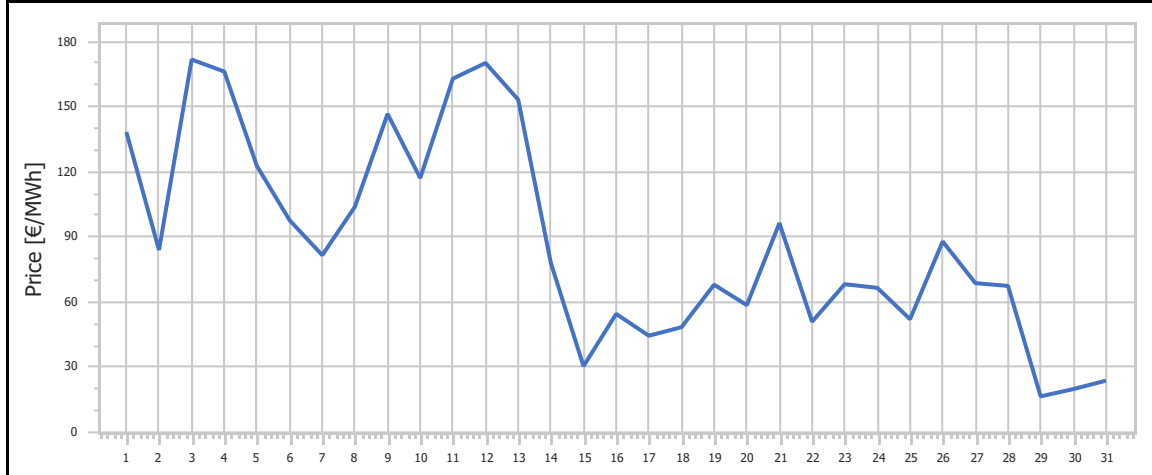
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Title	Imbalance Price
Scope	Imbalance Settlement Procedure
Analysis	Daily



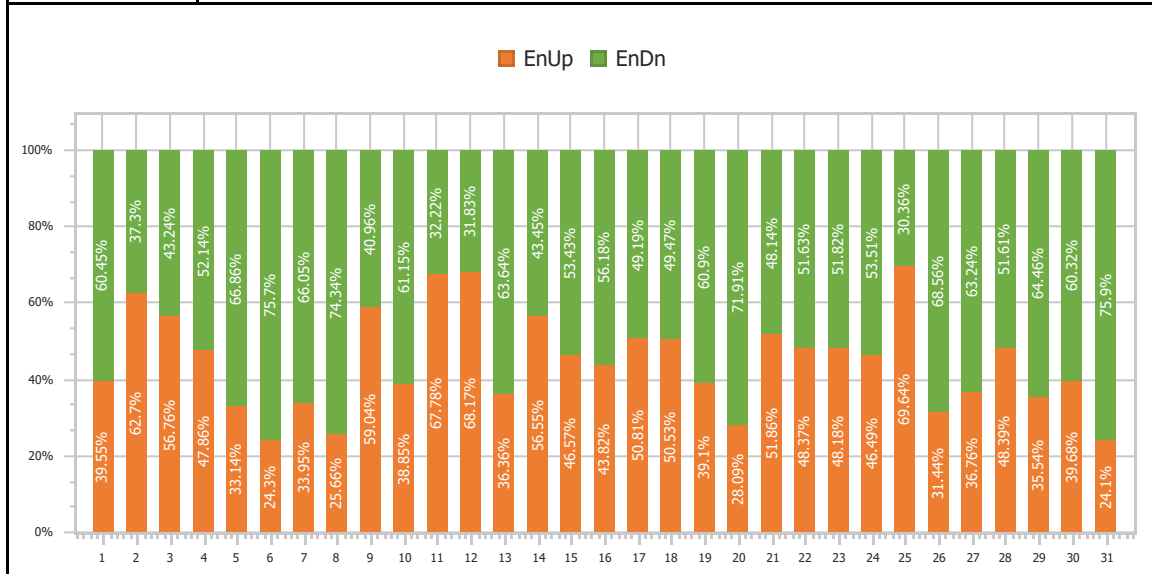
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Title	mFRR Up Price
Scope	Imbalance Settlement Procedure
Analysis	Daily



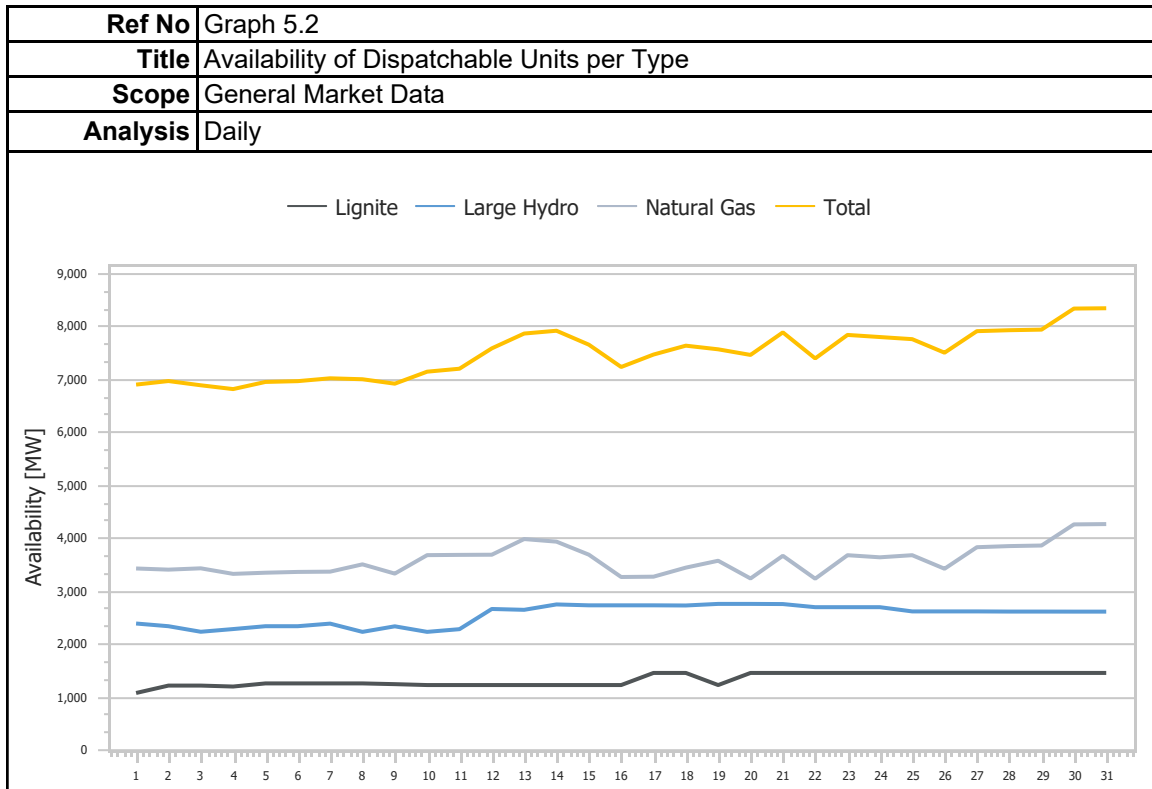
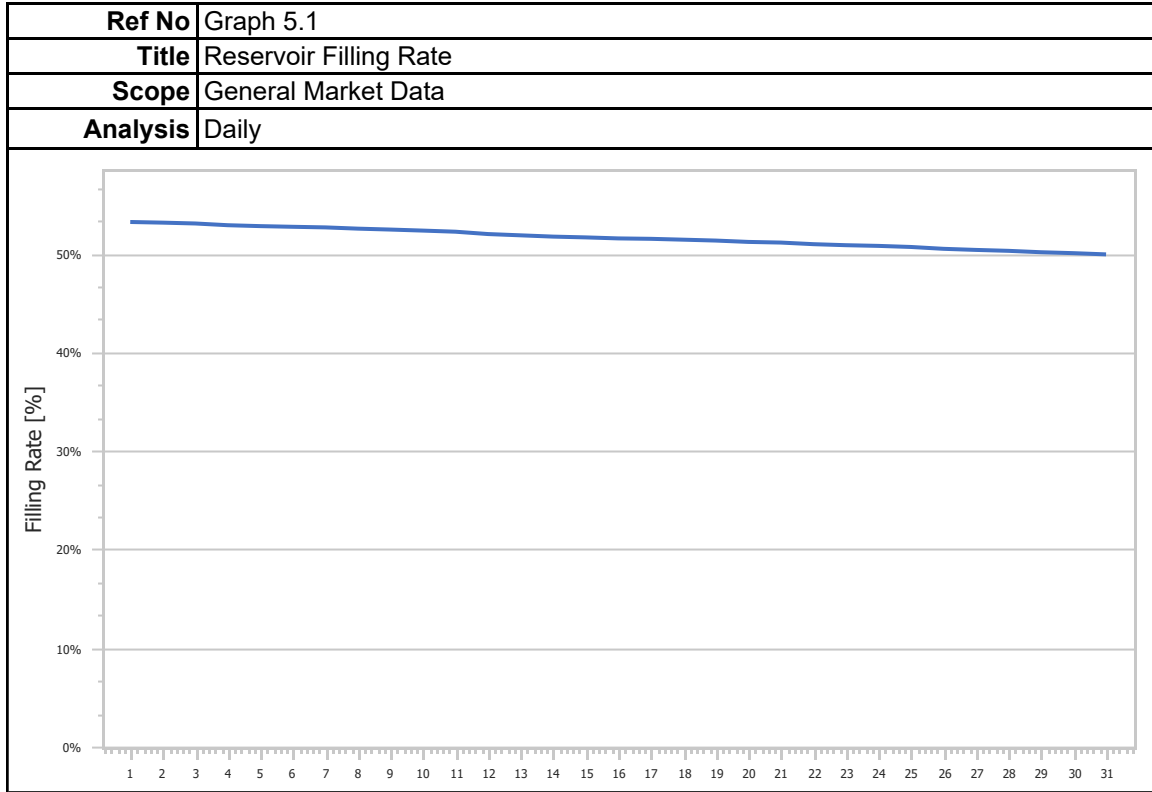
Ref No	Graph 4.7
Title	mFRR Down Price
Scope	Imbalance Settlement Procedure
Analysis	Daily



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



5. General Market Data



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	292,268.703	7.24%	69,089,246.95€	7.30%
Crete Conventional	147,482.400	3.65%	38,047,285.51€	4.02%
Natural Gas	913,949.004	22.64%	241,581,949.45€	25.51%
Large Hydro	126,584.676	3.14%	40,853,463.38€	4.31%
RES	1,603,985.984	39.73%	325,149,521.56€	34.34%
Crete Renewables	82,611.000	2.05%	18,361,861.33€	1.94%
Imports	870,619.910	21.56%	213,780,153.77€	22.58%
Total	4,037,501.675	100.00%	946,863,481.96€	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	-	4,037,501.68	292,268.70	147,482.40	913,949.00	126,584.68	1,603,985.98	82,611.00	870,619.91
Average	232.77	130,241.99	9,428.02	4,757.50	29,482.23	4,083.38	51,741.48	2,664.87	28,084.51
Min	107.25	113,577.60	4,000.00	3,110.65	10,994.29	3,488.00	22,537.78	798.00	12,878.50
Min day	30	9	2	28	16	17	25	1	28
Max	379.26	139,530.10	15,360.00	6,994.00	47,084.80	6,903.74	84,435.39	4,262.00	41,242.30
Max day	11	4	20	1	25	11	17	5	1
Spread	272.01	25,952.50	11,360.00	3,883.35	36,090.52	3,415.74	61,897.61	3,464.00	28,363.80
Standard Deviation	67.47	6,054.86	3,499.93	1,055.06	10,284.23	643.50	19,138.16	1,110.66	8,213.29

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	99,181.500	2.46%	23,385,731.30€	2.47%
Crete Load	253,417.000	6.28%	61,473,582.38€	6.49%
HV Load	647,781.521	16.04%	149,353,960.97€	15.77%
MV Load	824,503.334	20.42%	196,839,921.51€	20.79%
LV Load	1,876,998.584	46.49%	451,289,660.65€	47.66%
PUMP	5,183.901	0.13%	873,983.05€	0.09%
Exports	330,658.340	8.19%	63,671,566.47€	6.72%
Total	4,037,724.176	100.00%	946,888,406.33€	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]	PUMP [MWh]	Exports [MWh]
Total	-	4,037,724.18	99,181.50	253,417.00	647,781.52	824,503.33	1,876,998.58	5,183.90	330,658.34
Average	232.77	130,249.17	3,199.40	8,174.74	20,896.18	26,596.88	60,548.34	398.76	10,666.40
Min	107.25	113,577.58	2,292.50	6,455.00	18,815.21	18,545.12	51,989.68	101.01	2,327.20
Min day	30	9	23	23	17	2	28	8	1
Max	379.26	139,530.14	4,240.50	9,897.00	22,835.97	31,061.41	64,674.33	625.00	25,609.24
Max day	11	4	29	3	30	13	14	4	28
Spread	272.01	25,952.55	1,948.00	3,442.00	4,020.75	12,516.29	12,684.65	523.99	23,282.04
Standard Deviation	67.47	6,048.32	443.38	842.88	916.33	3,998.56	2,573.87	156.10	5,813.79

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	991,922.990	73.66%	5,681,208.97€	80.59%
FCR	112,359.440	8.34%	1,109,907.64€	15.75%
mFRR	242,407.640	18.00%	258,090.22€	3.66%
Total	1,346,690.070	100.00%	7,049,206.84€	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	283,573.170	49.69%	2,360,234.34€	57.65%
FCR	98,105.220	17.19%	789,543.20€	19.28%
mFRR	189,014.340	33.12%	944,434.15€	23.07%
Total	570,692.730	100.00%	4,094,211.69€	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	59,560.350	38.14%	31,018,880.54€	38.96%
mFRR	96,619.970	61.86%	48,602,089.96€	61.04%
Total	156,180.320	100.00%	79,620,970.50€	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	54,024.880	28.23%	3,964,100.60€	26.62%
mFRR	137,353.630	71.77%	10,929,850.67€	73.38%
Total	191,378.510	100.00%	14,893,951.27€	100.00%

3. Market Overview

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

Market	Quantity [MWh]	Share [%]
DAM	4,037,501.68	96.39%
IDMA1	86,350.34	2.06%
IDMA2	66,619.82	1.59%
IDMA3	33,641.45	0.80%
IDM (Total)	186,611.61	4.45%
Balancing Energy (Up)	156,180.32	3.73%
Balancing Energy (Dn)	191,378.51	4.57%
Balancing Energy (Total)	-35,198.19	-0.84%
Total	4,188,915.09	100.00%

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

Market	Value [EUR]	Share [%]
DAM	946,863,481.96€	88.76%
IDMA1	22,045,791.70€	2.07%
IDMA2	14,461,684.20€	1.36%
IDMA3	7,559,912.74€	0.71%
IDM (Total)	44,067,388.64€	4.13%
Balancing Capacity (Up)	7,049,206.84€	0.66%
Balancing Capacity (Dn)	4,094,211.69€	0.38%
Balancing Capacity (Total)	11,143,418.52€	1.04%
Balancing Energy (Up)	79,620,970.50€	7.46%
Balancing Energy (Dn)	14,893,951.27€	1.40%
Balancing Energy (Total)	64,727,019.23€	6.07%
Balancing Market (Total)	75,870,437.75€	7.11%
Total	1,066,801,308.35€	100.00%