

Market Monitoring Report

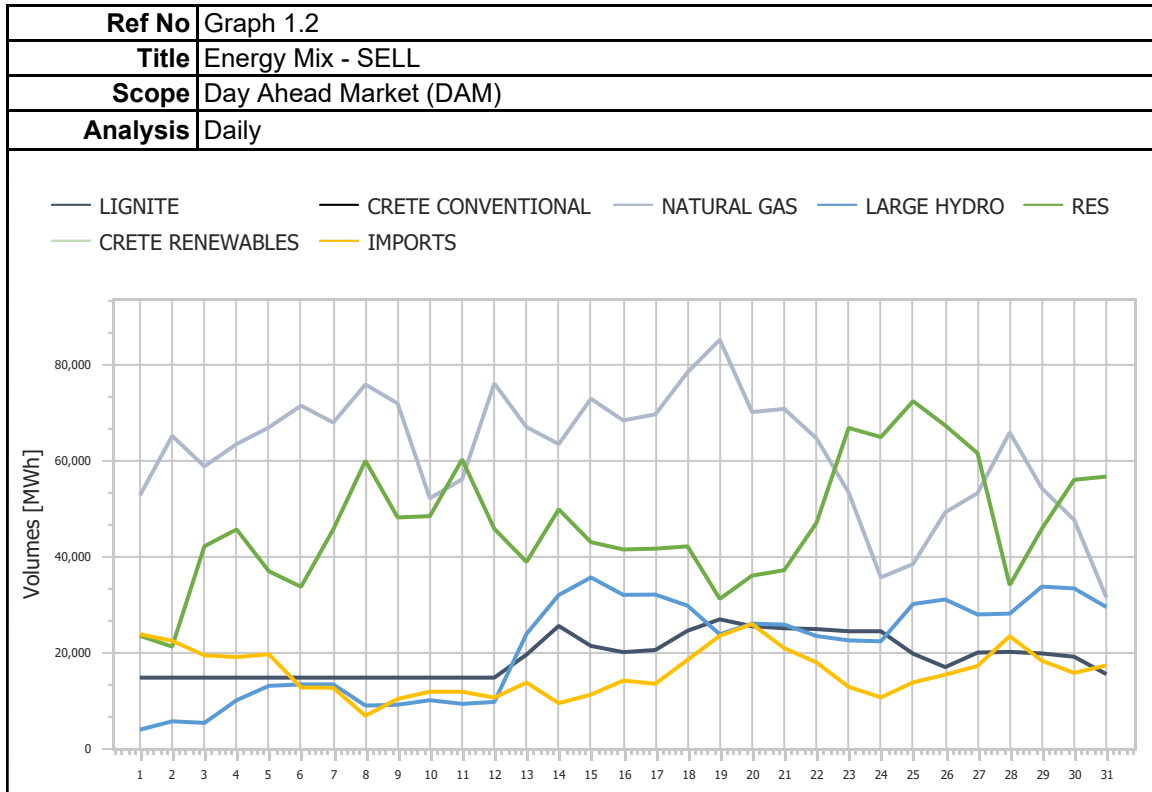
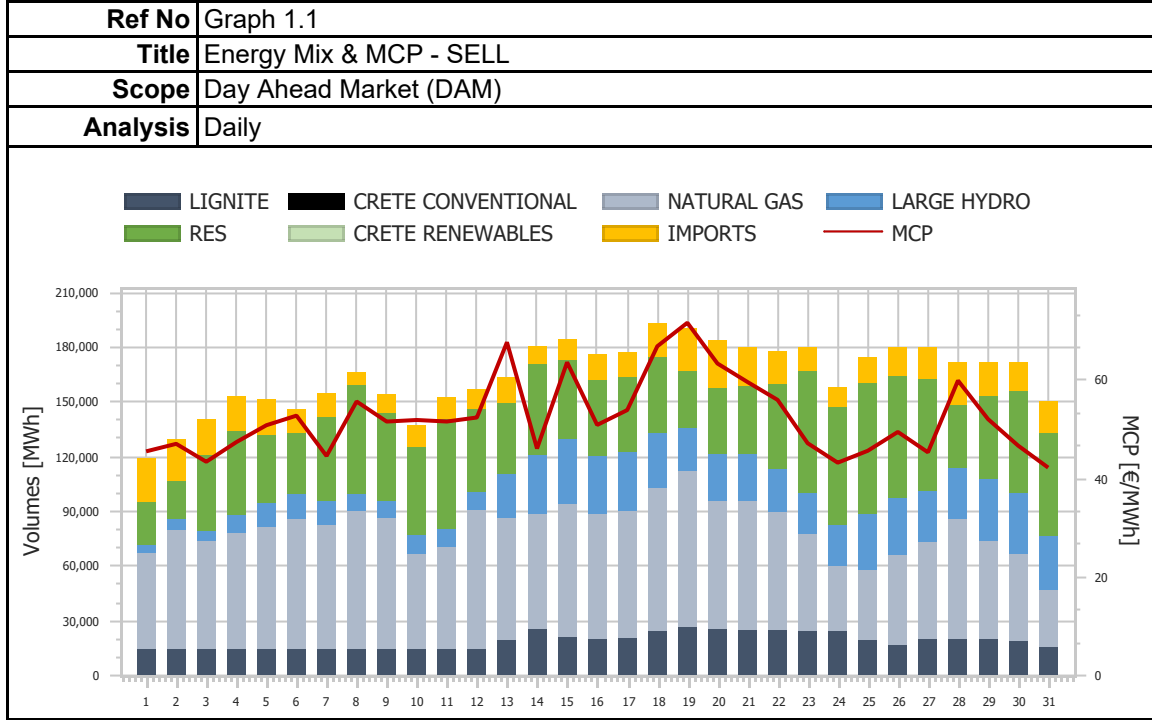
Monthly - Public - 2

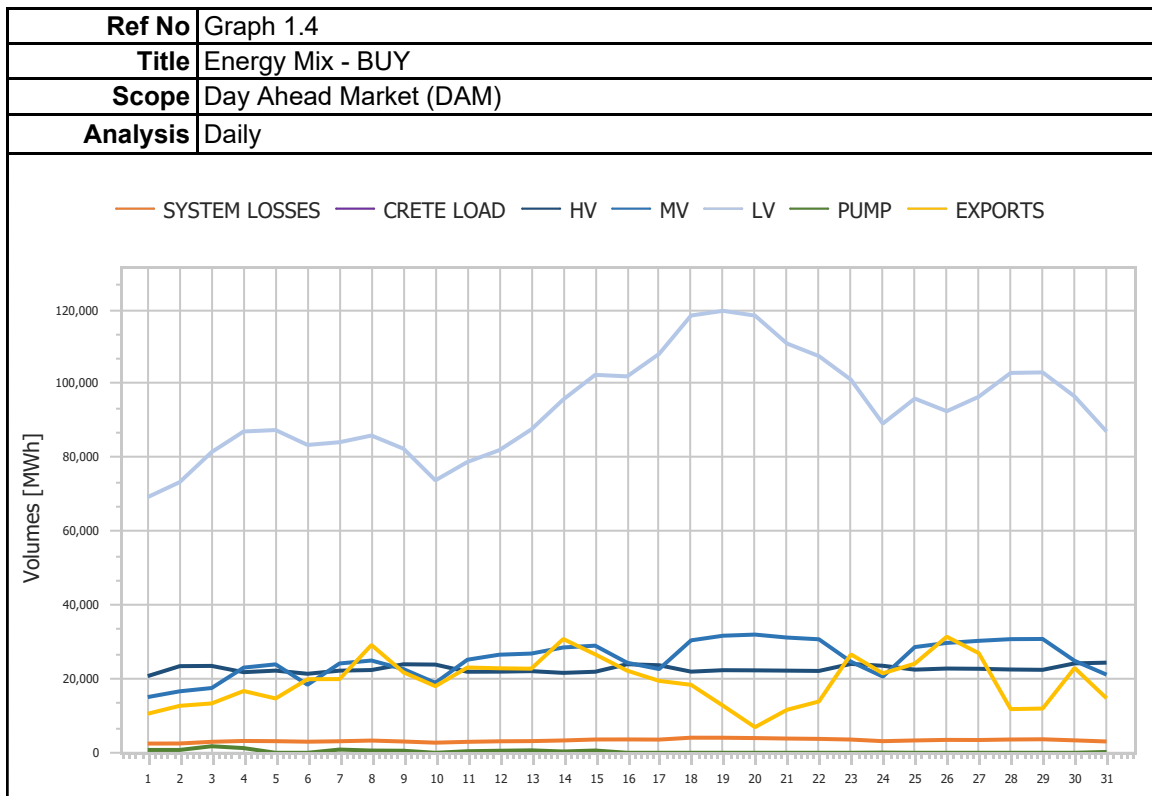
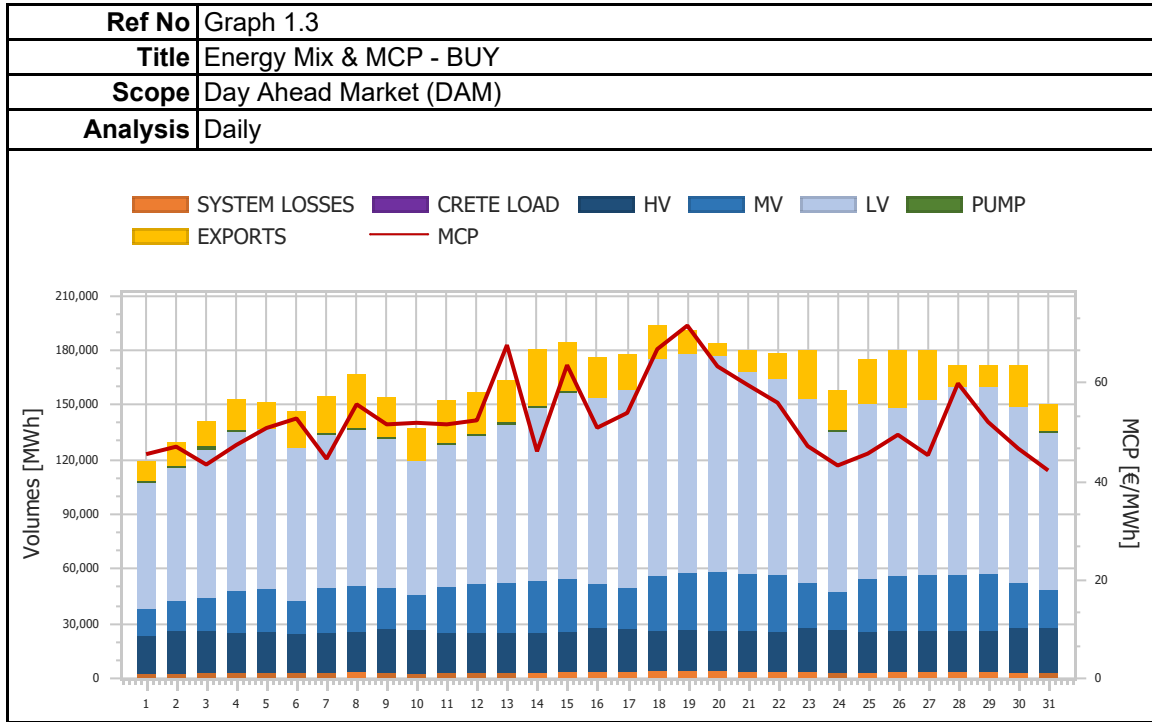
01-2021



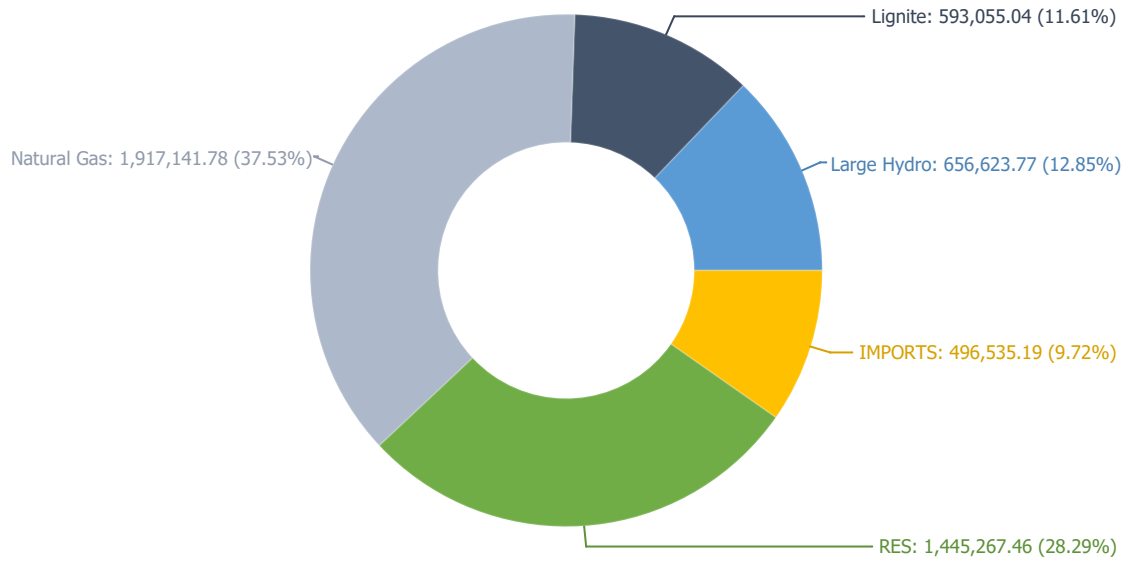
ΡΥΘΜΙΣΤΙΚΗ ΑΡΧΗ ΕΝΕΡΓΕΙΑΣ
REGULATORY AUTHORITY FOR ENERGY

1. Day Ahead Market (DAM)

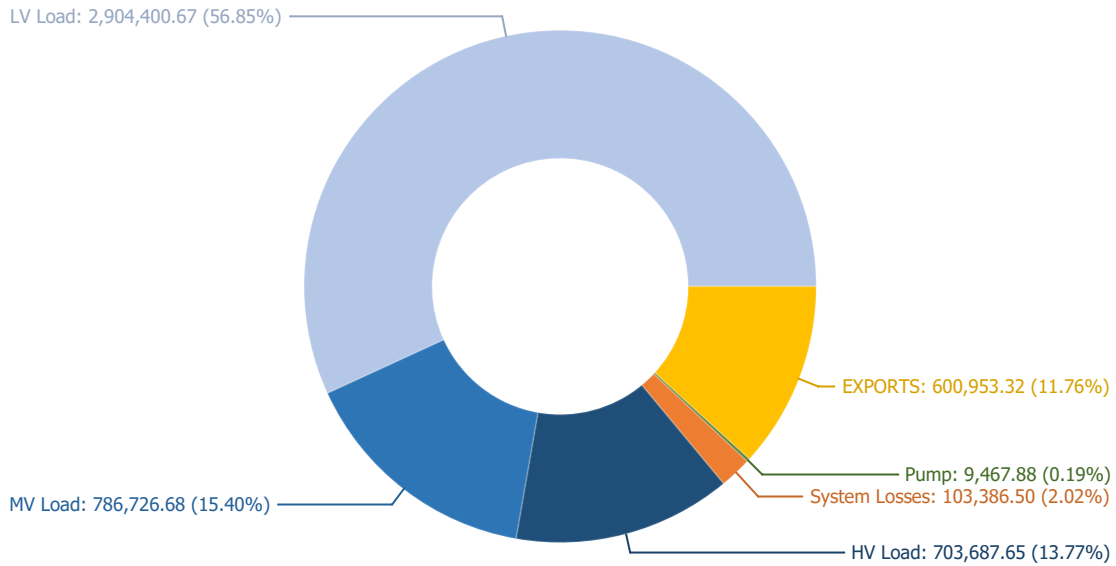




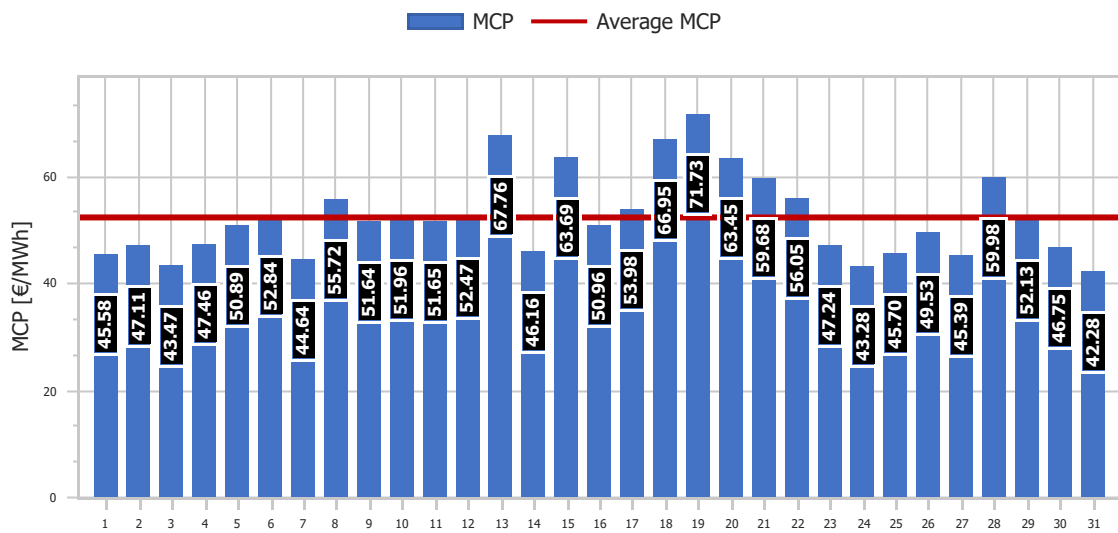
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Title	Energy Mix - SELL
Scope	Day Ahead Market (DAM)
Analysis	Daily



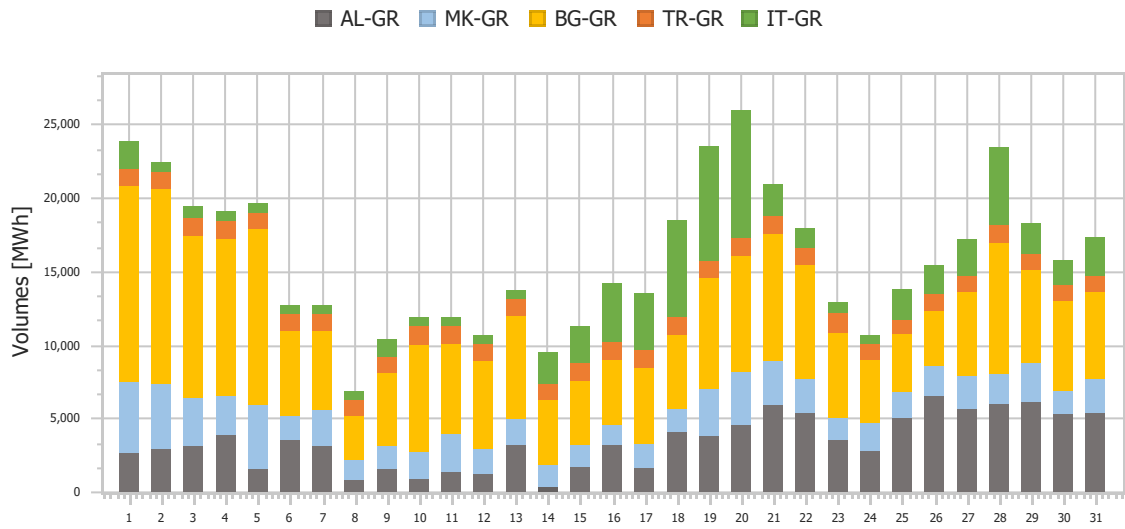
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Title	Energy Mix - BUY
Scope	Day Ahead Market (DAM)
Analysis	Daily



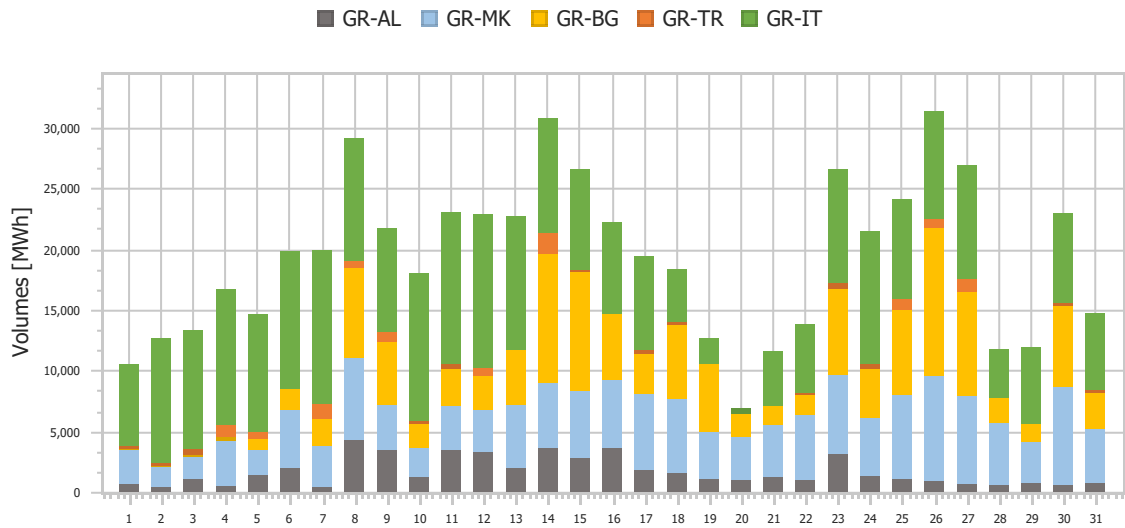
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Title	Market Clearing Price (MCP)
Scope	Day Ahead Market (DAM)
Analysis	Daily



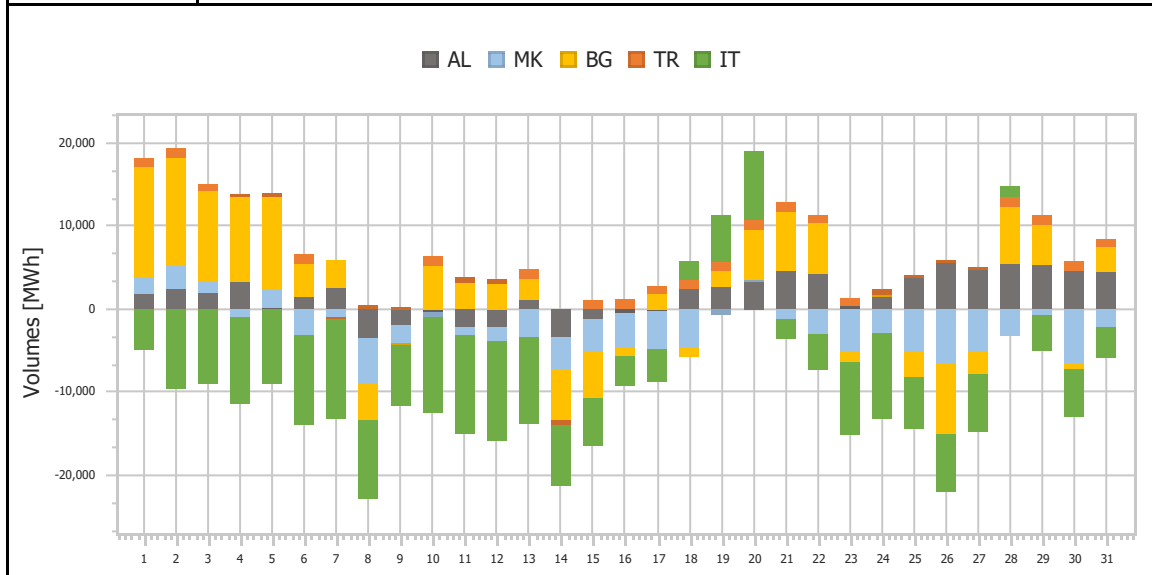
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Title	Imports per Border
Scope	Day Ahead Market (DAM)
Analysis	Daily



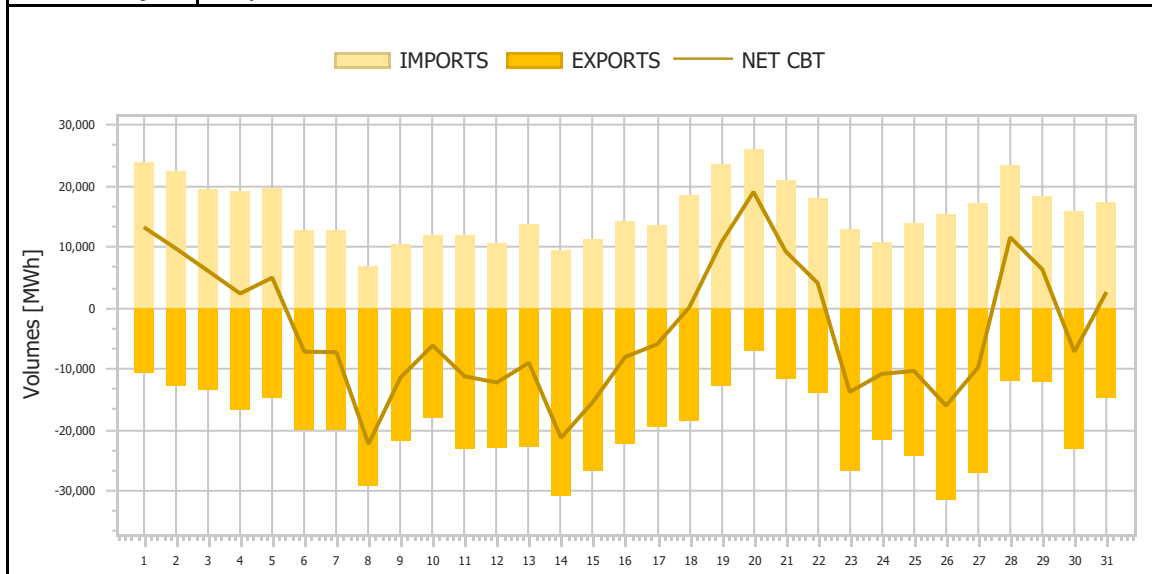
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Title	Exports per Border
Scope	Day Ahead Market (DAM)
Analysis	Daily



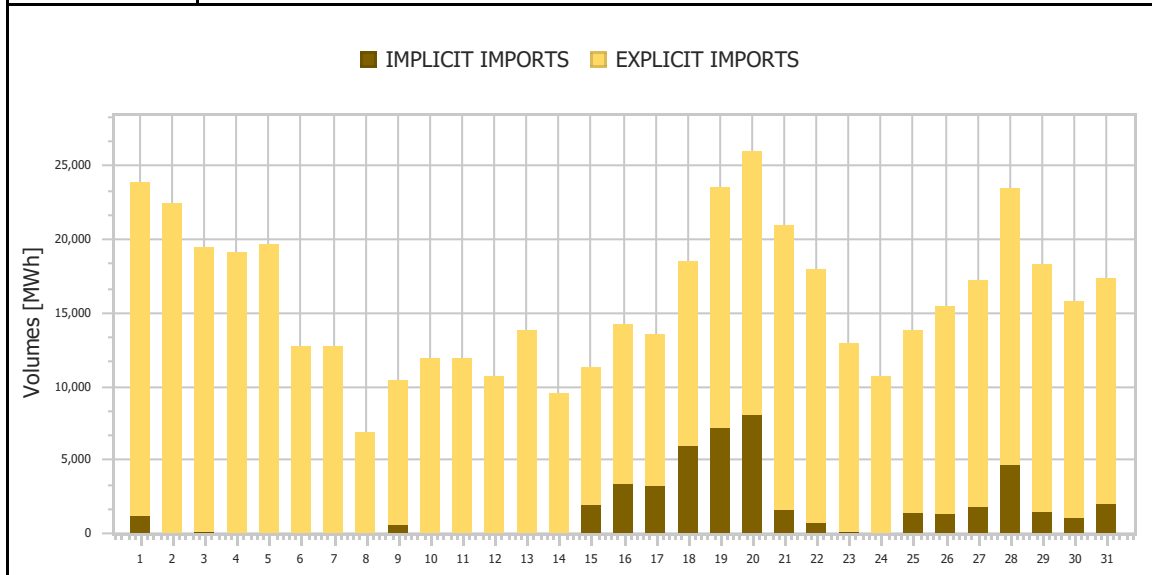
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Title	Net Imports per Border
Scope	Day Ahead Market (DAM)
Analysis	Daily



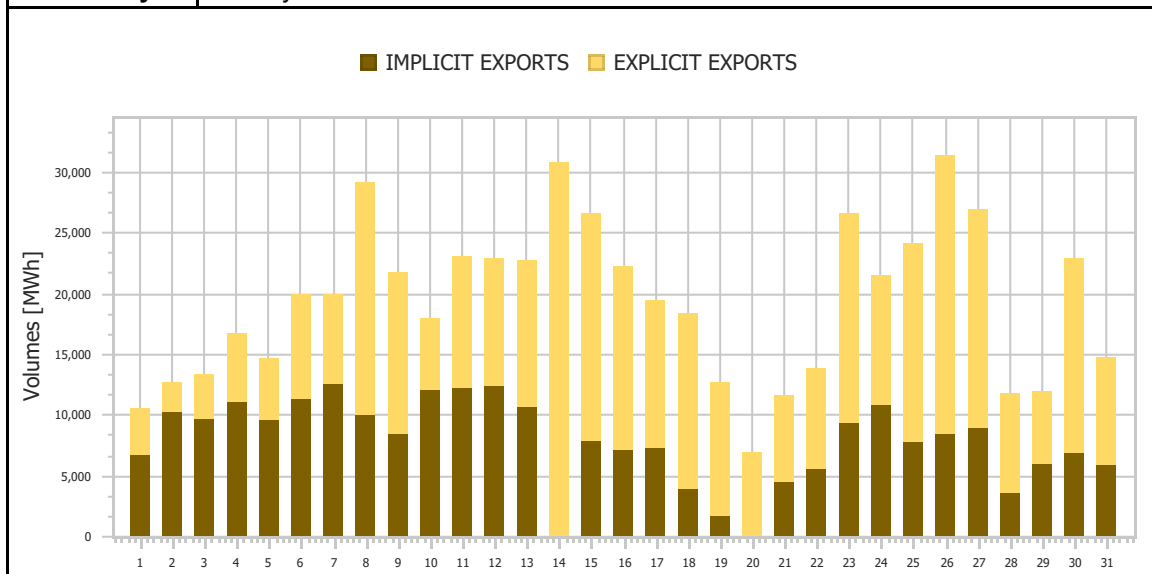
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Title	Total Imports & Exports
Scope	Day Ahead Market (DAM)
Analysis	Daily



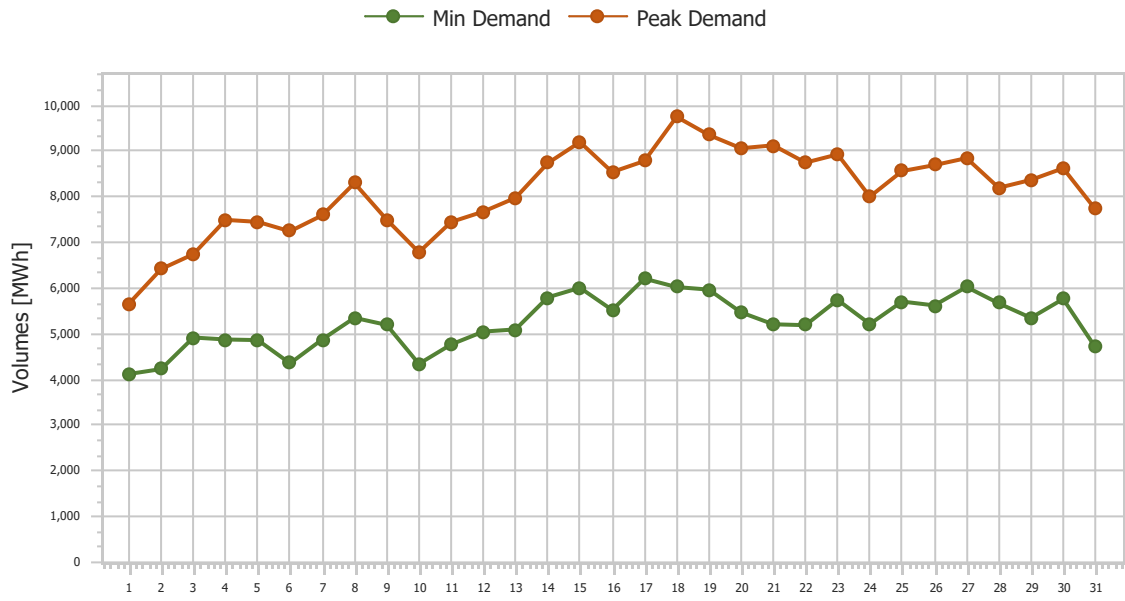
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Title	Imports (Implicit/Explicit)
Scope	Day Ahead Market (DAM)
Analysis	Daily



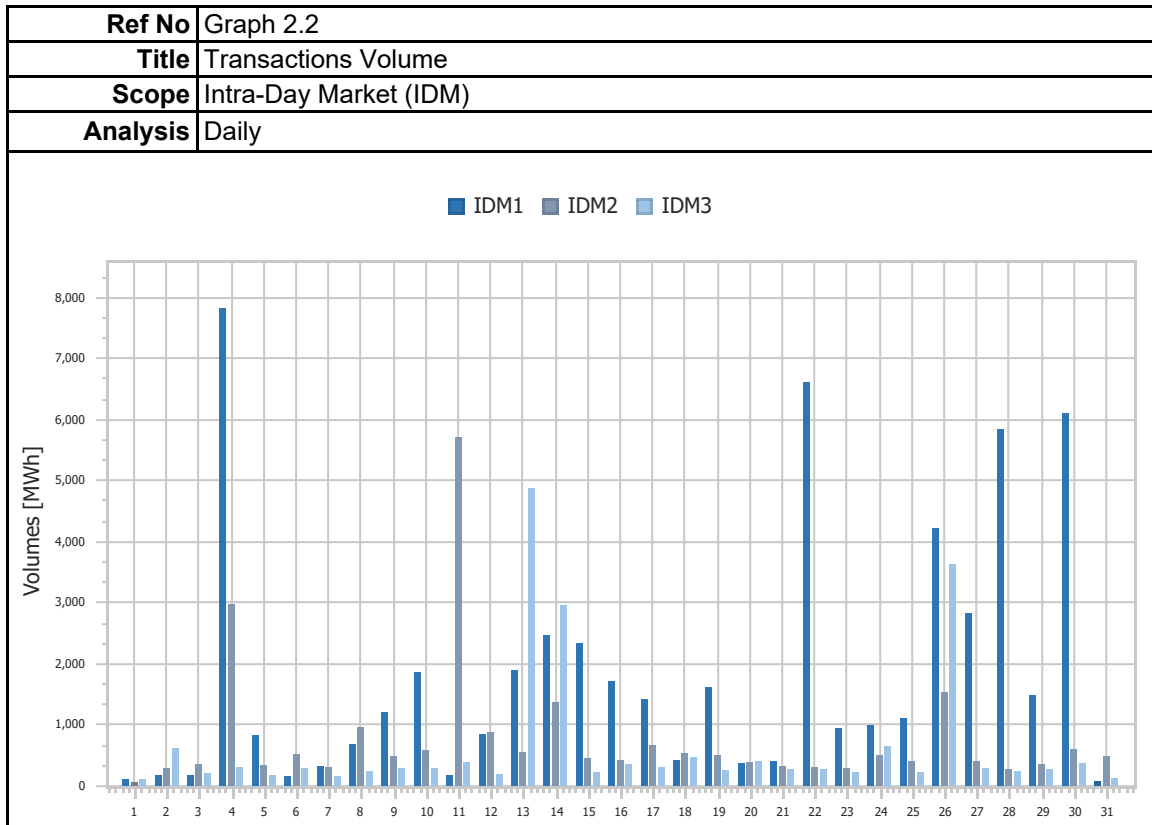
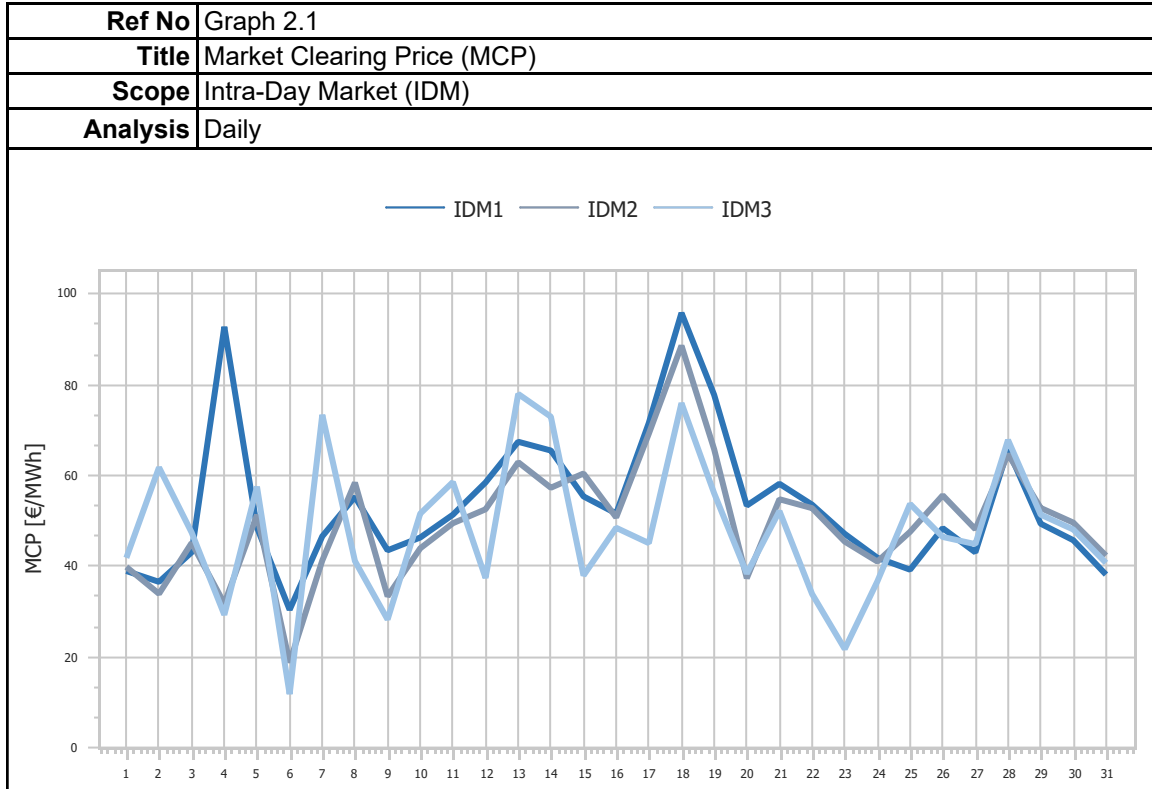
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Title	Exports (Implicit/Explicit)
Scope	Day Ahead Market (DAM)
Analysis	Monthly

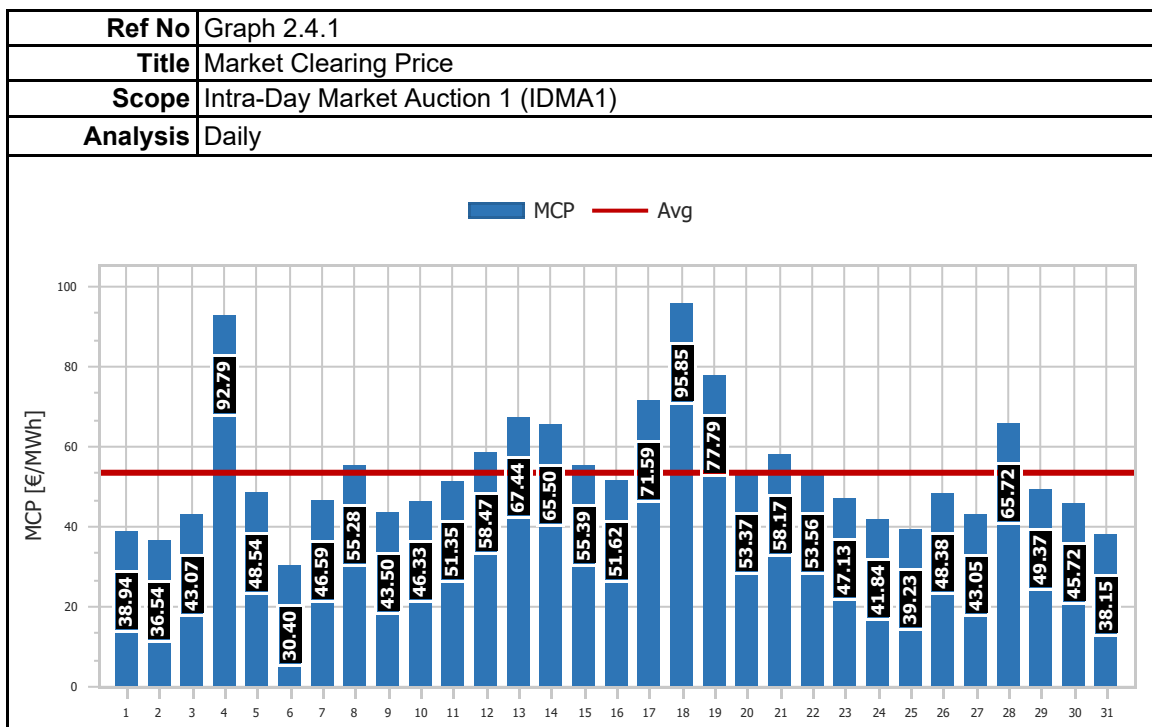
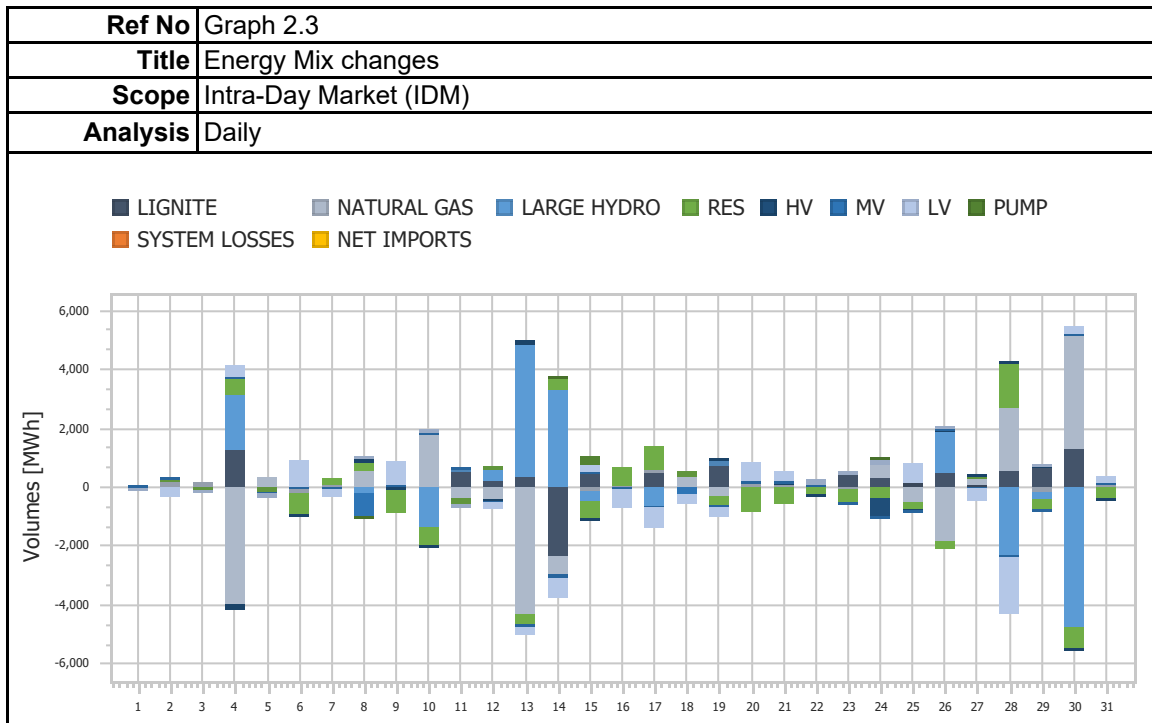


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Title	Min & Peak Demand
Scope	Day Ahead Market (DAM)
Analysis	Daily

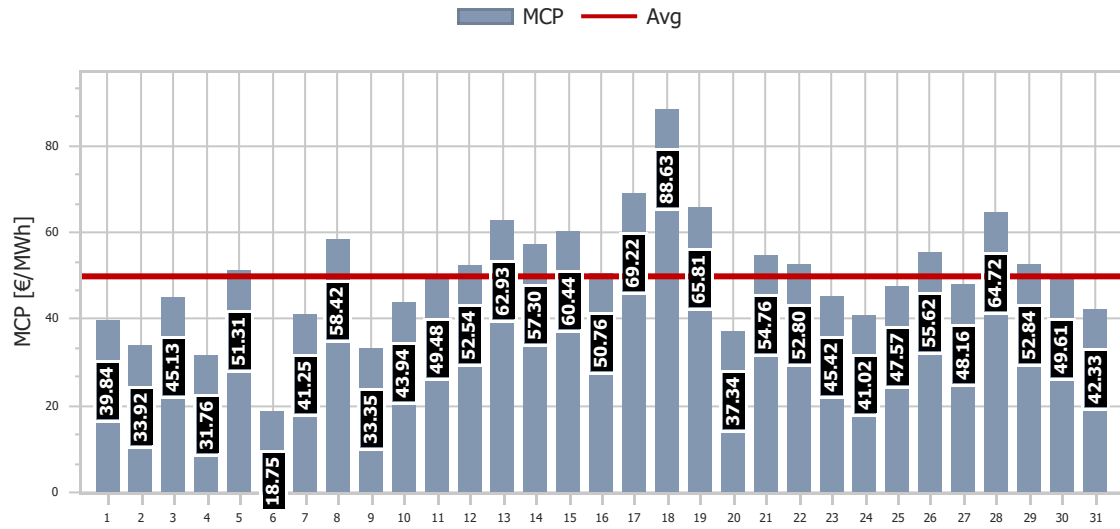


2. Intra-Day Market (IDM)

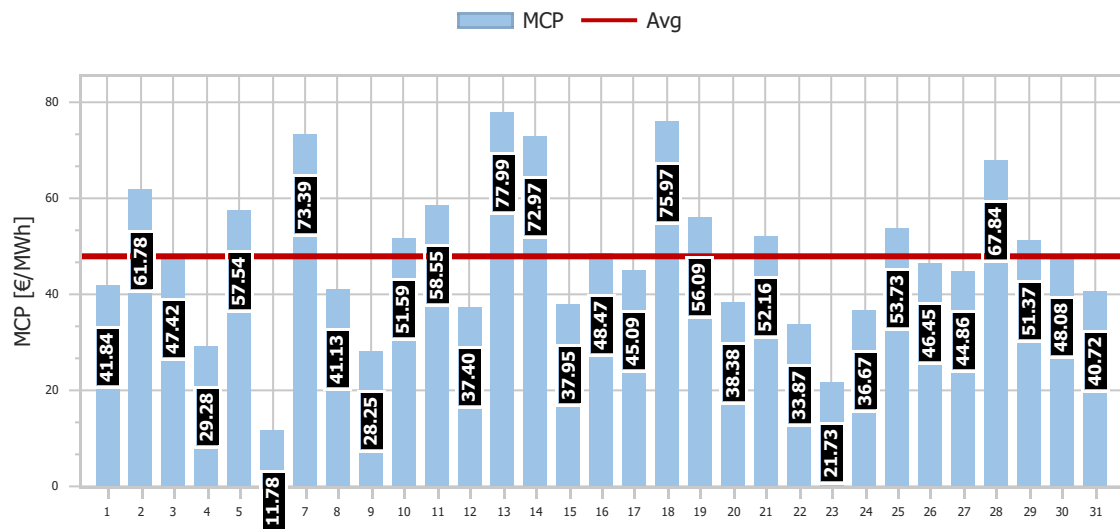




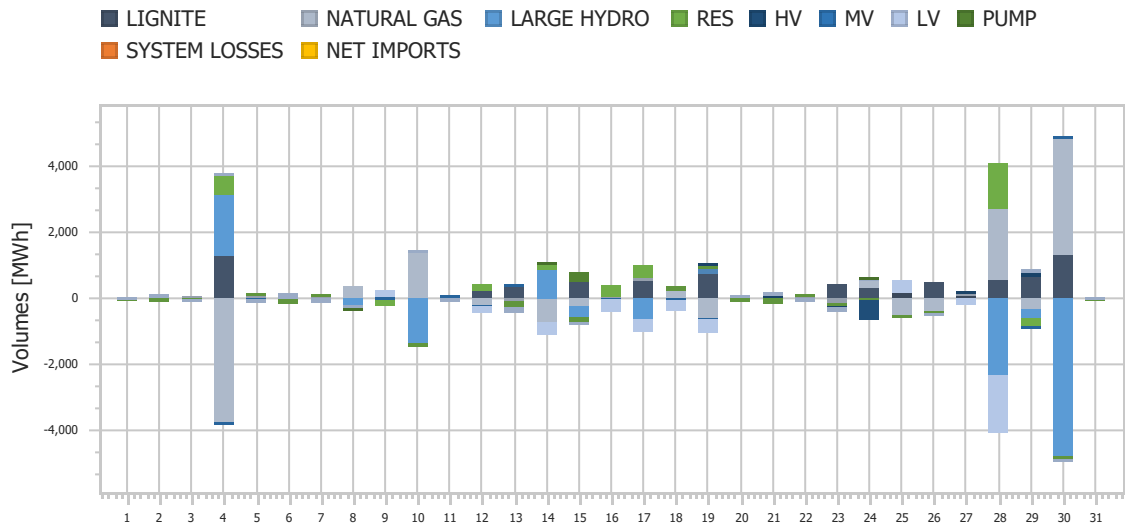
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Title	Market Clearing Price
Scope	Intra-Day Market Auction 2 (IDMA2)
Analysis	Daily



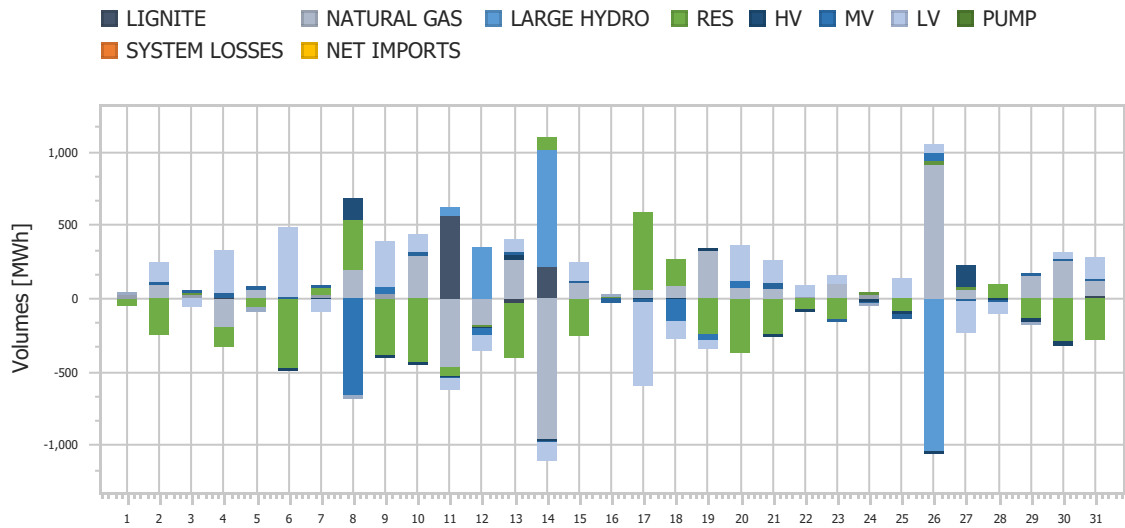
Ref No	Graph 2.4.3
Title	Market Clearing Price
Scope	Intra-Day Market Auction 3 (IDMA3)
Analysis	Daily



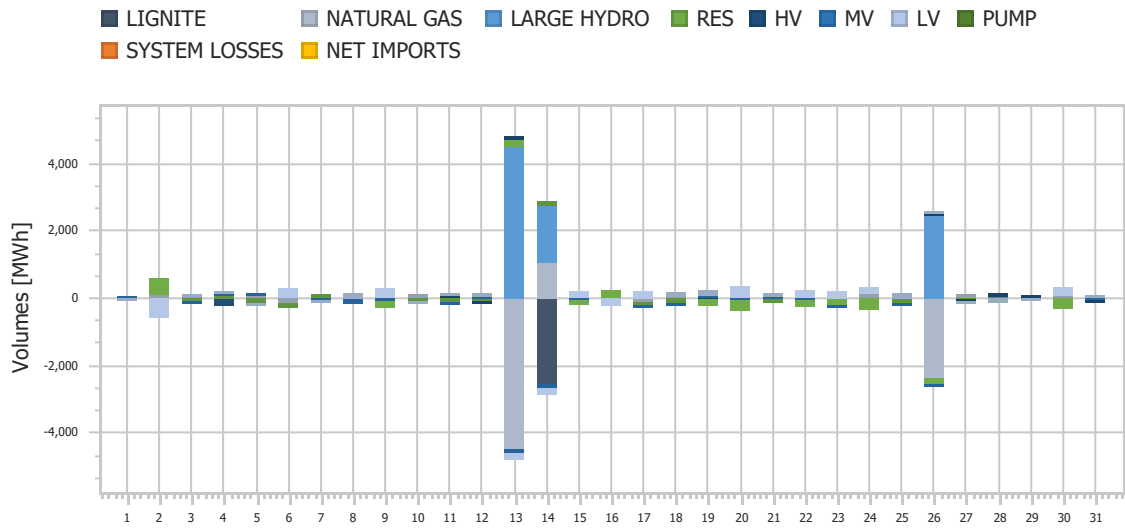
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Title	IDM Energy Mix Changes
Scope	Intra-Day Market Auction 1 (IDMA1)
Analysis	Daily



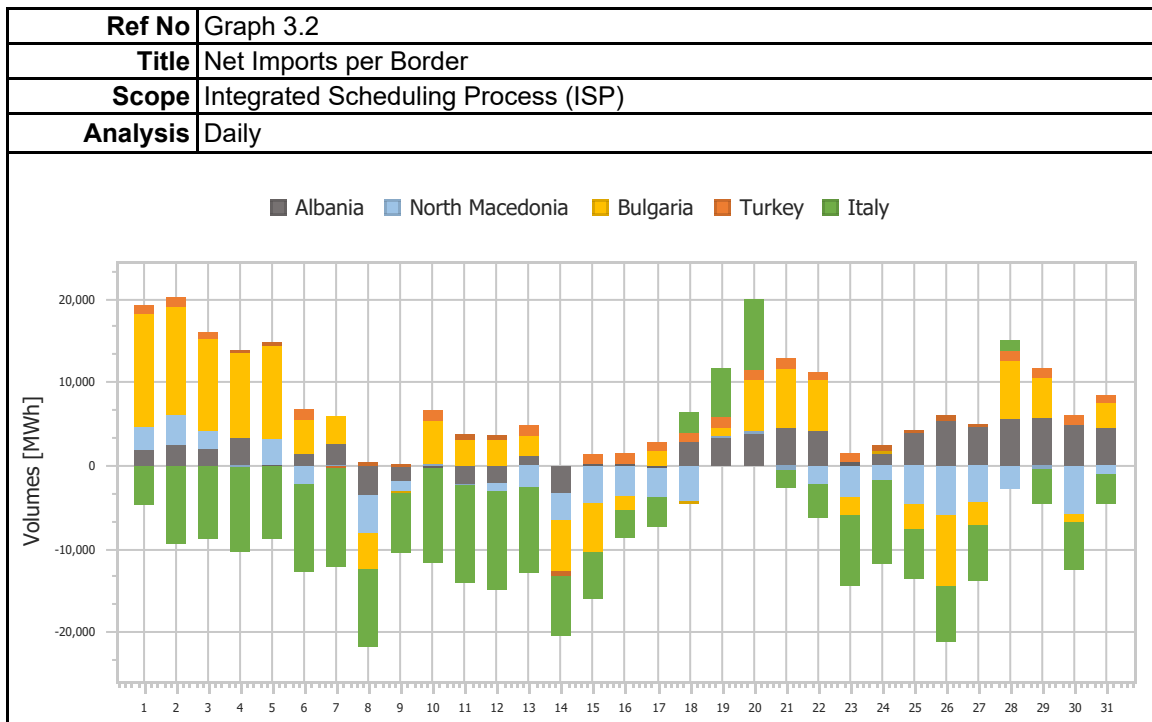
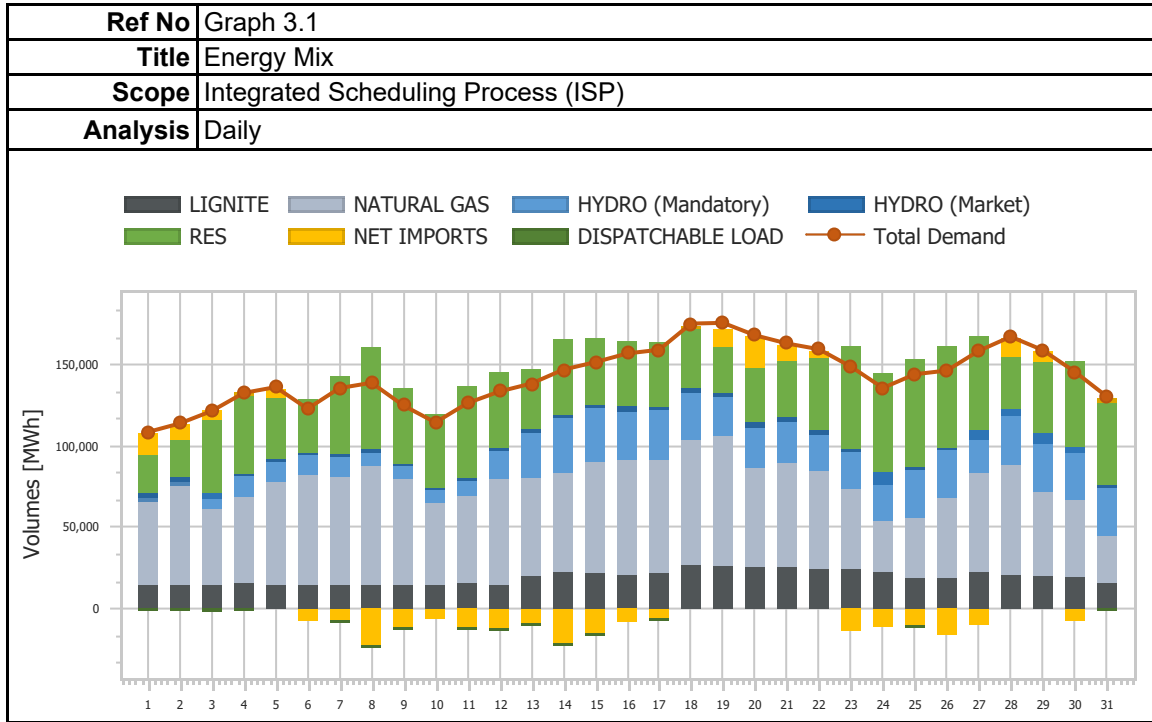
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Scope	Intra-Day Market Auction 2 (IDMA2)
Analysis	Daily



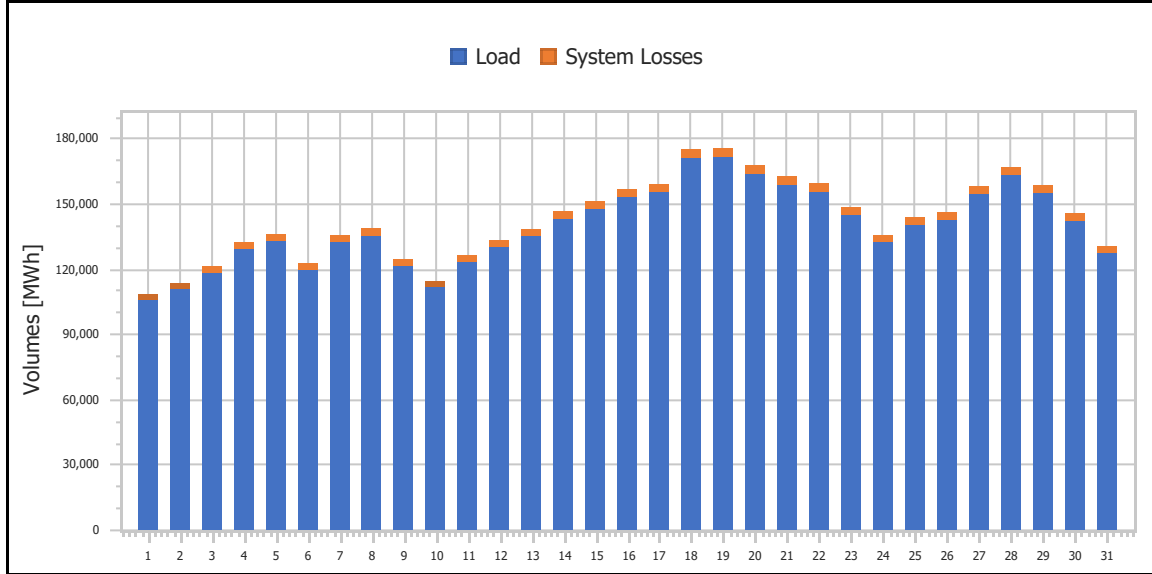
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Title	IDM Energy Mix Changes
Scope	Intra-Day Market Auction 3 (IDMA3)
Analysis	Daily



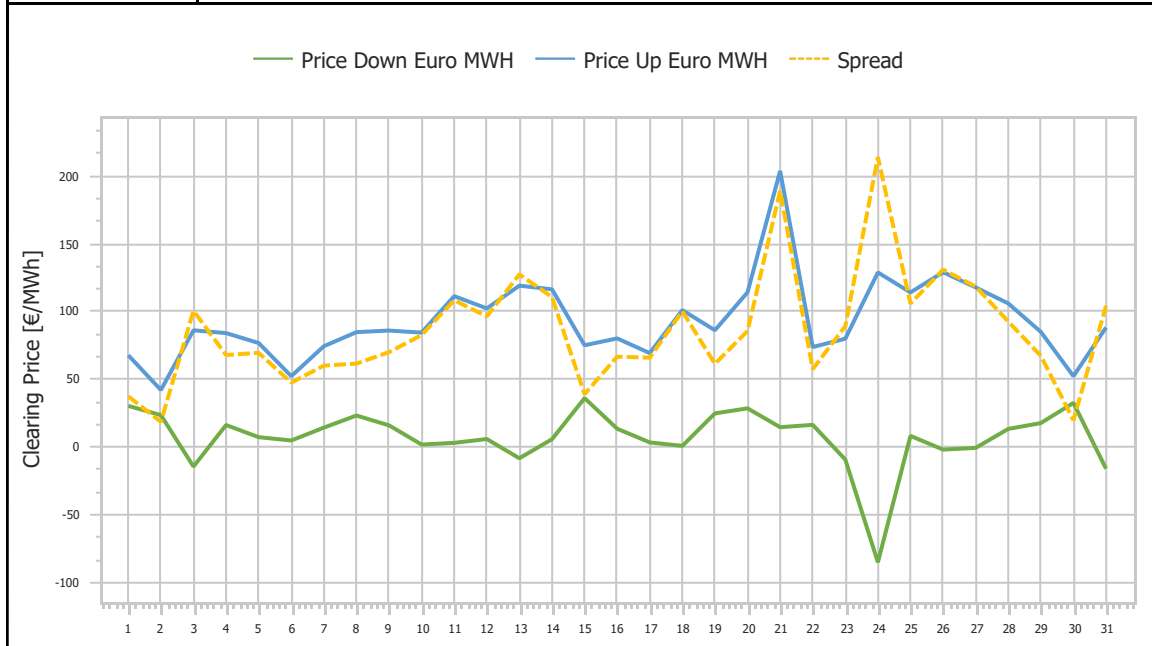
3. Integrated Scheduling Process (ISP)



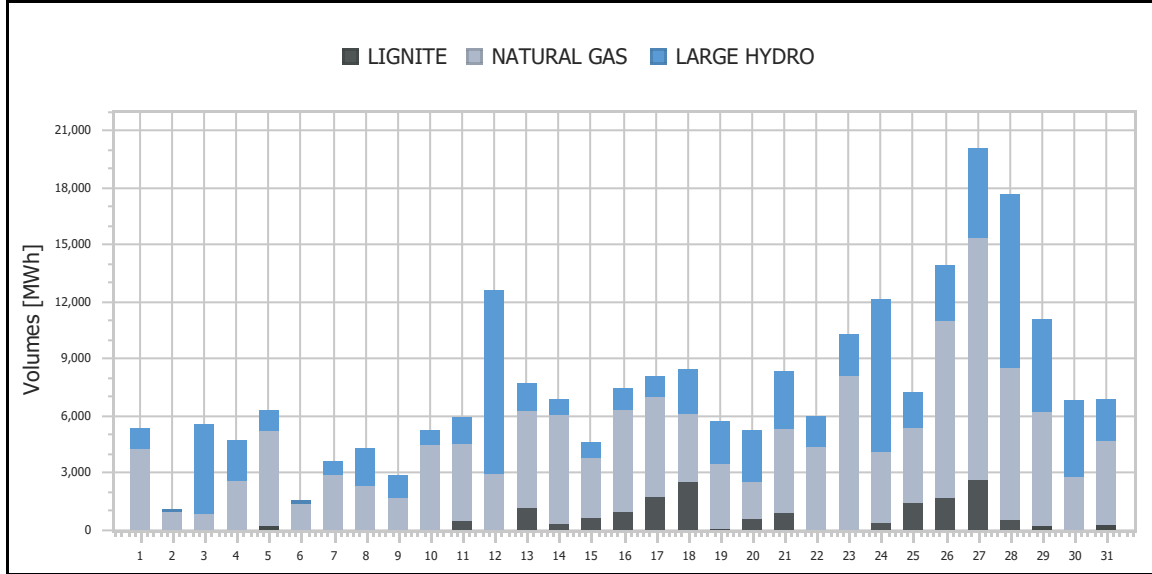
Ref No	Graph 3.3
Title	Demand & System Losses
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



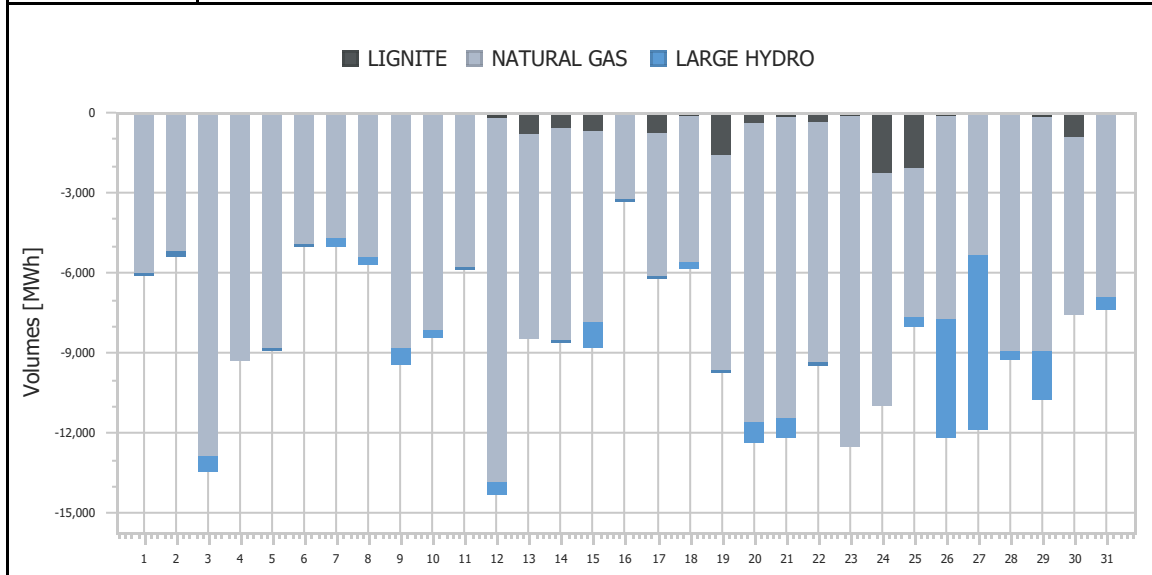
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Title	Clearing Prices
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



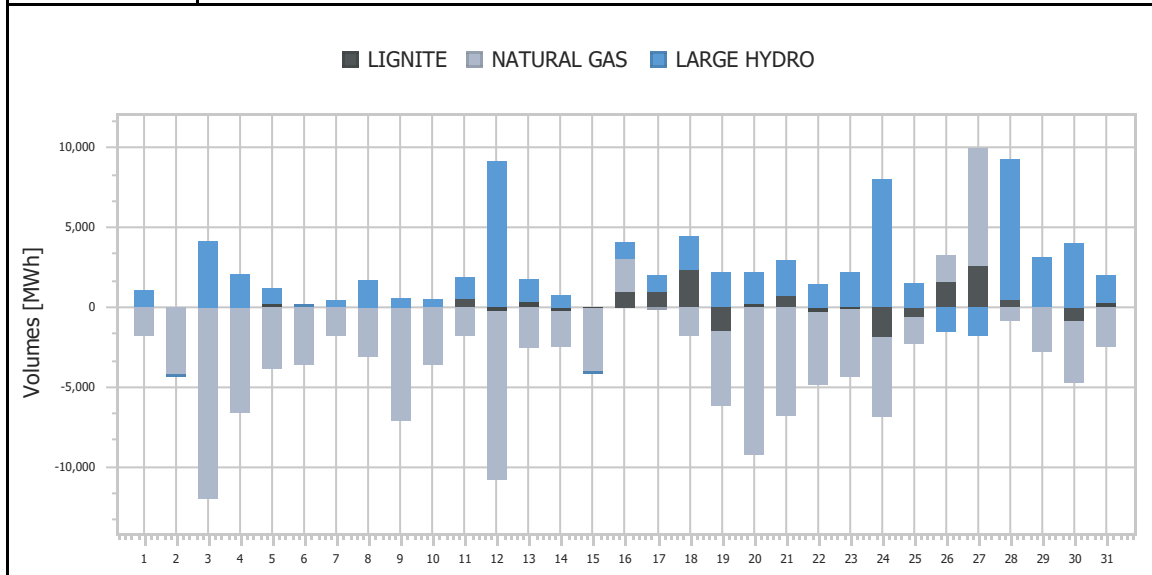
Ref No	Graph 3.5
Title	Upward Activated Balancing energy
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



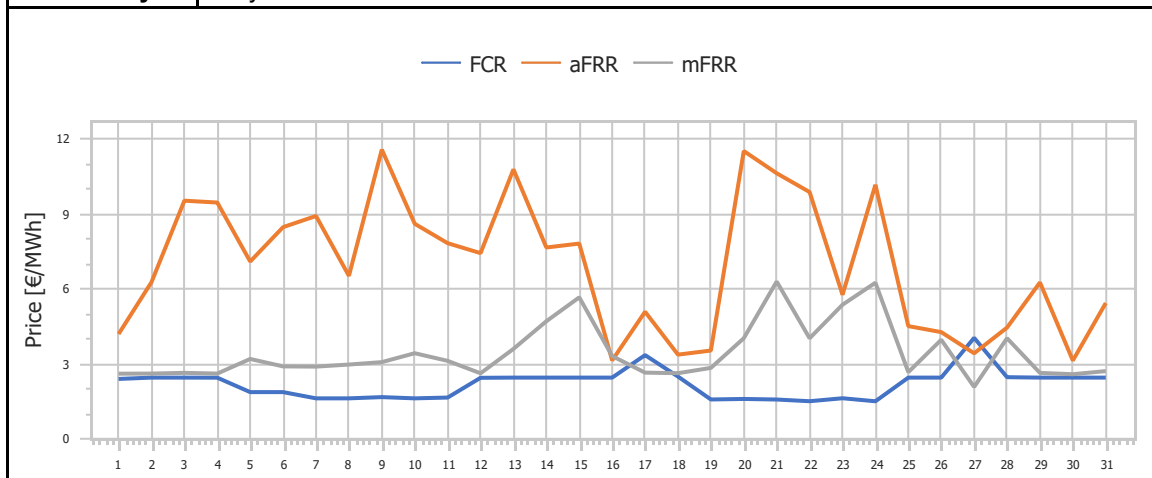
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Title	Downward Activated Balancing energy
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



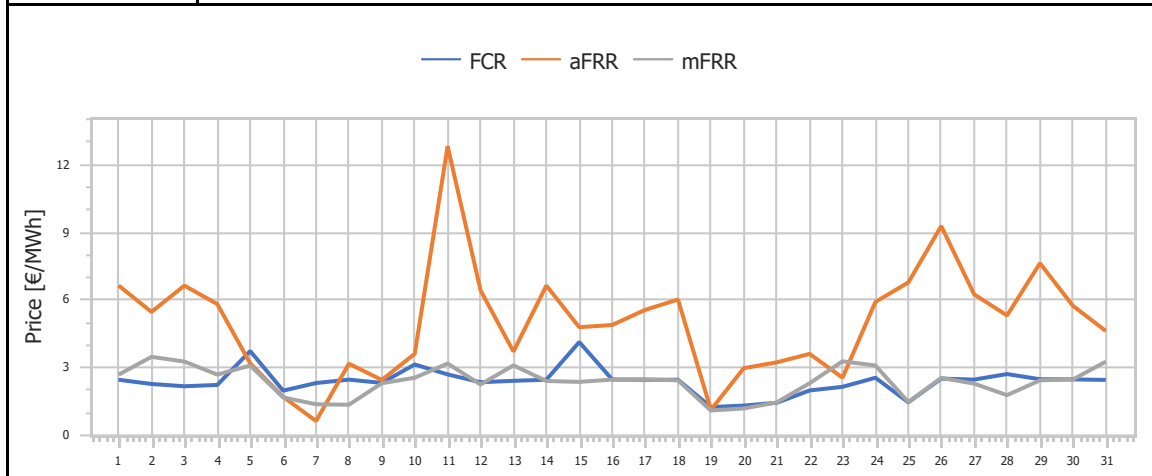
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Title	Net Activated Balancing energy
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



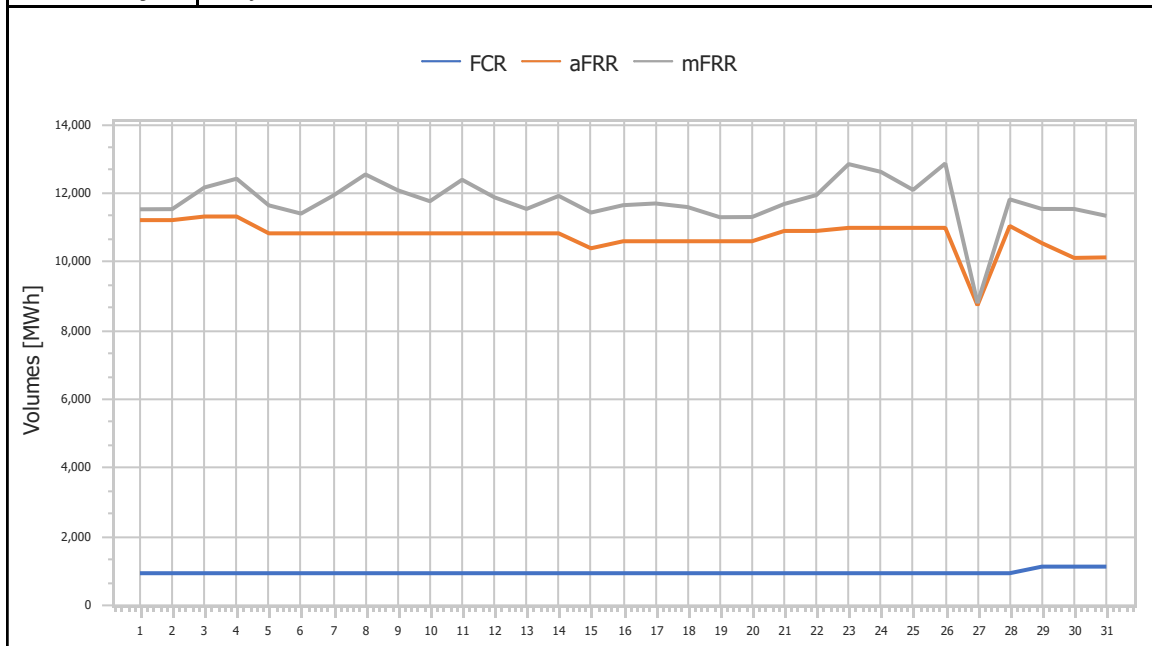
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Title	Upward Capacity Reserves Prices
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily

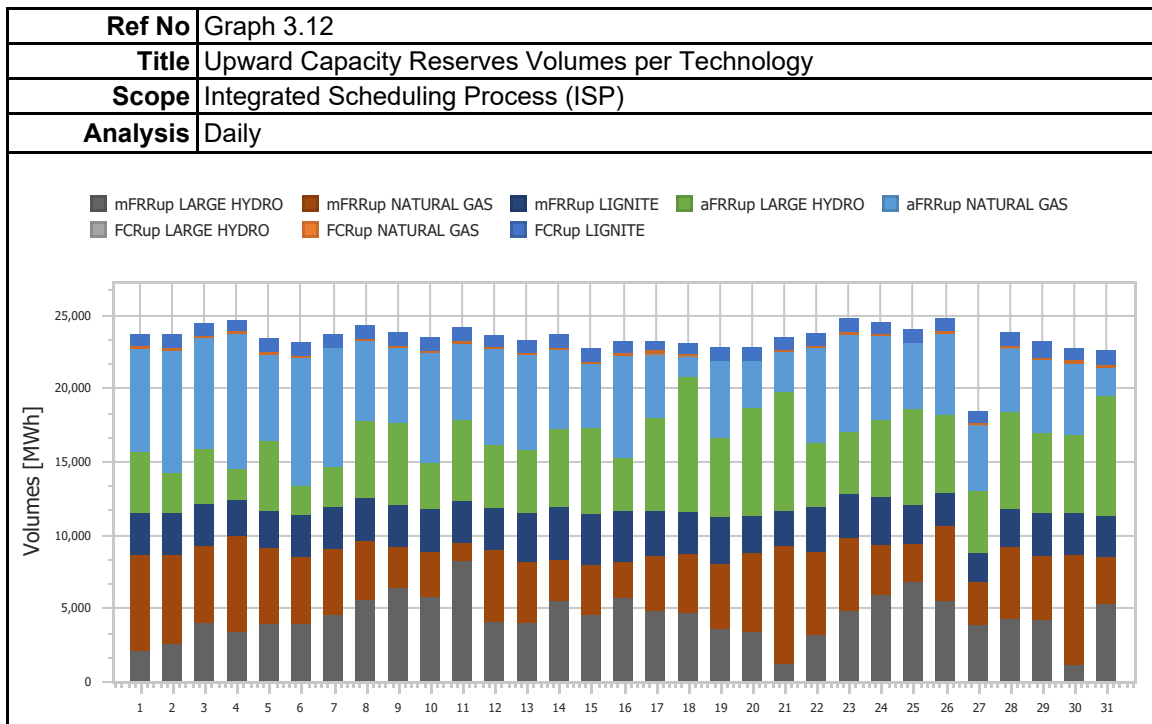
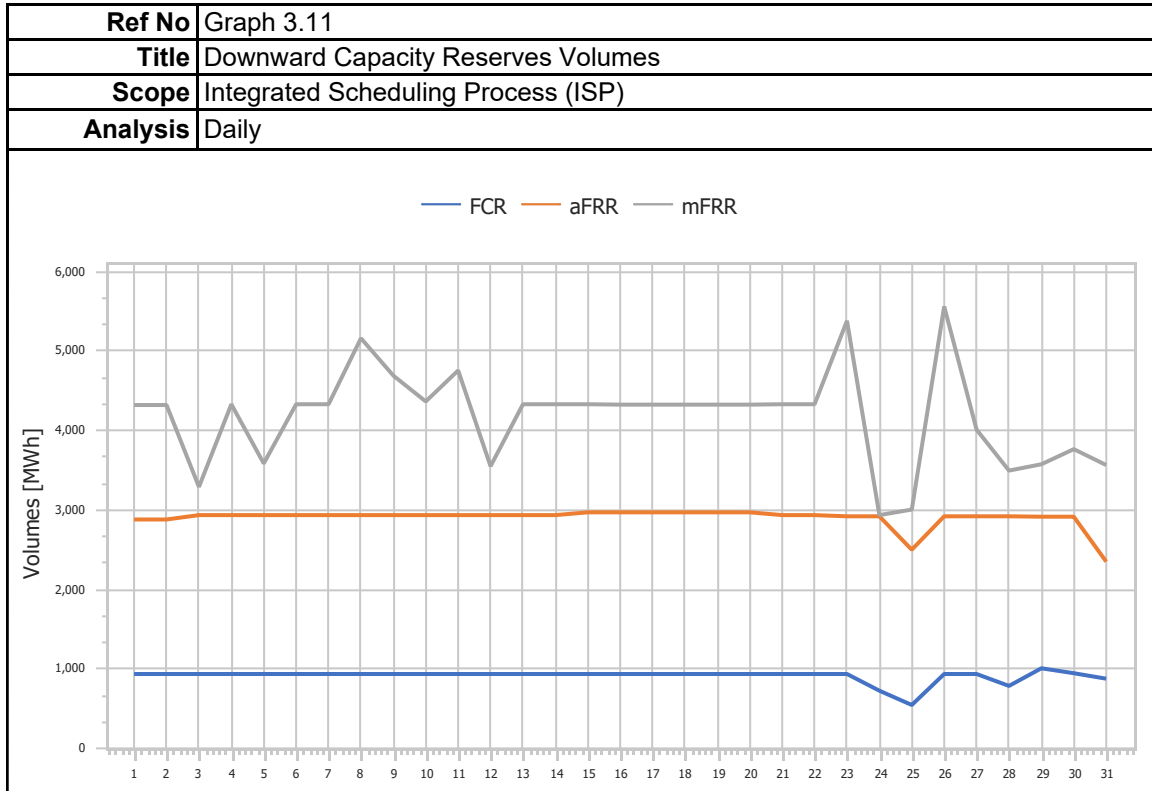


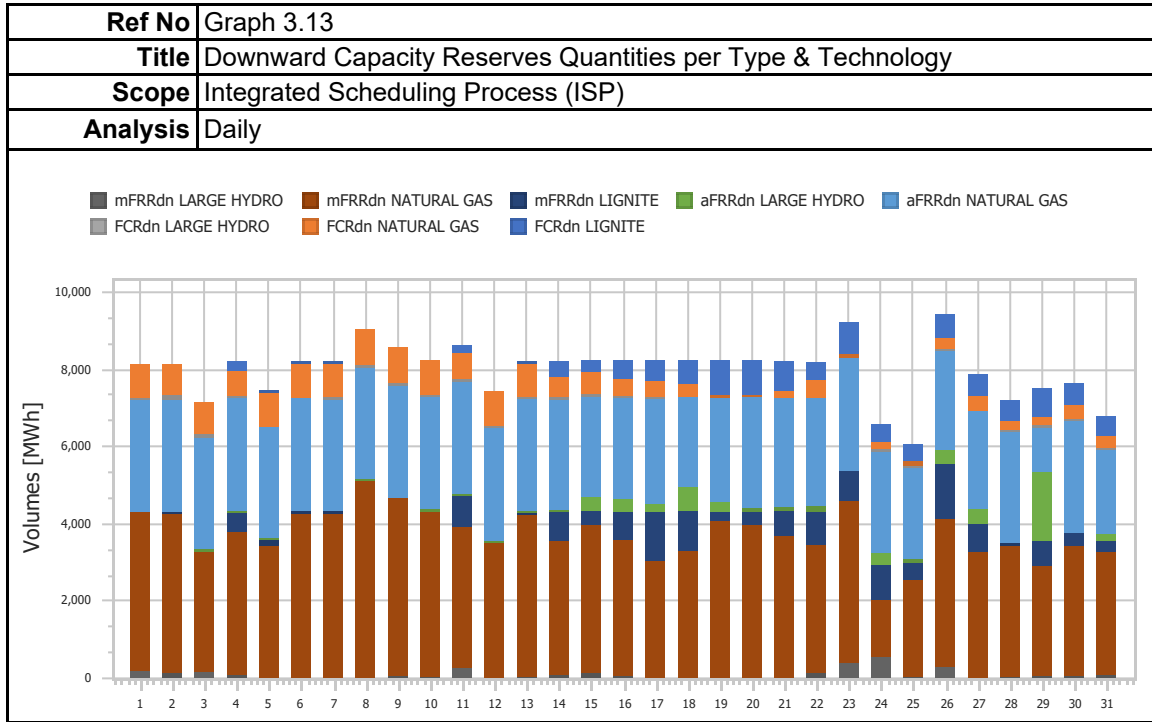
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Title	Downward Capacity Reserves Prices
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



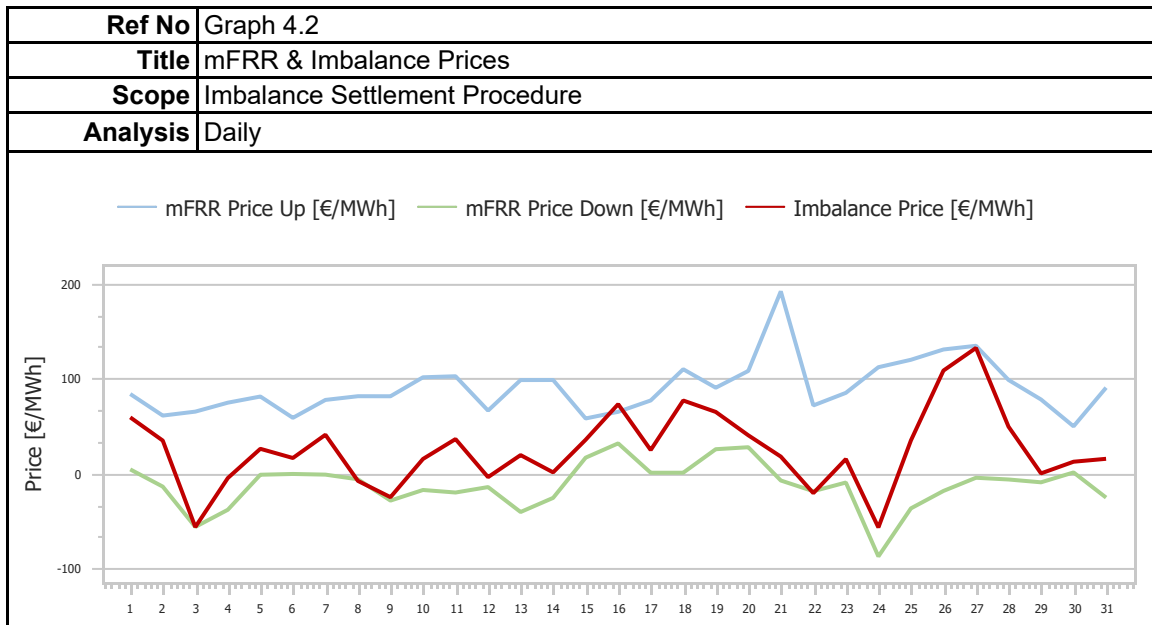
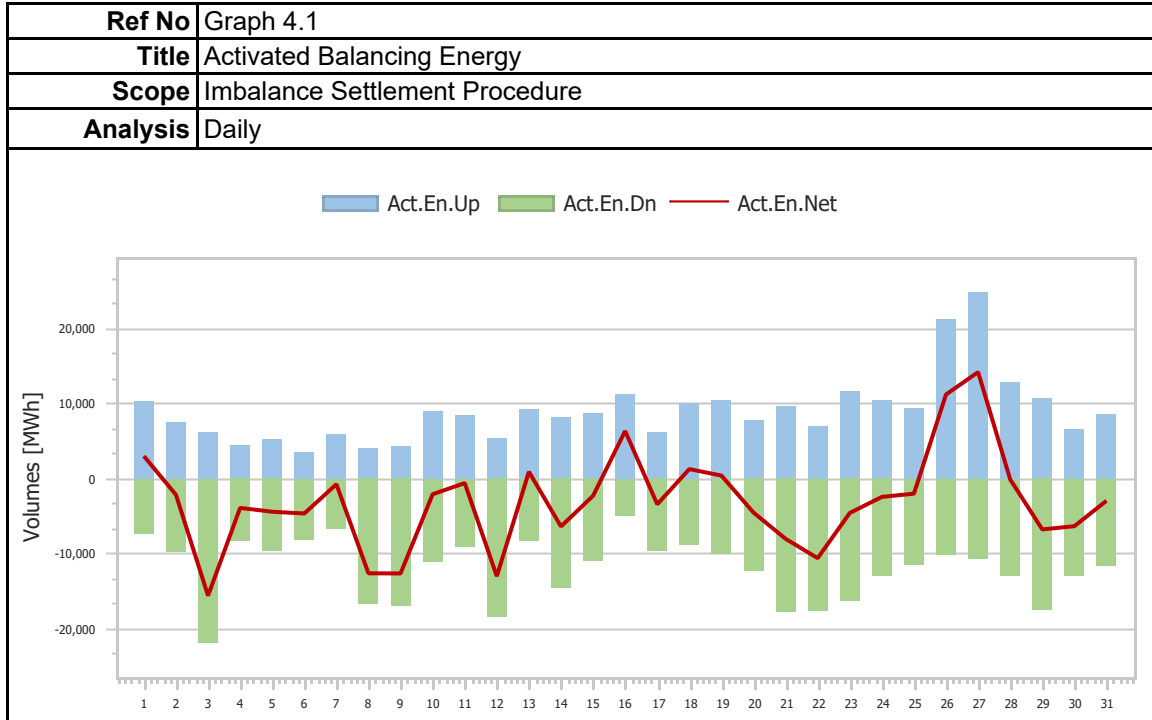
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Title	Upward Capacity Reserves Volumes
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



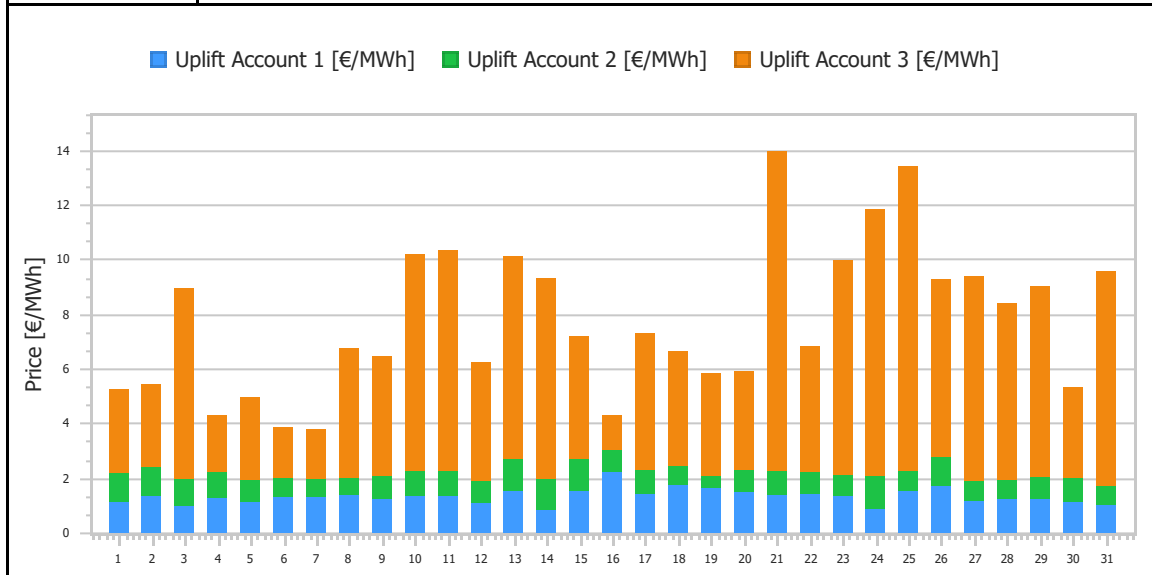




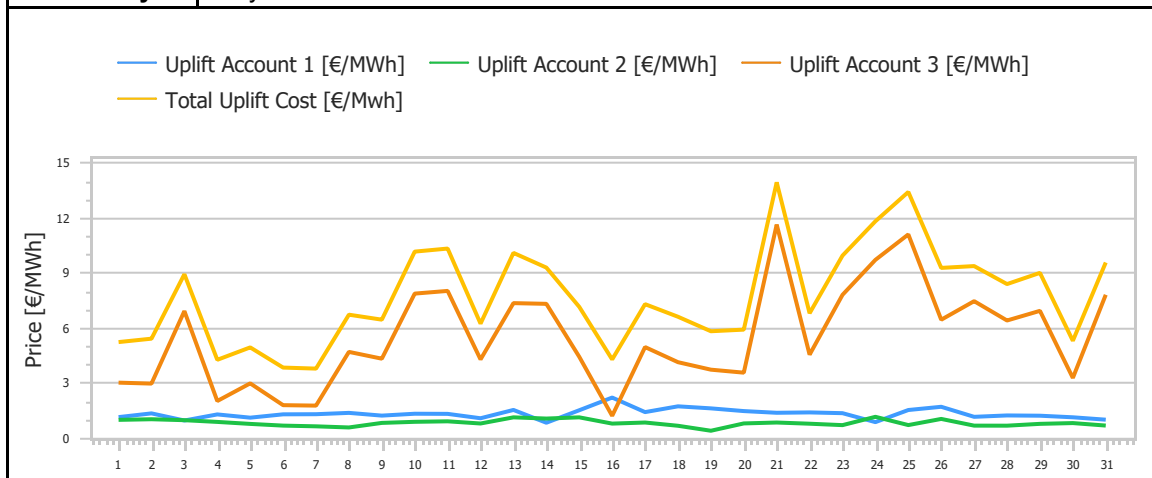
4. Imbalance Settlement Procedure



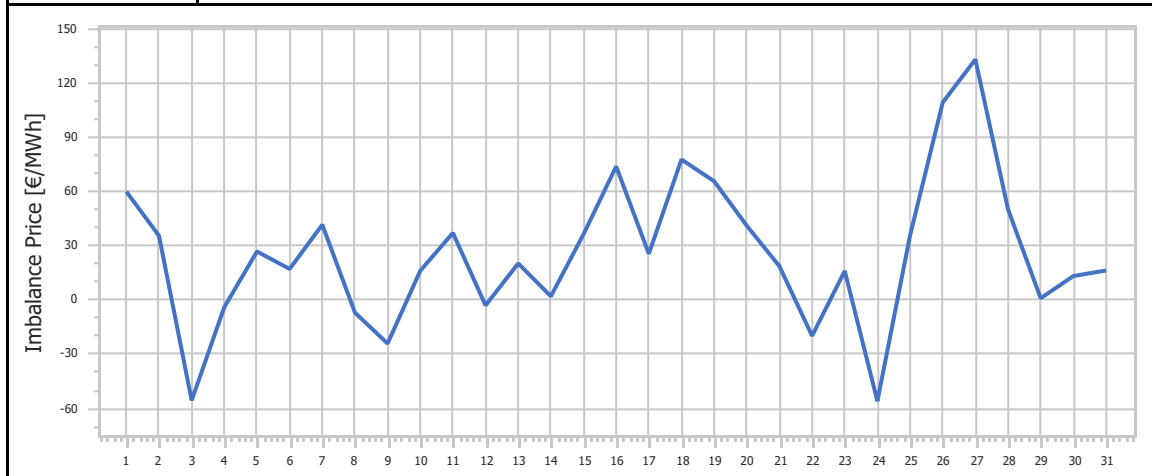
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Title	Uplift Accounts Cost
Scope	Imbalance Settlement Procedure
Analysis	Daily



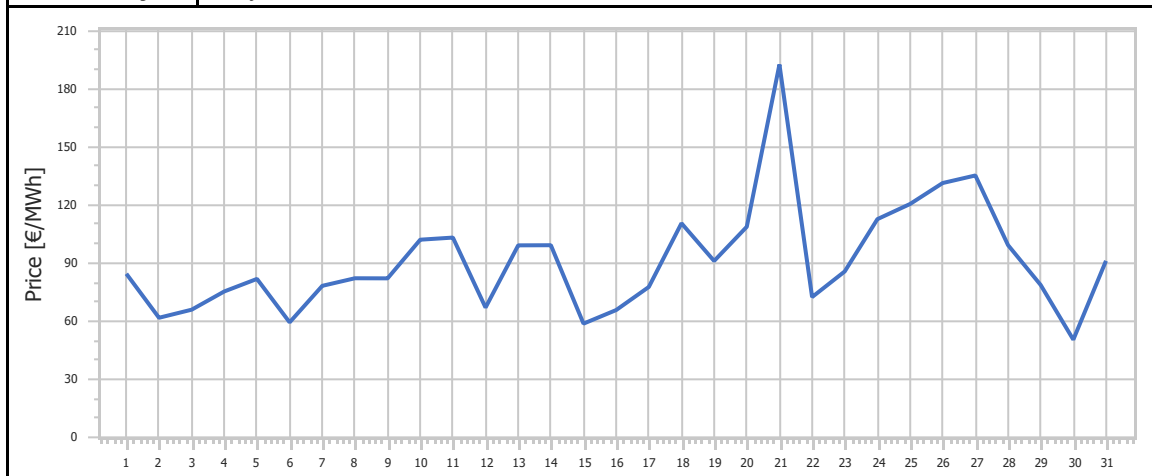
Ref No	Graph 4.4
Title	Uplift Accounts Cost
Scope	Imbalance Settlement Procedure
Analysis	Daily



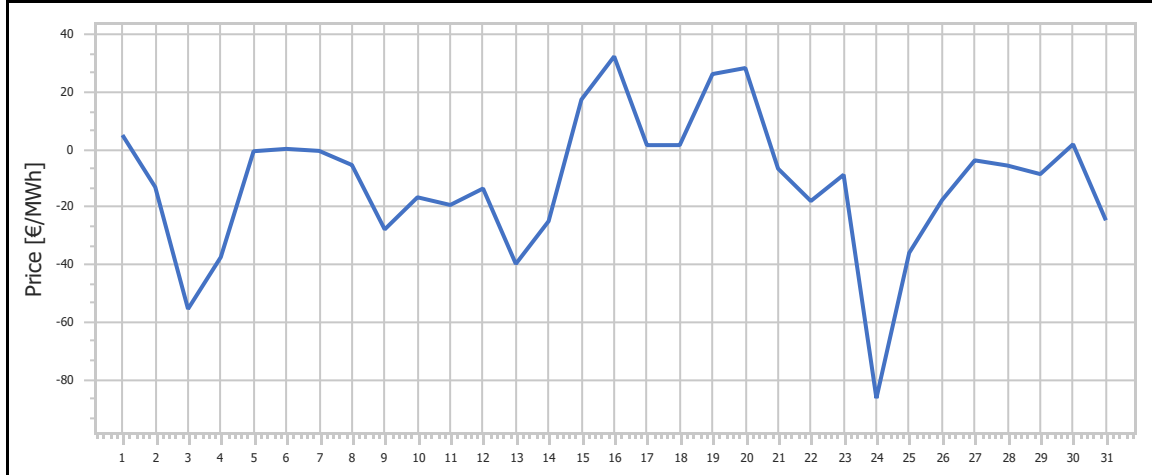
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Title	Imbalance Price
Scope	Imbalance Settlement Procedure
Analysis	Daily



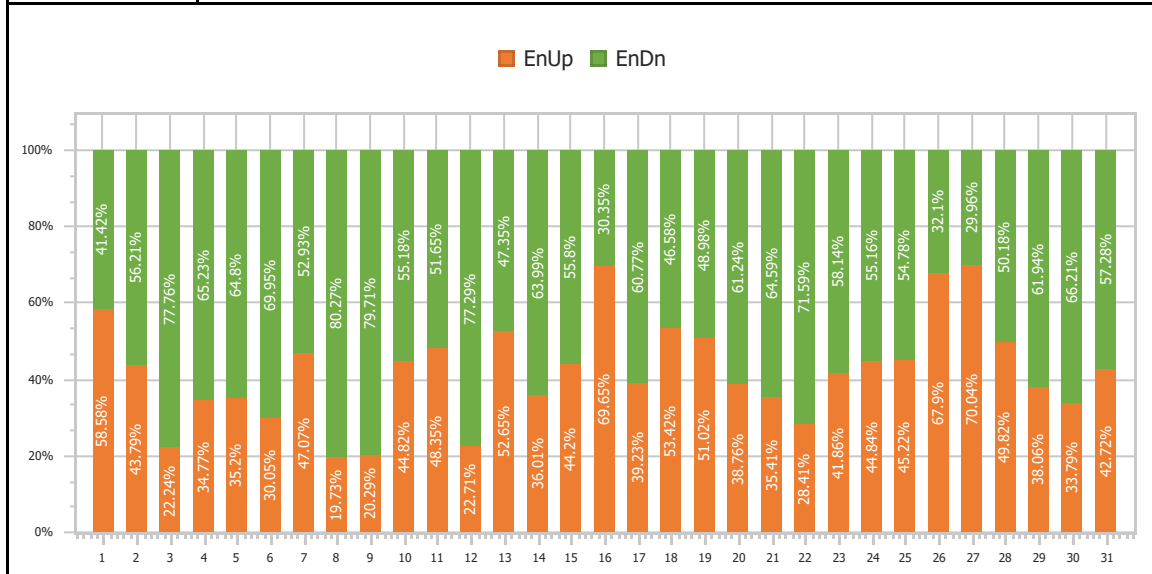
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Title	mFRR Up Price
Scope	Imbalance Settlement Procedure
Analysis	Daily



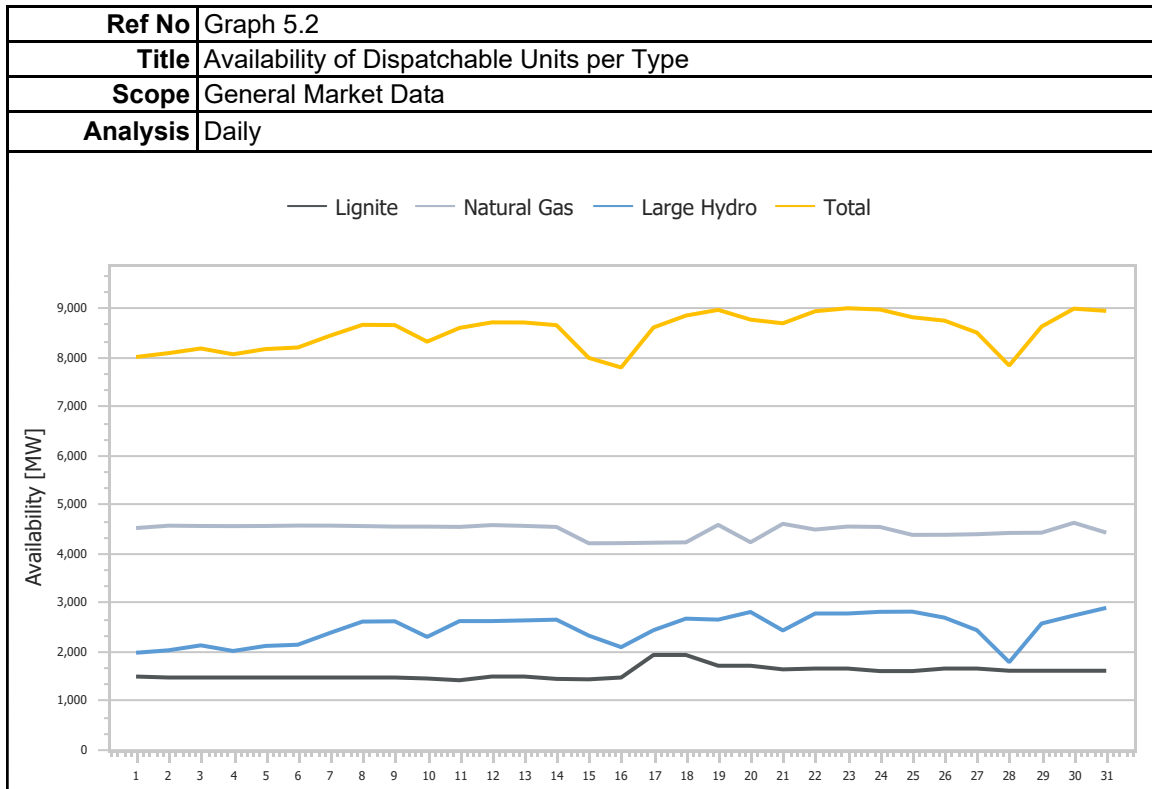
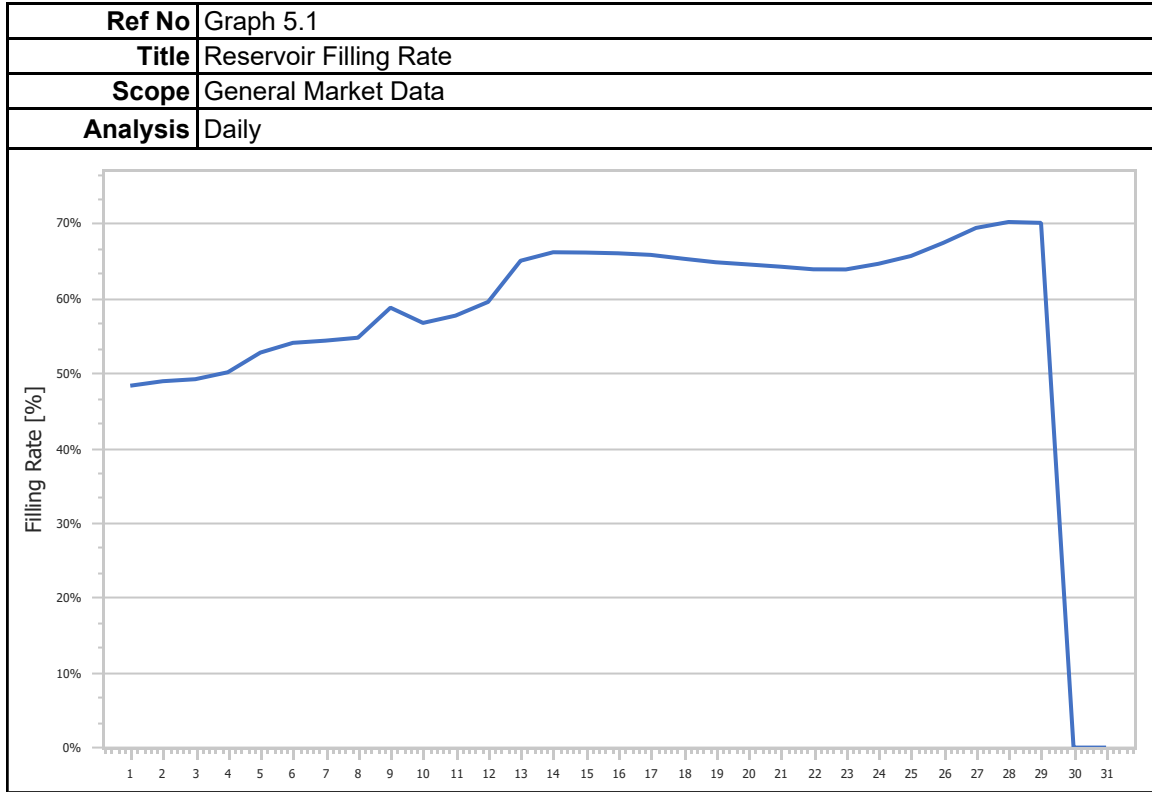
Ref No	Graph 4.7
Title	mFRR Down Price
Scope	Imbalance Settlement Procedure
Analysis	Daily



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	593,055.036	11.61%	31,832,937.34€	11.45%
Crete Conventional	-	0.00%	- €	0.00%
Natural Gas	1,917,141.784	37.53%	107,549,314.52€	38.67%
Large Hydro	656,623.771	12.85%	37,273,091.78€	13.40%
RES	1,445,267.456	28.29%	74,845,987.42€	26.91%
Crete Renewables	-	0.00%	- €	0.00%
Imports	496,535.190	9.72%	26,603,286.92€	9.57%
Total	5,108,623.236	100.00%	278,104,617.98€	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]	Natural Gas [MWh]	Hydro [MWh]	RES [MWh]	Imports [MWh]
Total	-	5,108,623.24	593,055.04	1,917,141.78	656,623.77	1,445,267.46	496,535.19
Average	52.52	164,794.30	19,130.81	61,843.28	21,181.41	46,621.53	16,017.26
Min	42.28	118,983.26	14,832.00	31,520.68	4,011.66	21,286.58	6,900.00
Min day	31	1	1	31	1	2	8
Max	71.73	193,402.17	26,952.76	85,104.20	35,665.00	72,330.09	25,992.37
Max day	19	18	19	19	15	25	20
Spread	29.46	74,418.91	12,120.76	53,583.52	31,653.34	51,043.51	19,092.37
Standard Deviation	7.70	18,065.42	4,215.00	12,486.56	10,048.00	12,457.89	4,796.23

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	103,386.500	2.02%	5,670,938.18€	2.04%
Crete Load	-	0.00%	- €	0.00%
HV Load	703,687.651	13.77%	36,547,524.72€	13.14%
MV Load	786,726.680	15.40%	43,365,961.28€	15.59%
LV Load	2,904,400.671	56.85%	161,742,390.65€	58.16%
PUMP	9,467.882	0.19%	281,201.81€	0.10%
Exports	600,953.320	11.76%	30,496,577.08€	10.97%
Total	5,108,622.704	100.00%	278,104,593.71€	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]	HV [MWh]	MV [MWh]	LV [MWh]	PUMP [MWh]	Exports [MWh]
Total	-	5,108,622.70	103,386.50	703,687.65	786,726.68	2,904,400.67	9,467.88	600,953.32
Average	52.52	164,794.28	3,335.05	22,699.60	25,378.28	93,690.34	676.28	19,385.59
Min	42.28	118,983.12	2,497.00	20,775.70	15,092.45	69,266.06	50.42	6,938.00
Min day	31	1	1	1	1	1	24	20
Max	71.73	193,402.22	4,088.00	24,416.33	32,019.51	119,723.48	1,770.00	31,448.17
Max day	19	18	18	31	20	19	3	26
Spread	29.46	74,419.09	1,591.00	3,640.63	16,927.06	50,457.42	1,719.58	24,510.17
Standard Deviation	7.70	18,065.45	399.63	915.74	4,790.11	13,294.48	415.97	6,326.50

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	1,281,089.650	60.35%	1,693,052.15€	64.24%
FCR	54,042.890	2.55%	49,660.33€	1.88%
mFRR	787,693.250	37.11%	892,866.19€	33.88%
Total	2,122,825.790	100.00%	2,635,578.67€	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	348,342.770	37.37%	657,756.88€	56.49%
FCR	104,615.150	11.22%	102,263.27€	8.78%
mFRR	479,115.290	51.40%	404,389.48€	34.73%
Total	932,073.210	100.00%	1,164,409.62€	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	76,740.120	27.44%	8,432,049.69€	26.72%
mFRR	202,875.960	72.56%	23,120,706.58€	73.28%
Total	279,616.080	100.00%	31,552,756.26€	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	66,074.500	17.63%	-1,295,175.31€	17.28%
mFRR	308,615.150	82.37%	-6,200,767.88€	82.72%
Total	374,689.650	100.00%	-7,495,943.19€	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	5,108,623.24	99.88%
IDMA1	57,322.06	1.12%
IDMA2	23,941.03	0.47%
IDMA3	19,794.27	0.39%
IDM (Total)	101,057.36	1.98%
Balancing Energy (Up)	279,616.08	5.47%
Balancing Energy (Dn)	374,689.65	7.33%
Balancing Energy (Total)	-95,073.57	-1.86%
Total	5,114,607.03	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	278,104,617.98€	85.14%
IDMA1	3,320,115.40€	1.02%
IDMA2	1,177,163.30€	0.36%
IDMA3	1,194,005.70€	0.37%
IDM (Total)	5,691,284.40€	1.74%
Balancing Capacity (Up)	2,635,578.67€	0.81%
Balancing Capacity (Dn)	1,164,409.62€	0.36%
Balancing Capacity (Total)	3,799,988.30€	1.16%
Balancing Energy (Up)	31,552,756.26€	9.66%
Balancing Energy (Dn)	-7,495,943.19€	-2.29%
Balancing Energy (Total)	39,048,699.45€	11.95%
Balancing Market (Total)	42,848,687.75€	13.12%
Total	326,644,590.13€	100.00%