

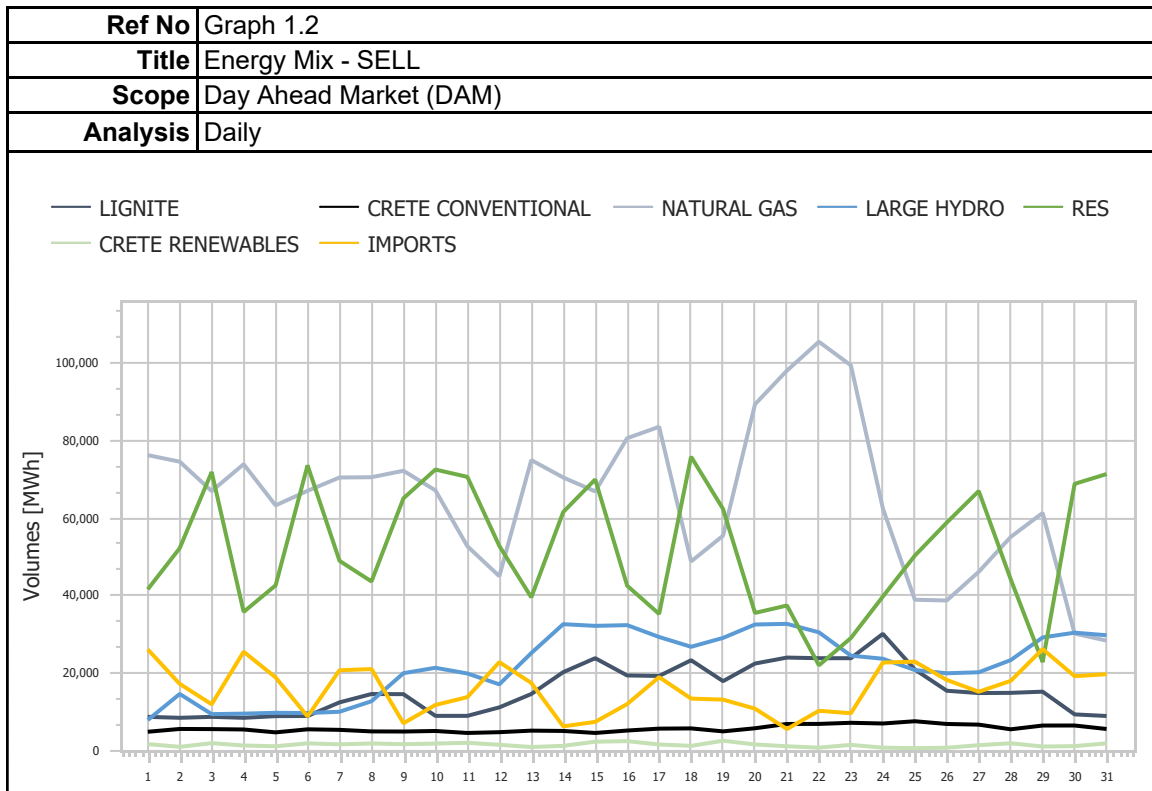
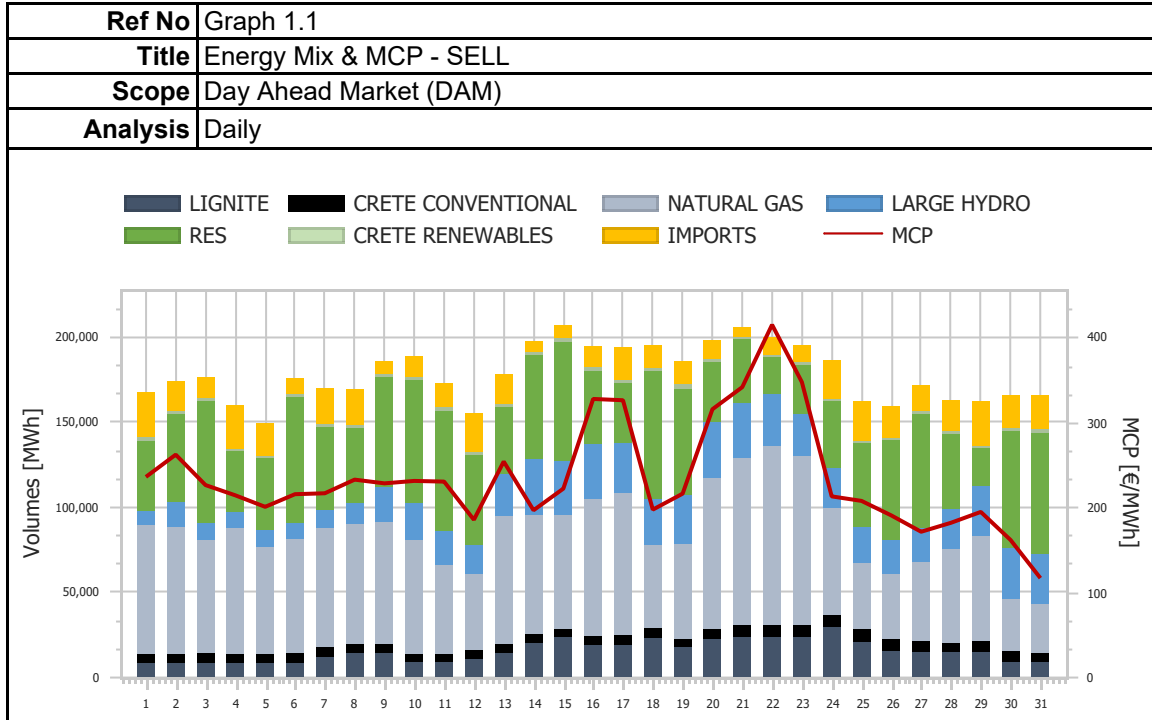
Market Monitoring Report

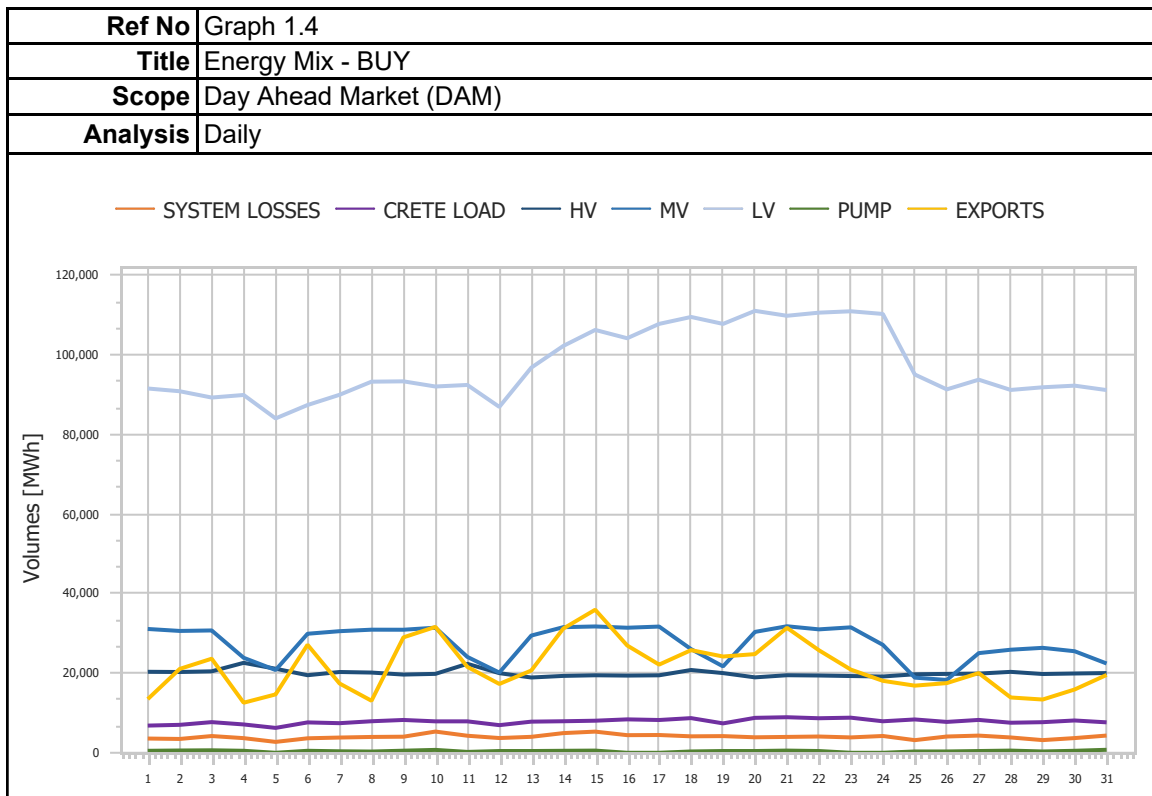
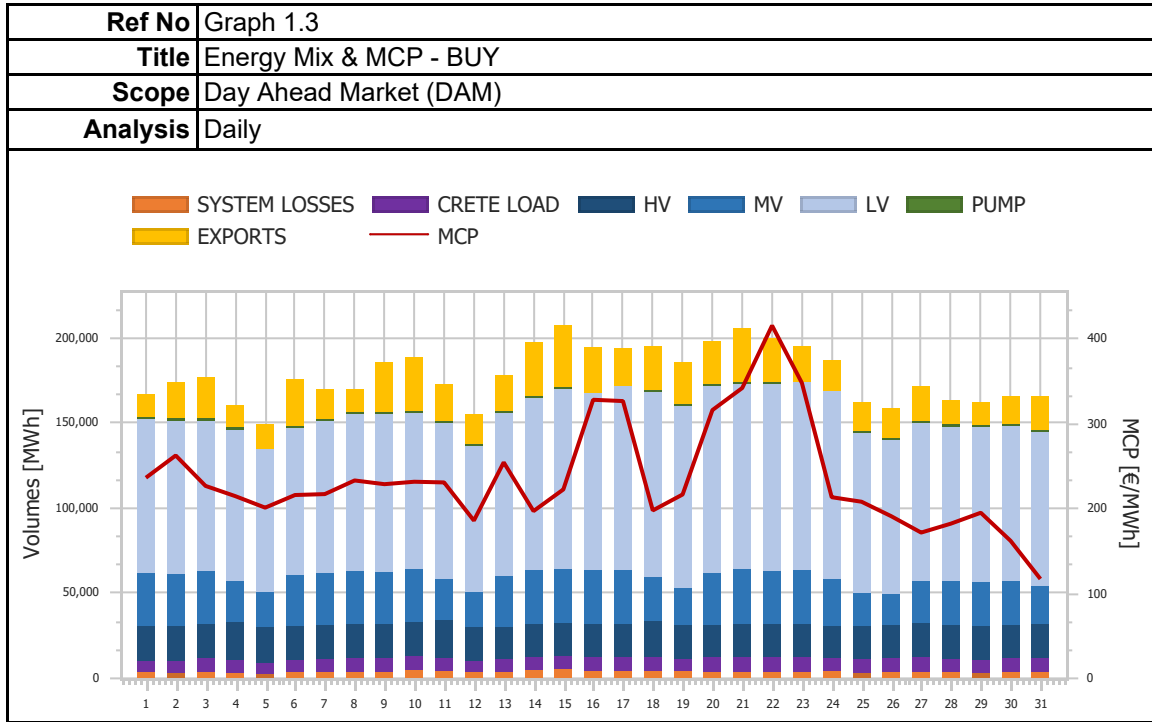
Monthly - Public - 2

12-2021

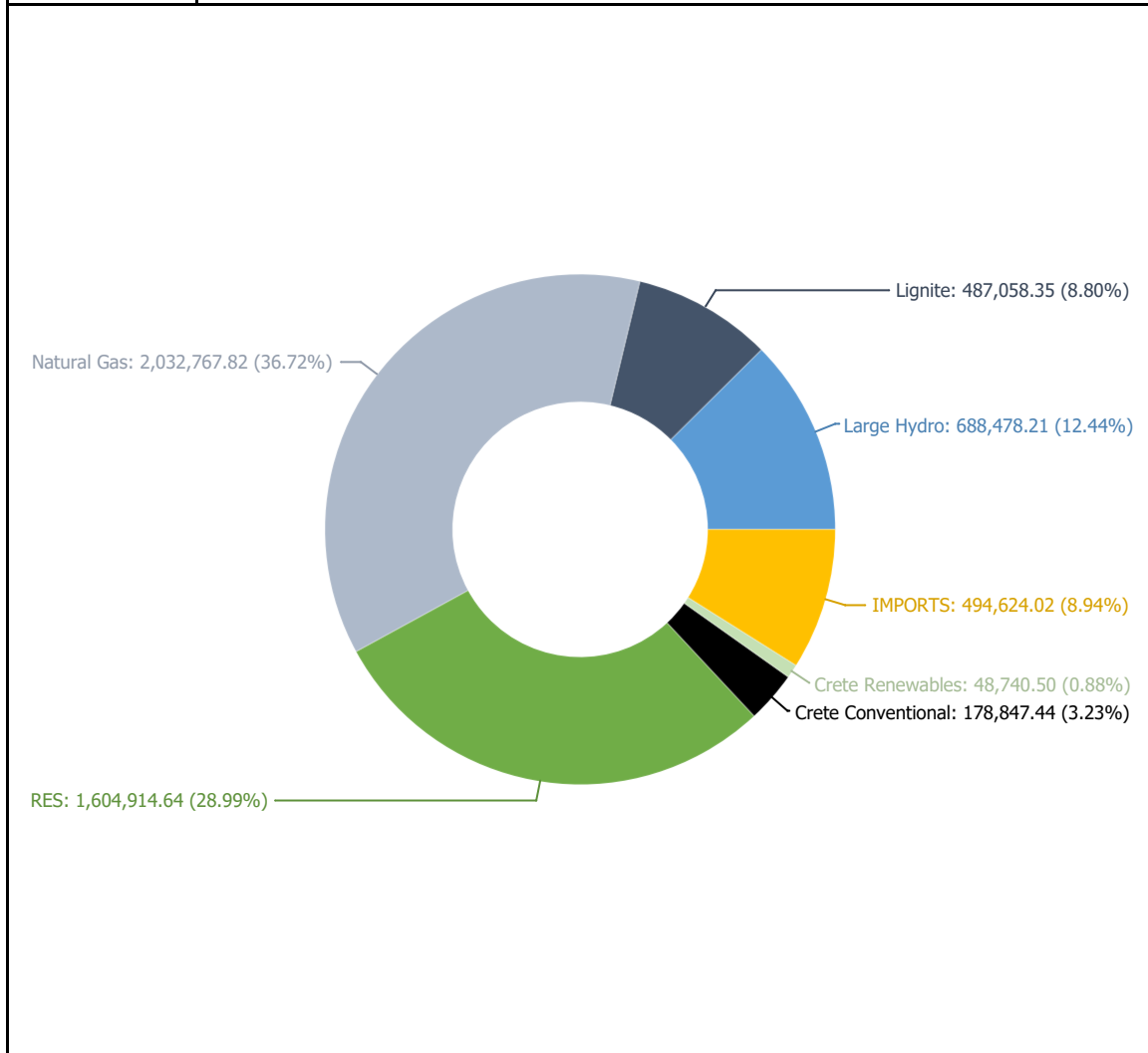


1. Day Ahead Market (DAM)

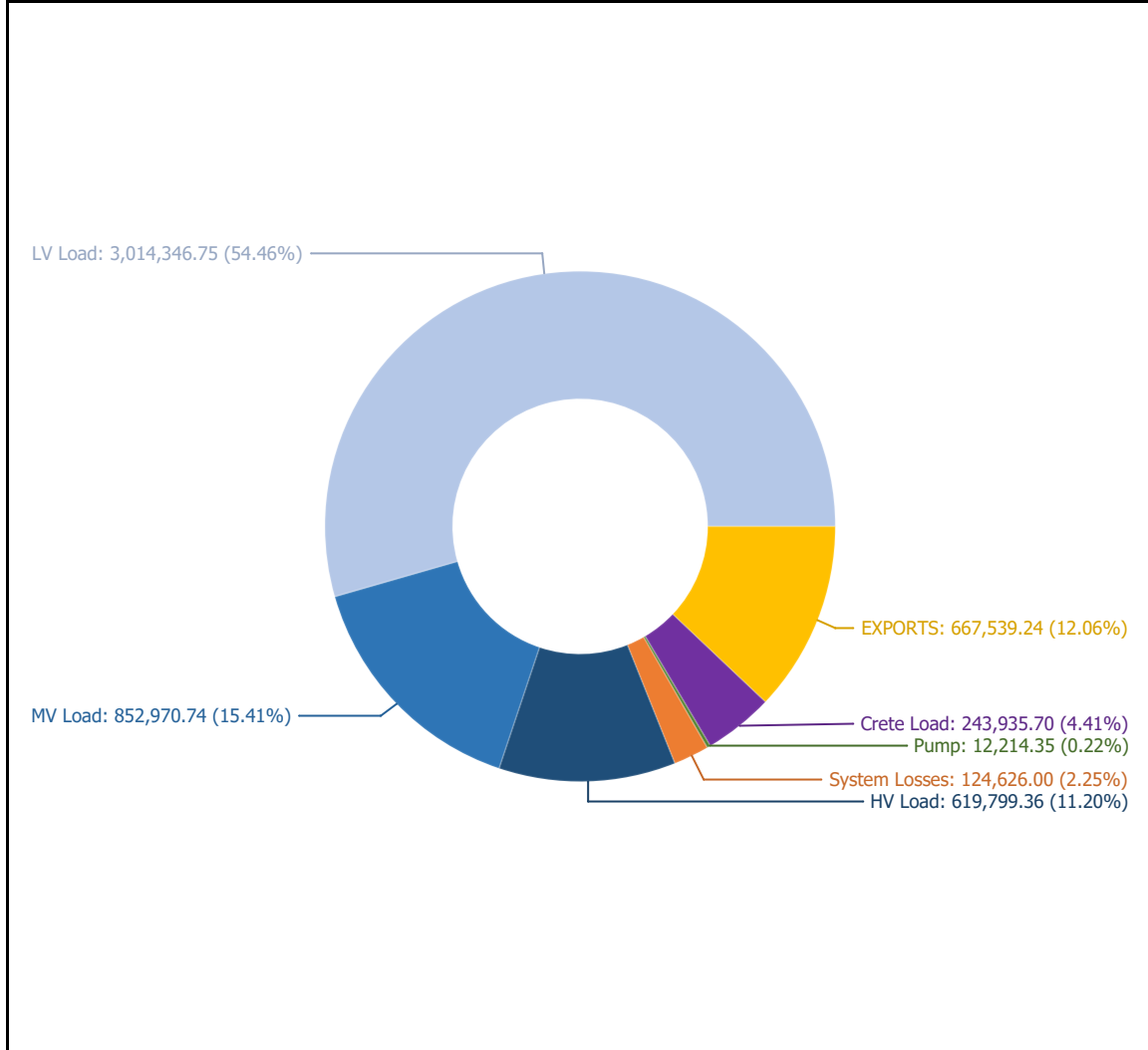


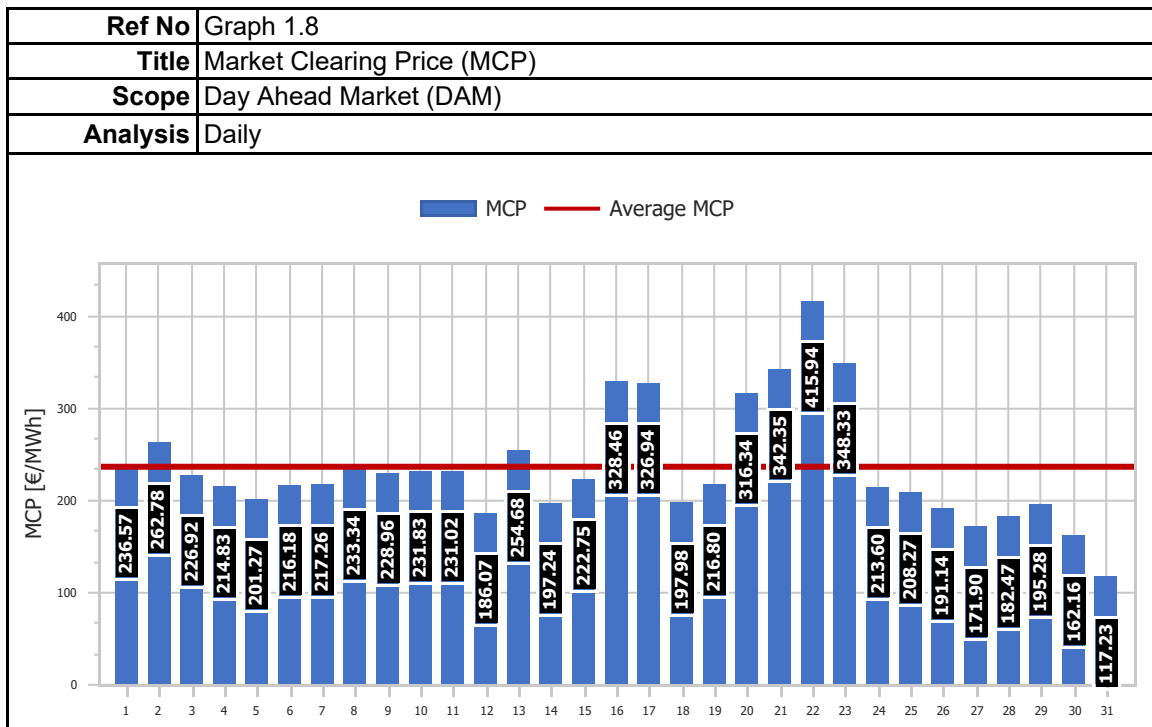
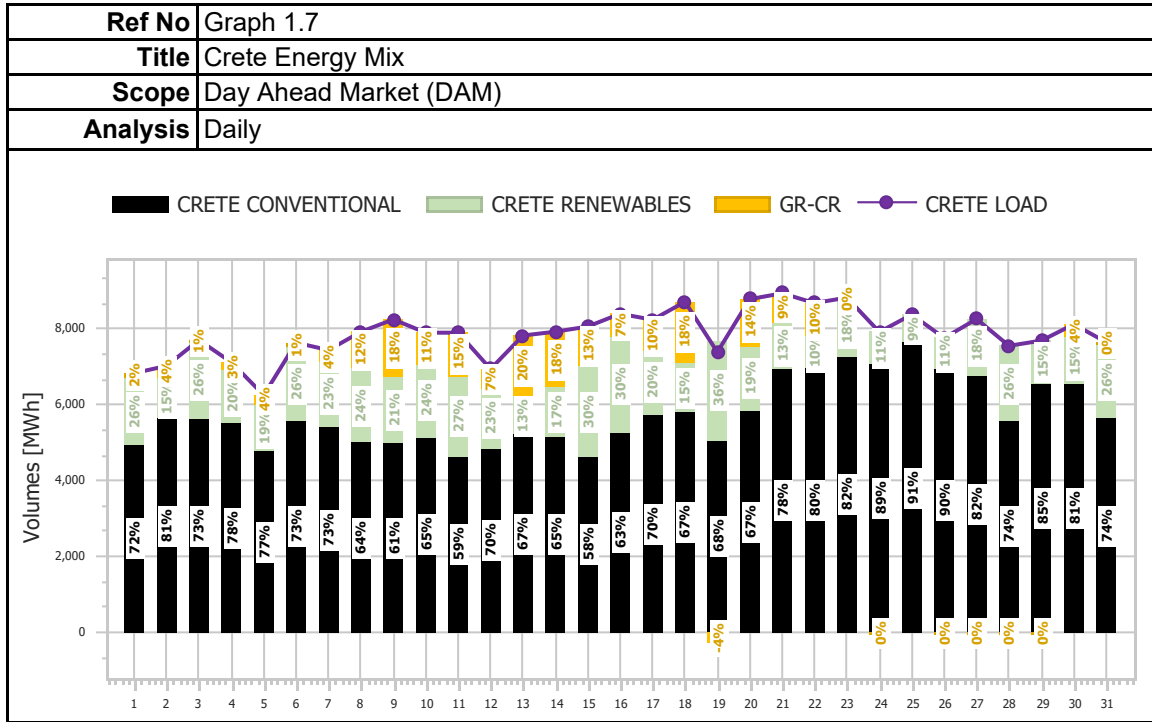


Ref No	Graph 1.5
Title	Energy Mix - SELL
Scope	Day Ahead Market (DAM)
Analysis	Daily

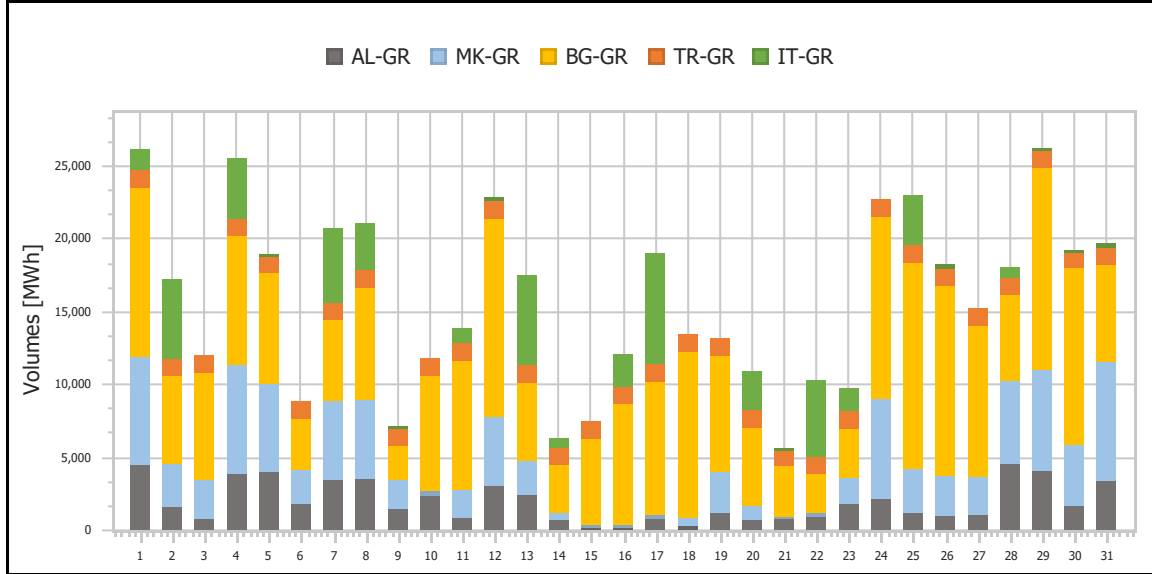


Ref No	Graph 1.6
Title	Energy Mix - BUY
Scope	Day Ahead Market (DAM)
Analysis	Daily

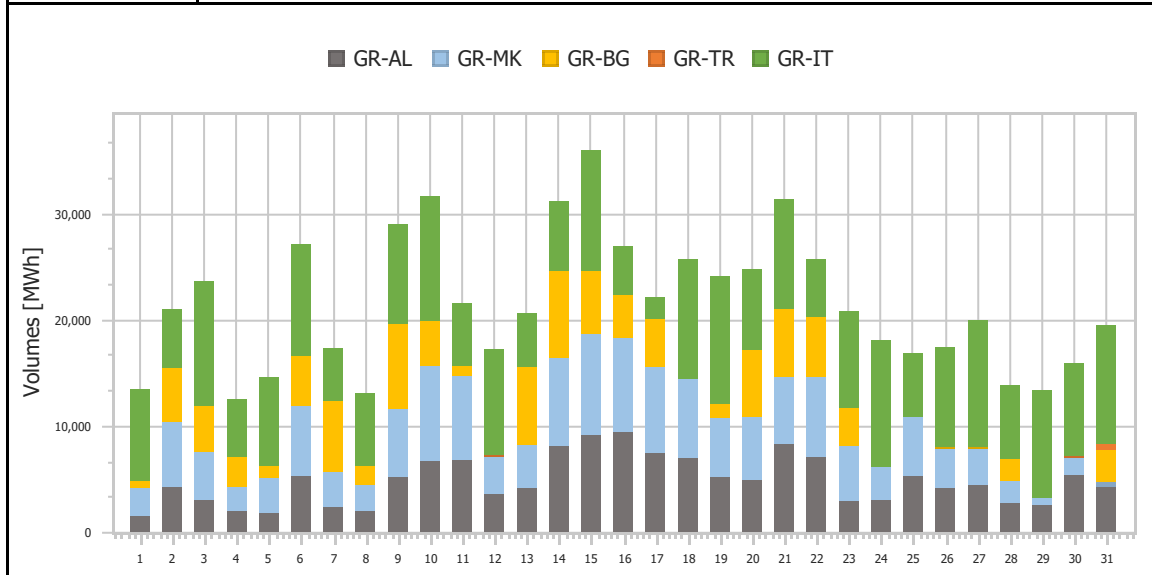




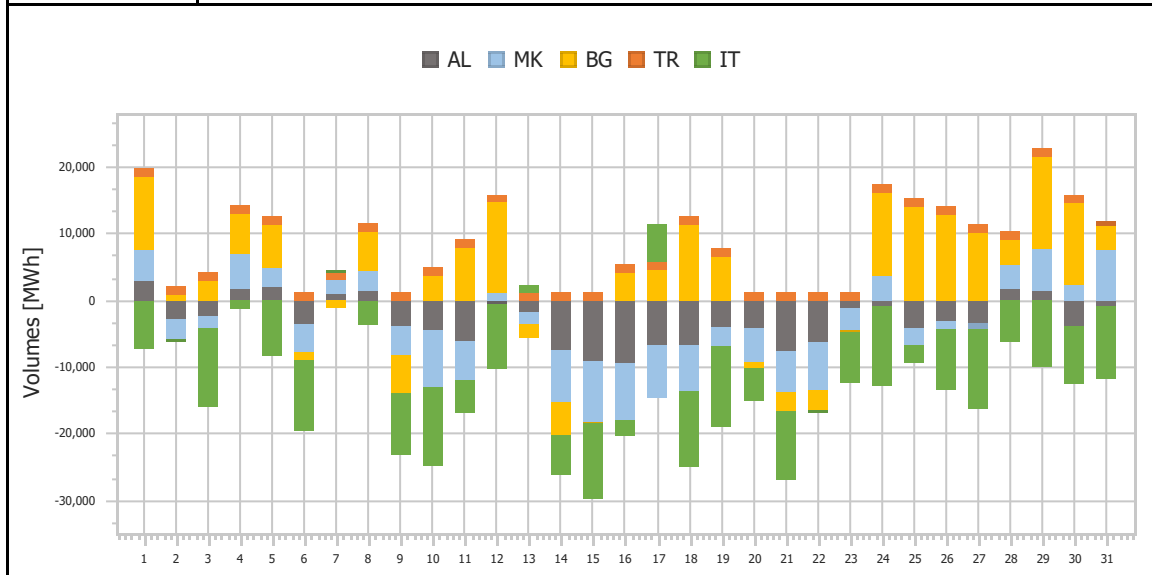
Ref No	Graph 1.9
Title	Imports per Border
Scope	Day Ahead Market (DAM)
Analysis	Daily



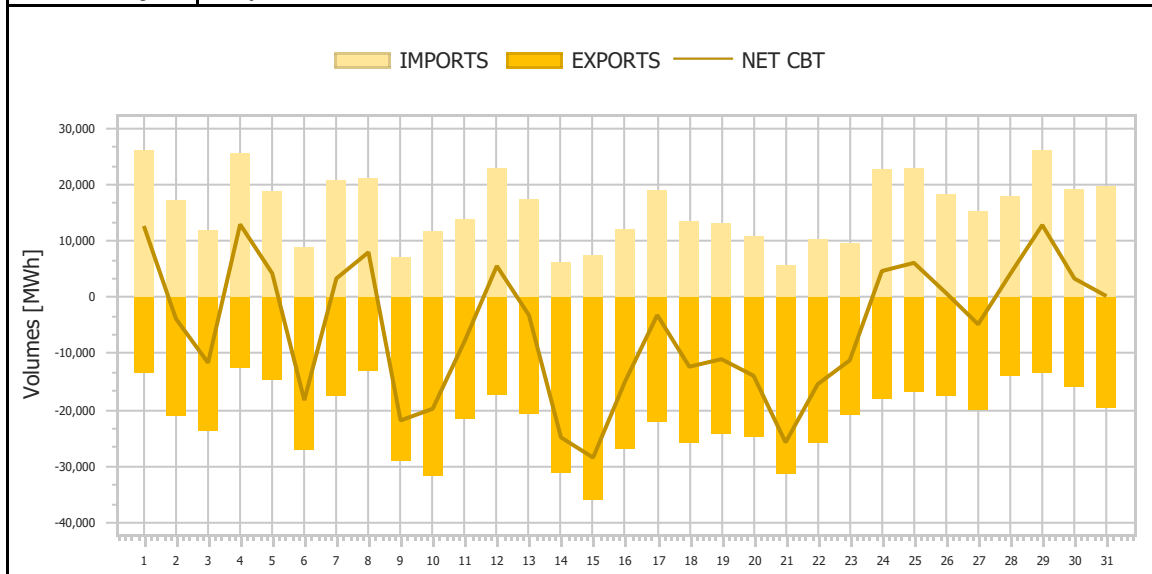
Ref No	Graph 1.10
Title	Exports per Border
Scope	Day Ahead Market (DAM)
Analysis	Daily



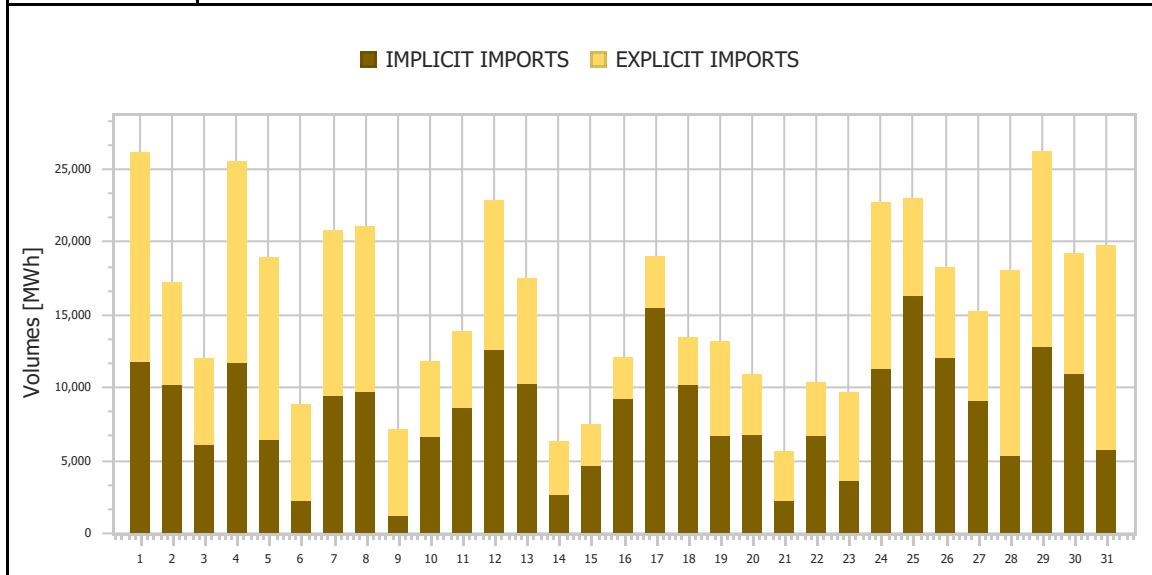
Ref No	Graph 1.11
Title	Net Imports per Border
Scope	Day Ahead Market (DAM)
Analysis	Daily



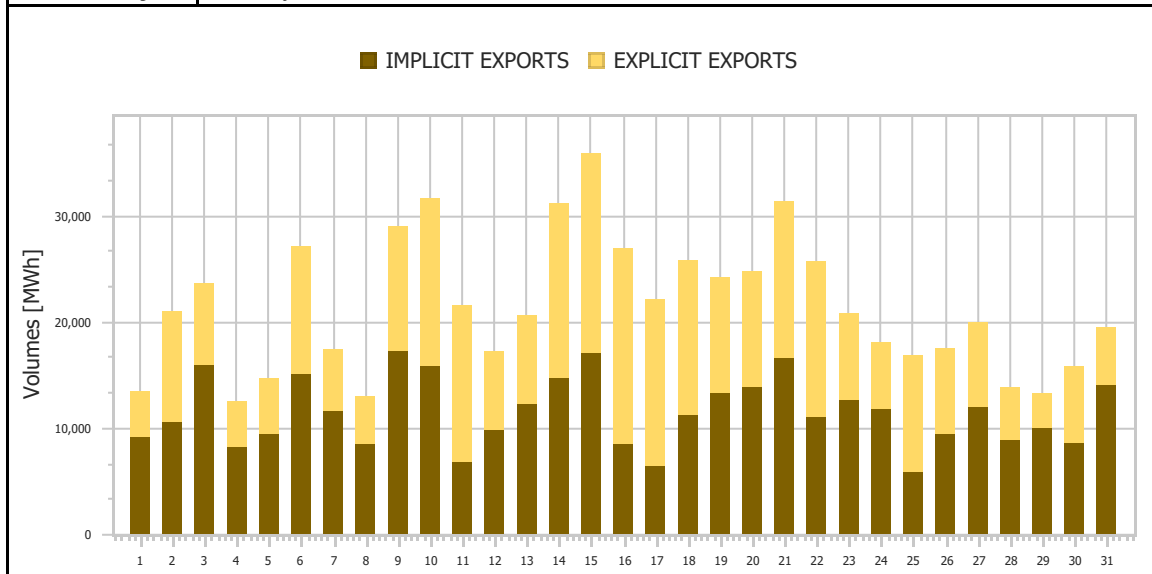
Ref No	Graph 1.12
Title	Total Imports & Exports
Scope	Day Ahead Market (DAM)
Analysis	Daily

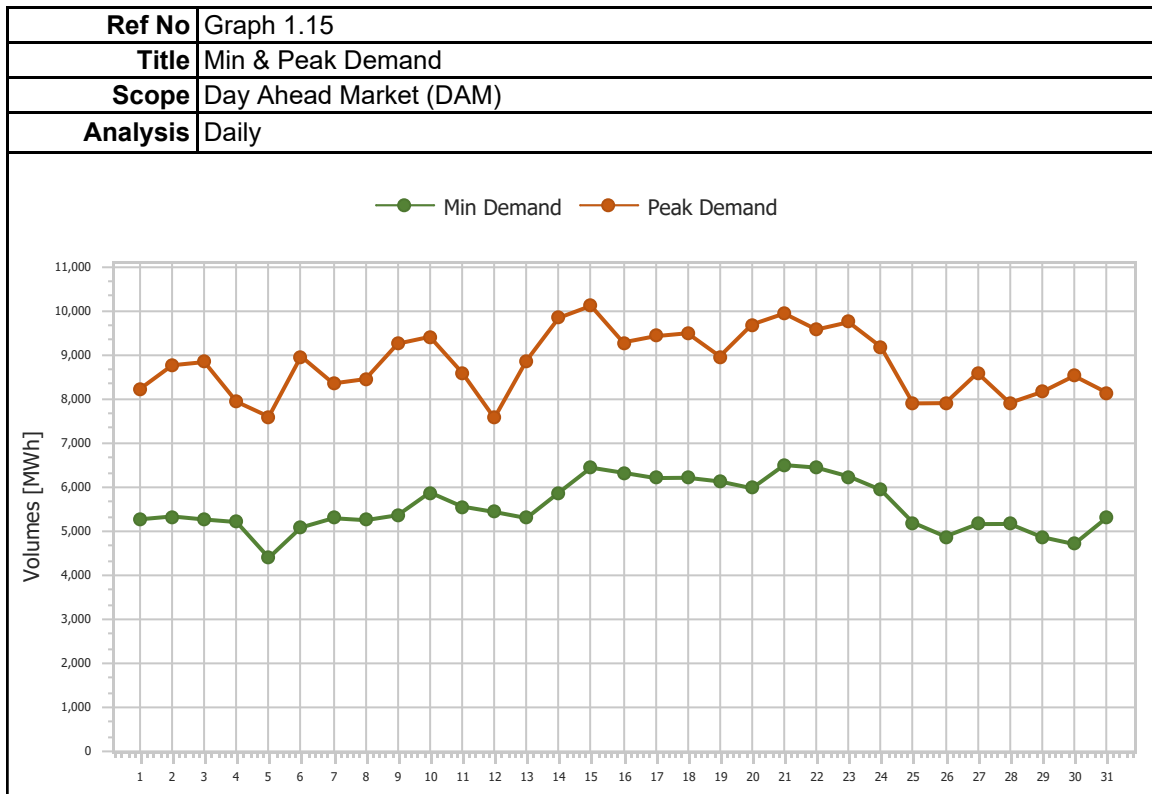


Ref No	Graph 1.13
Title	Imports (Implicit/Explicit)
Scope	Day Ahead Market (DAM)
Analysis	Daily

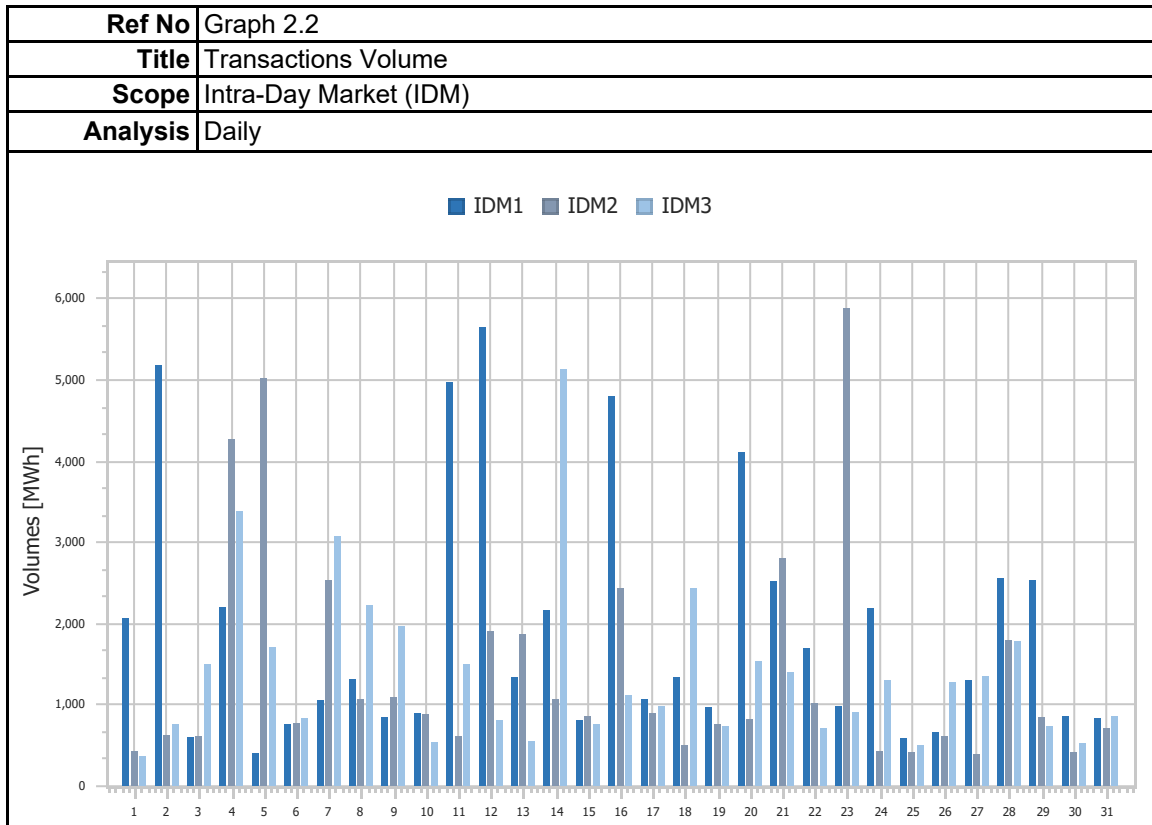
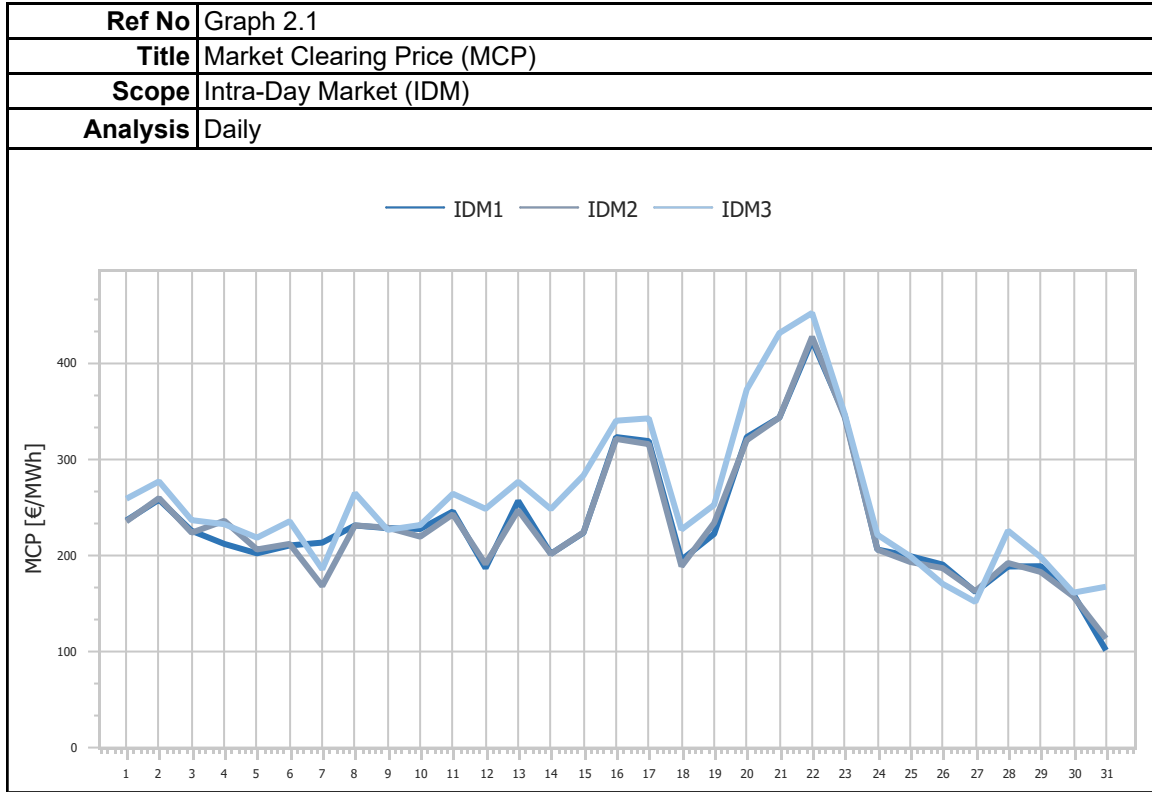


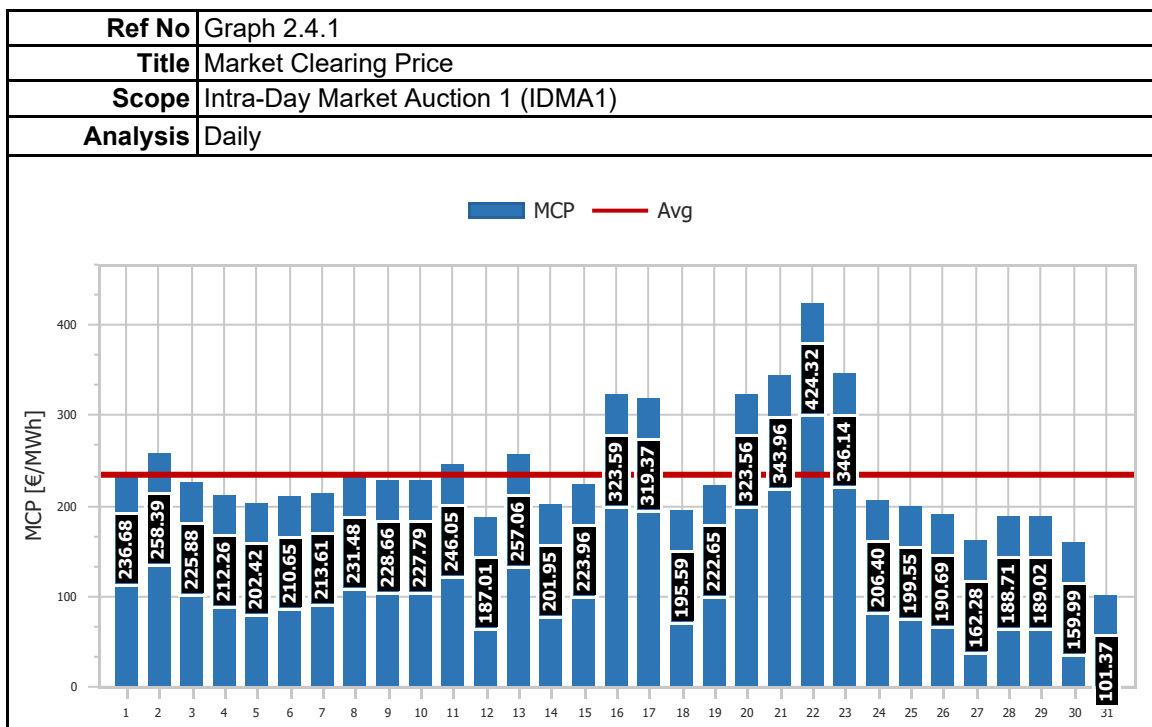
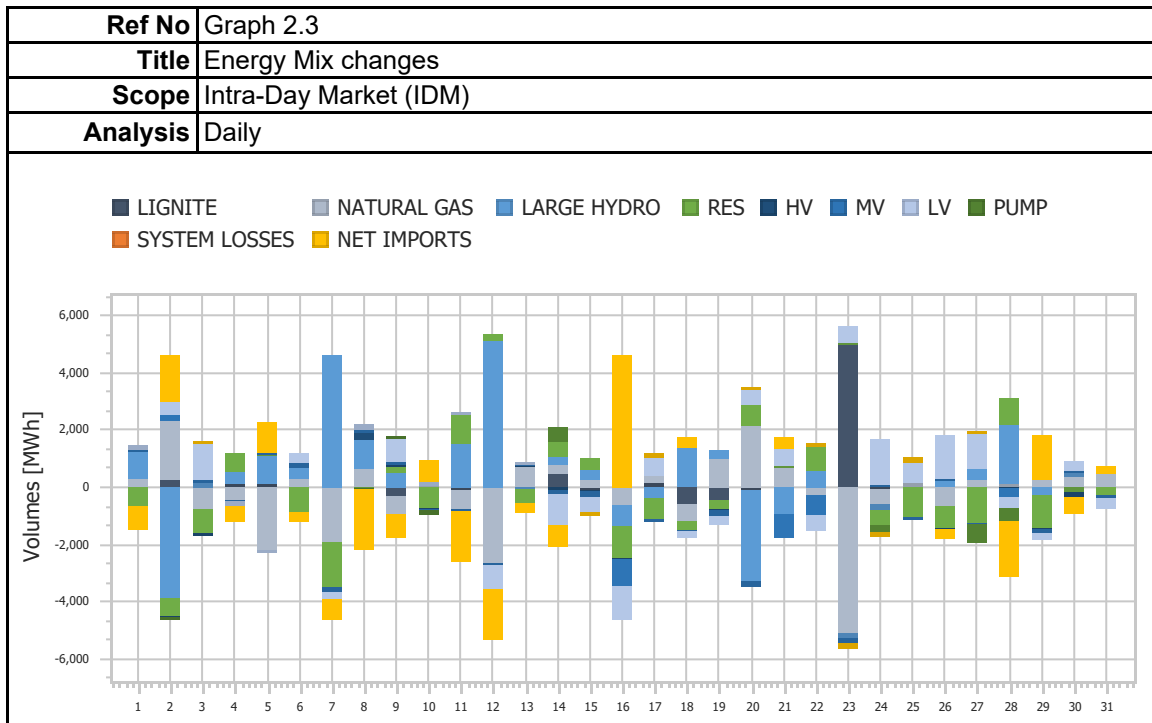
Ref No	Graph 1.14
Title	Exports (Implicit/Explicit)
Scope	Day Ahead Market (DAM)
Analysis	Monthly



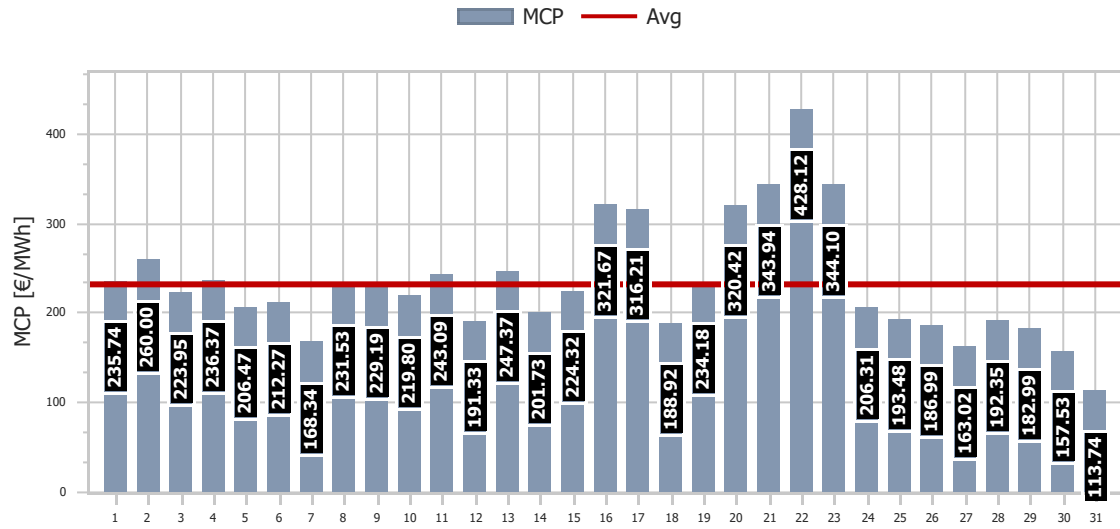


2. Intra-Day Market (IDM)

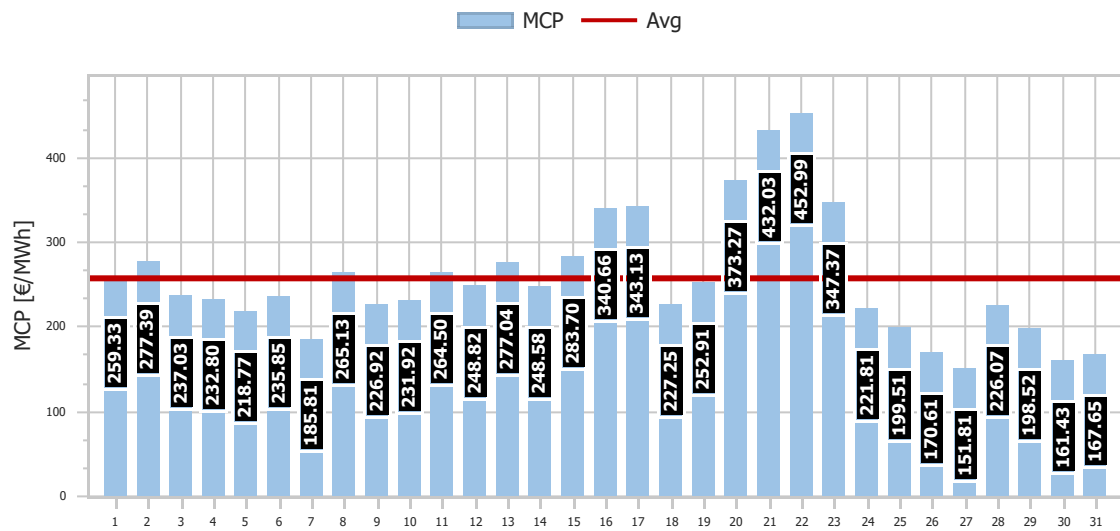




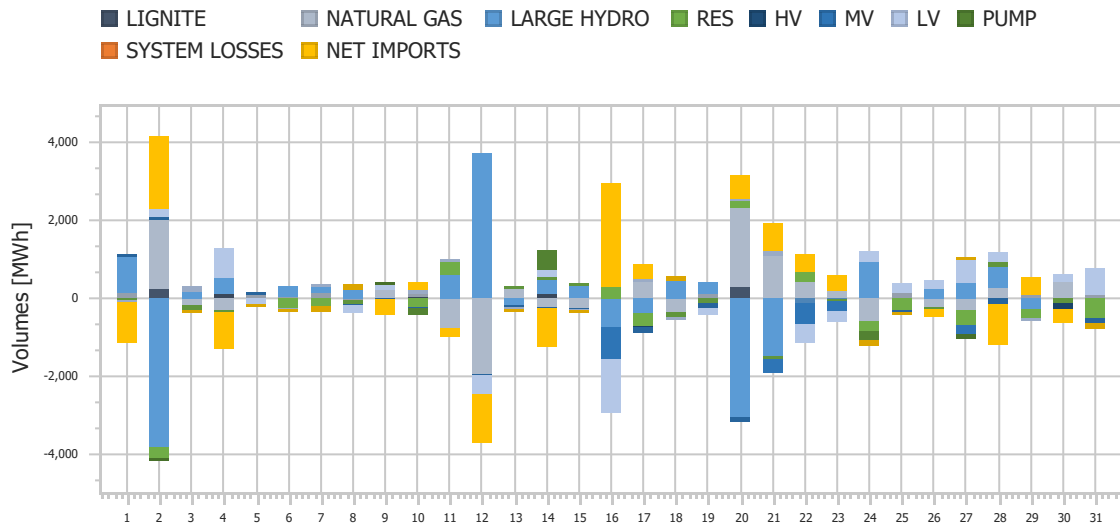
Ref No	Graph 2.4.2
Title	Market Clearing Price
Scope	Intra-Day Market Auction 2 (IDMA2)
Analysis	Daily



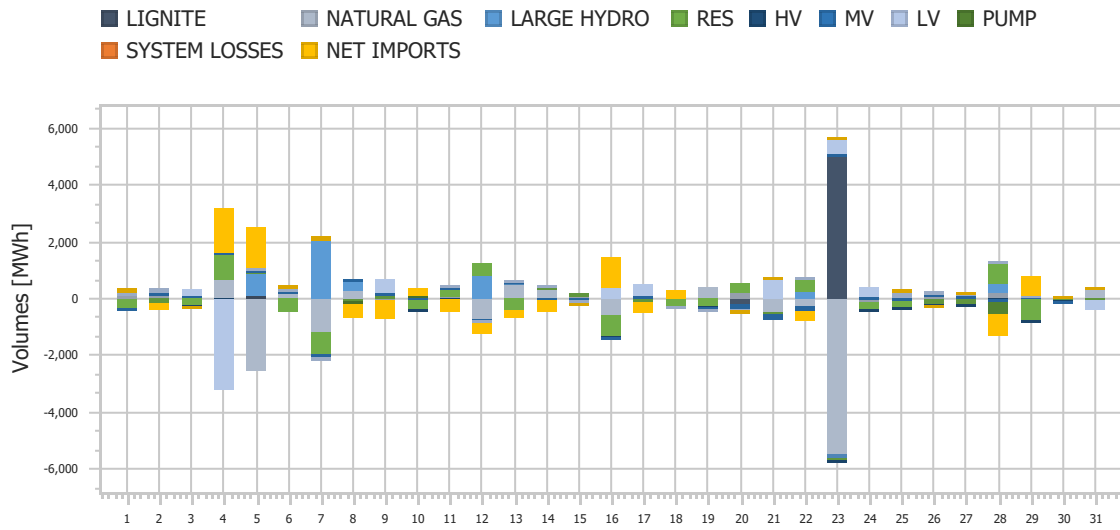
Ref No	Graph 2.4.3
Title	Market Clearing Price
Scope	Intra-Day Market Auction 3 (IDMA3)
Analysis	Daily



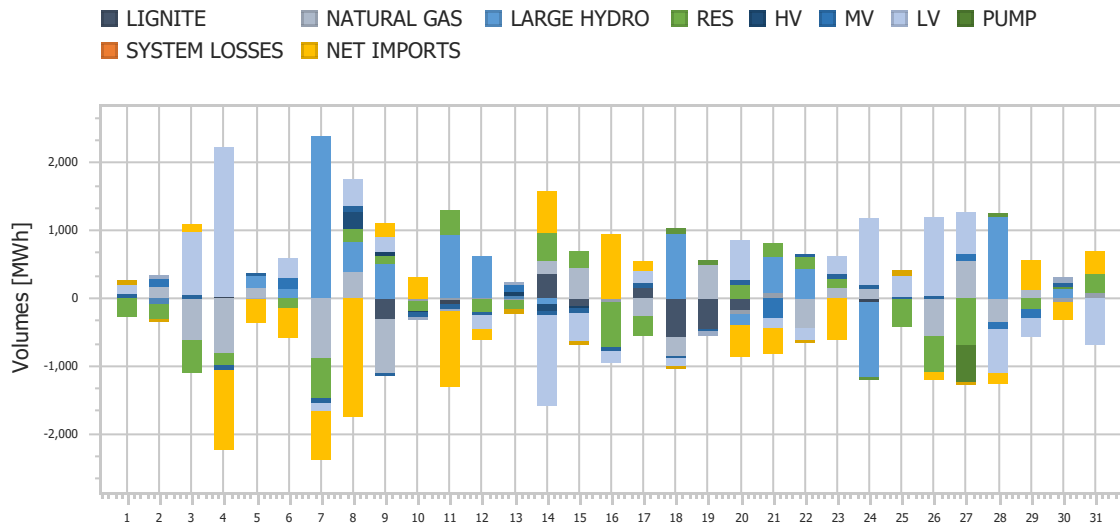
Ref No	Graph 2.5.1
Title	IDM Energy Mix Changes
Scope	Intra-Day Market Auction 1 (IDMA1)
Analysis	Daily



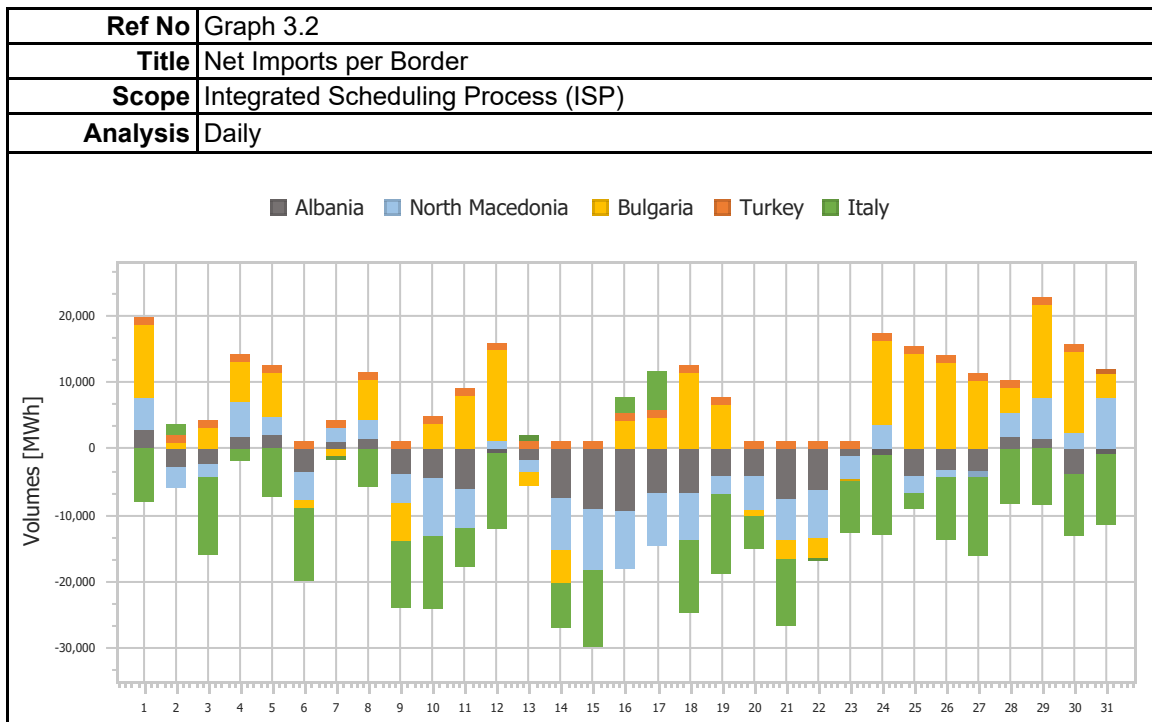
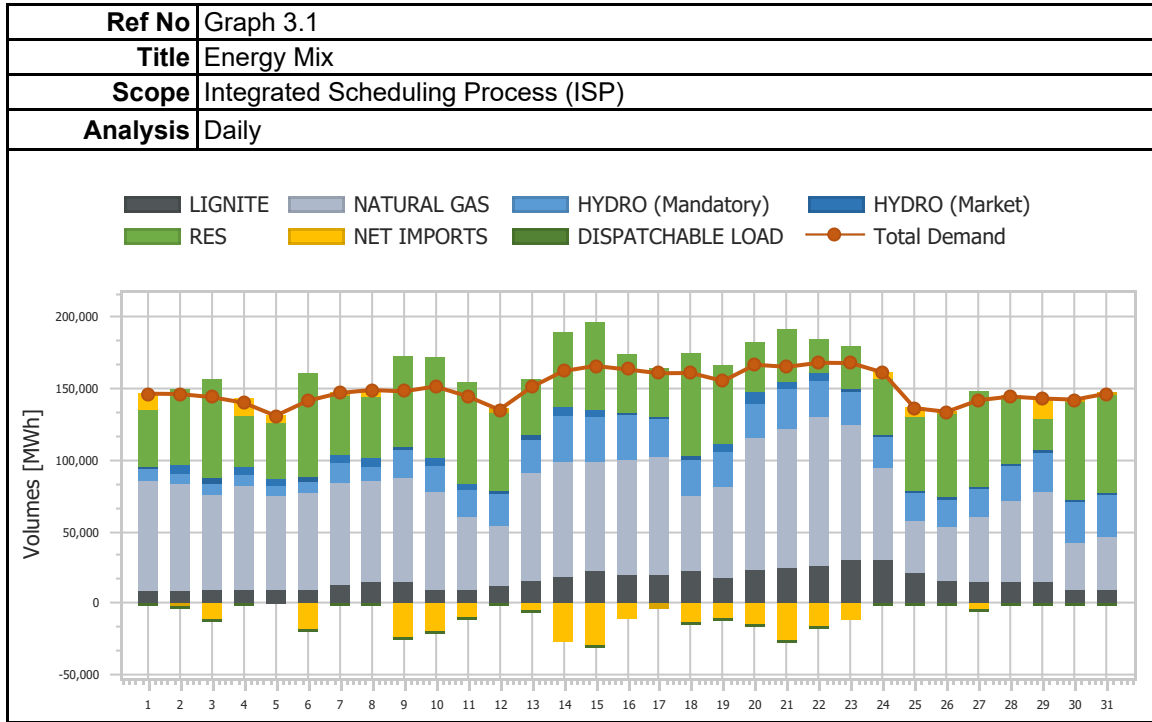
Ref No	Graph 2.5.2
Title	IDM Energy Mix Changes
Scope	Intra-Day Market Auction 2 (IDMA2)
Analysis	Daily



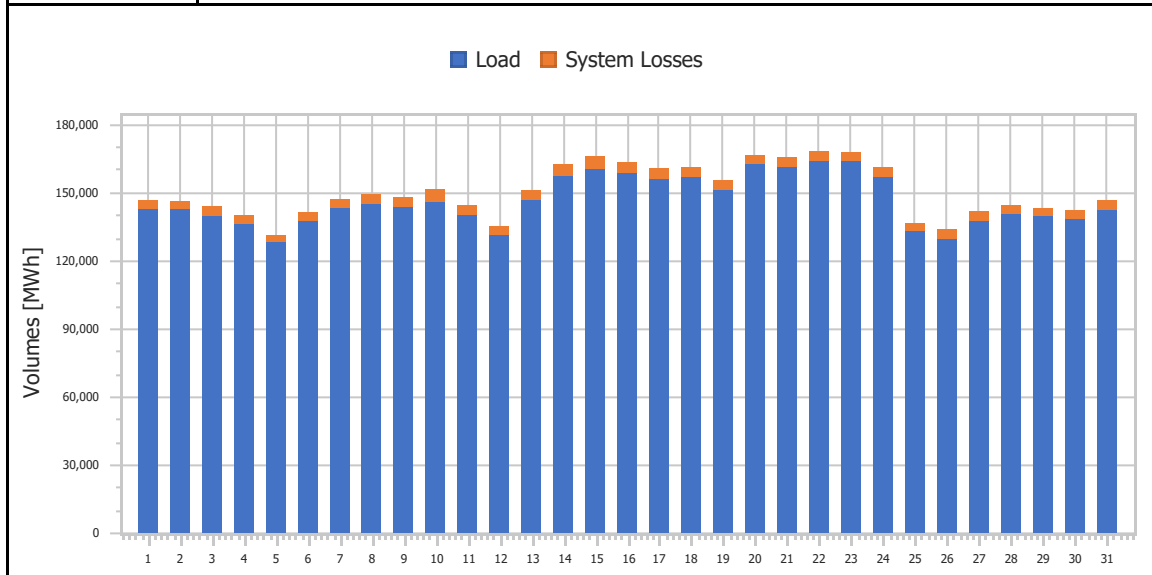
Ref No	Graph 2.5.3
Title	IDM Energy Mix Changes
Scope	Intra-Day Market Auction 3 (IDMA3)
Analysis	Daily



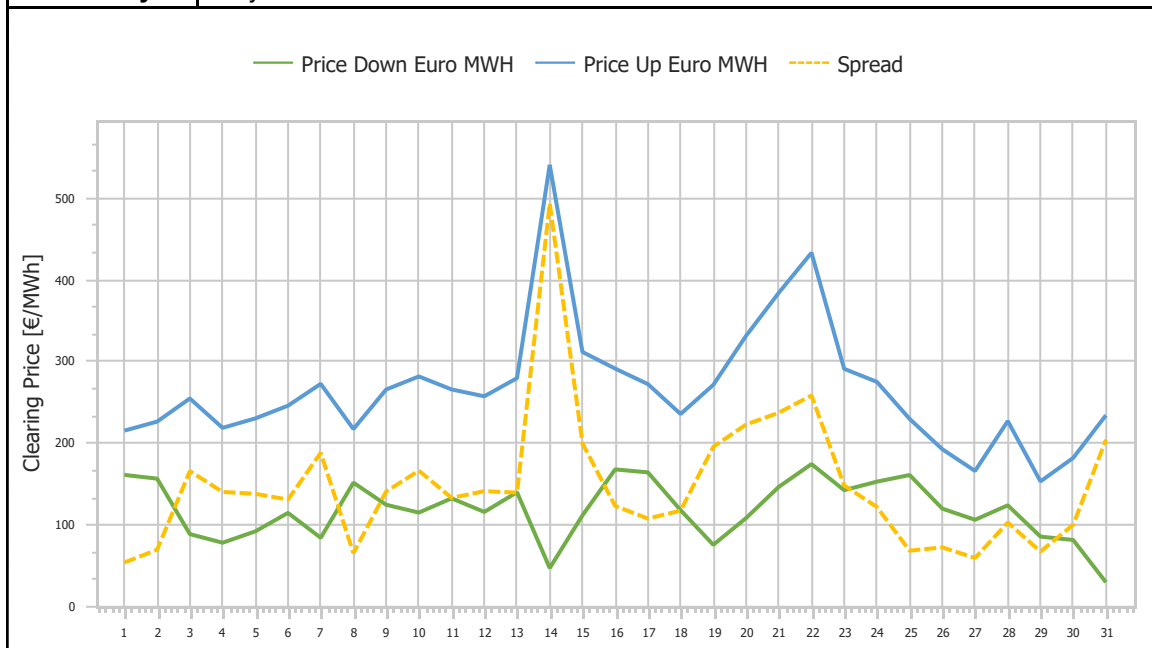
3. Integrated Scheduling Process (ISP)



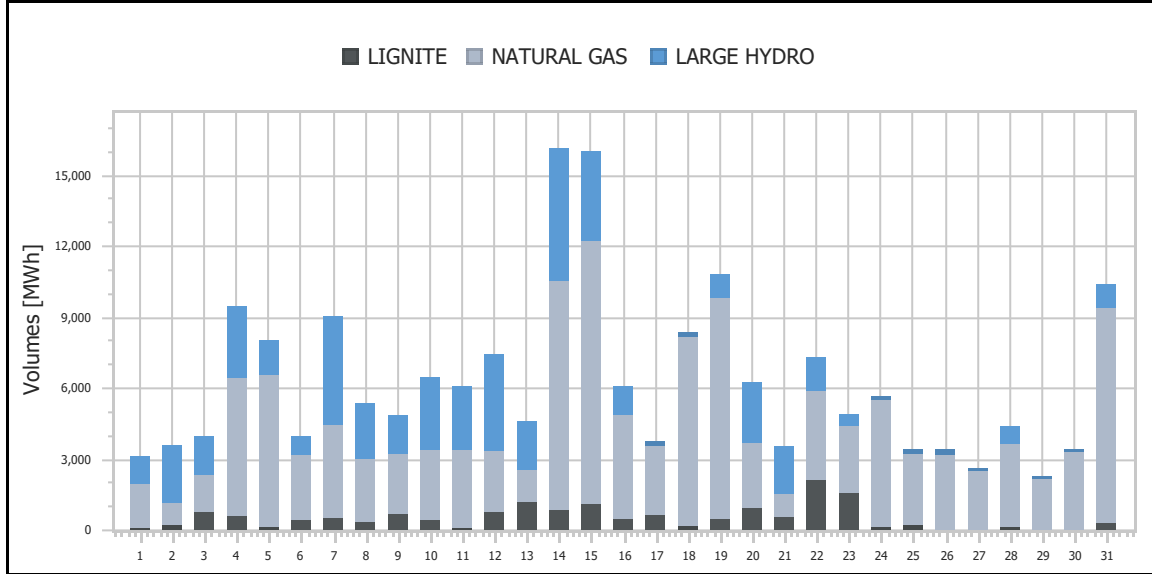
Ref No	Graph 3.3
Title	Demand & System Losses
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



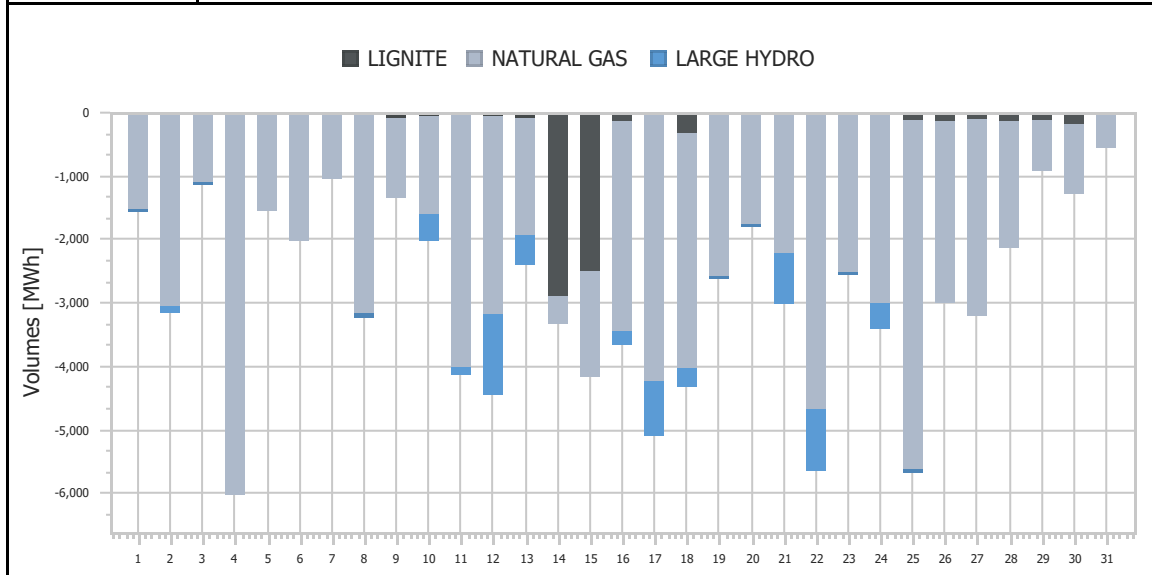
Ref No	Graph 3.4
Title	Clearing Prices
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



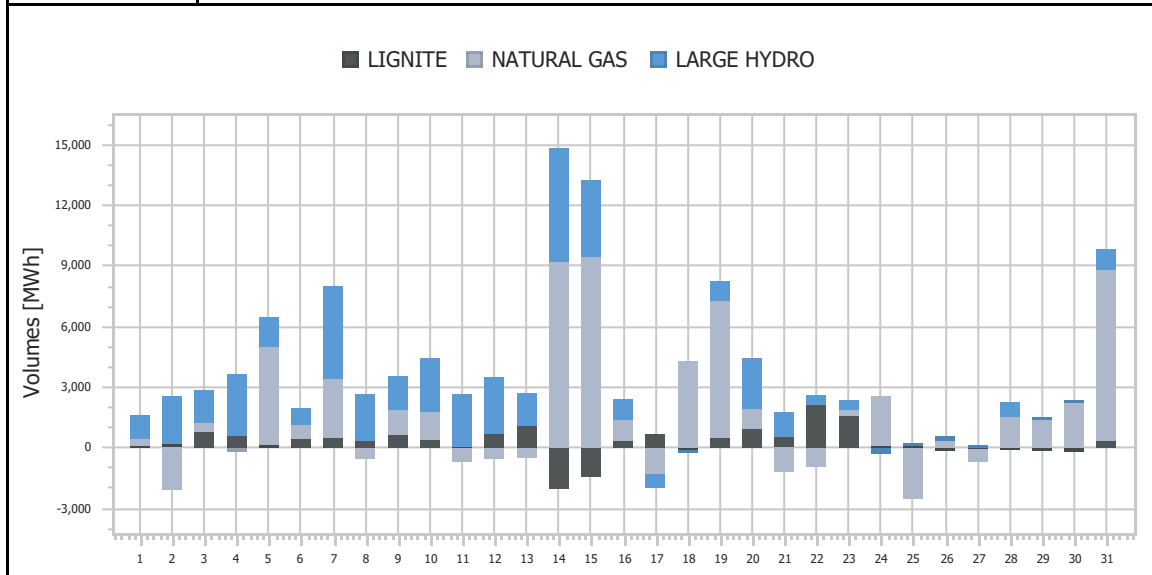
Ref No	Graph 3.5
Title	Upward Activated Balancing energy
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



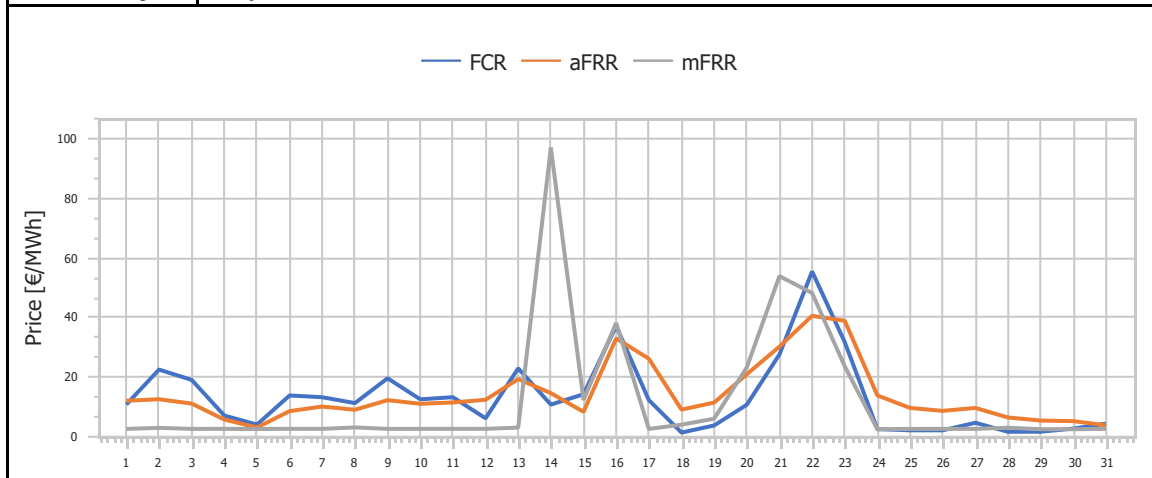
Ref No	Graph 3.6
Title	Downward Activated Balancing energy
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



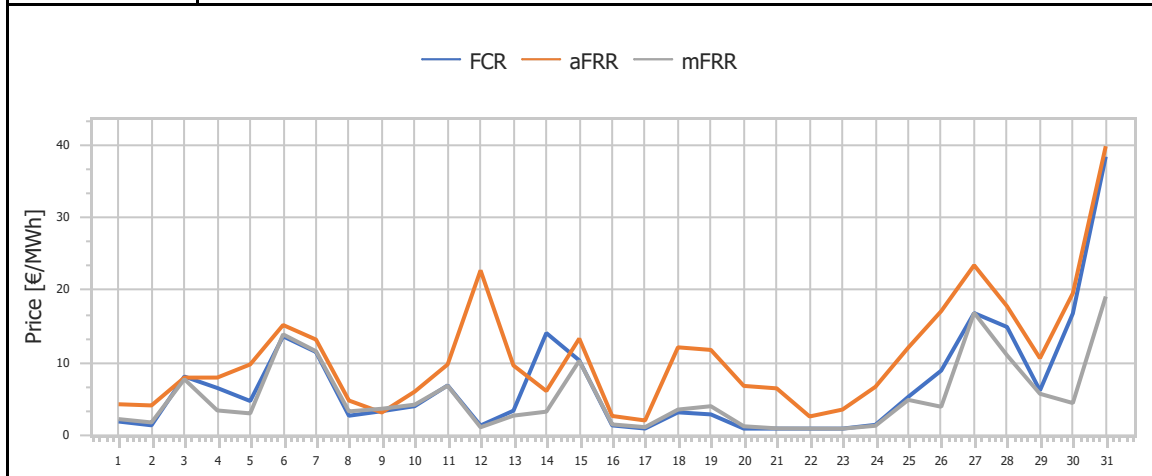
Ref No	Graph 3.7
Title	Net Activated Balancing energy
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



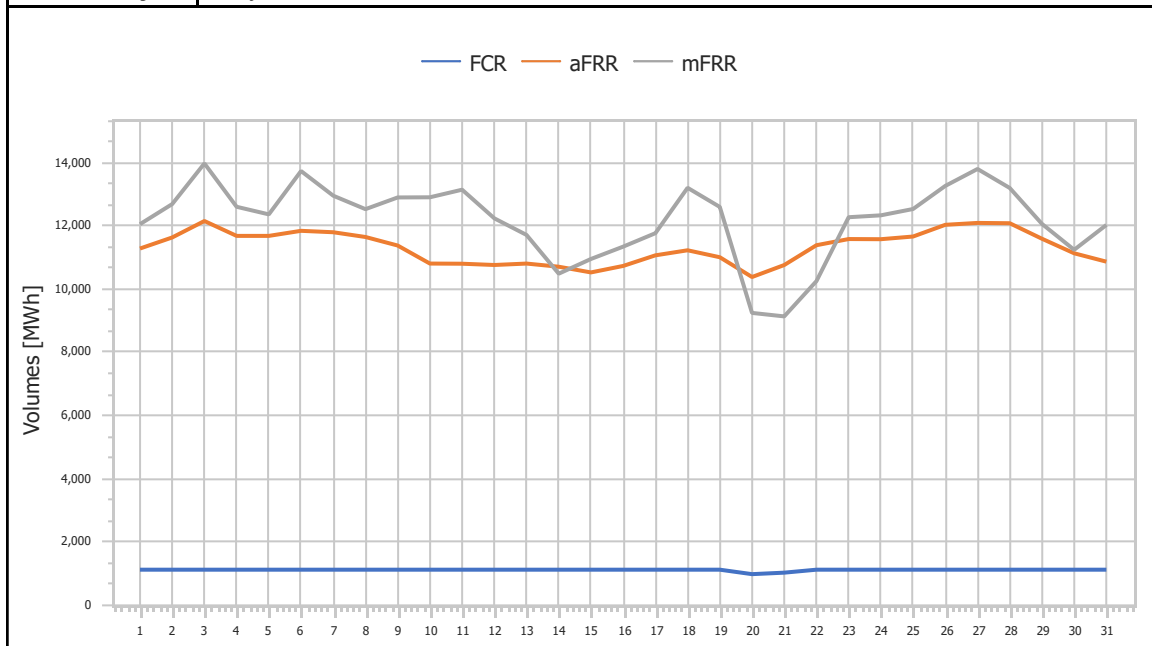
Ref No	Graph 3.8
Title	Upward Capacity Reserves Prices
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily

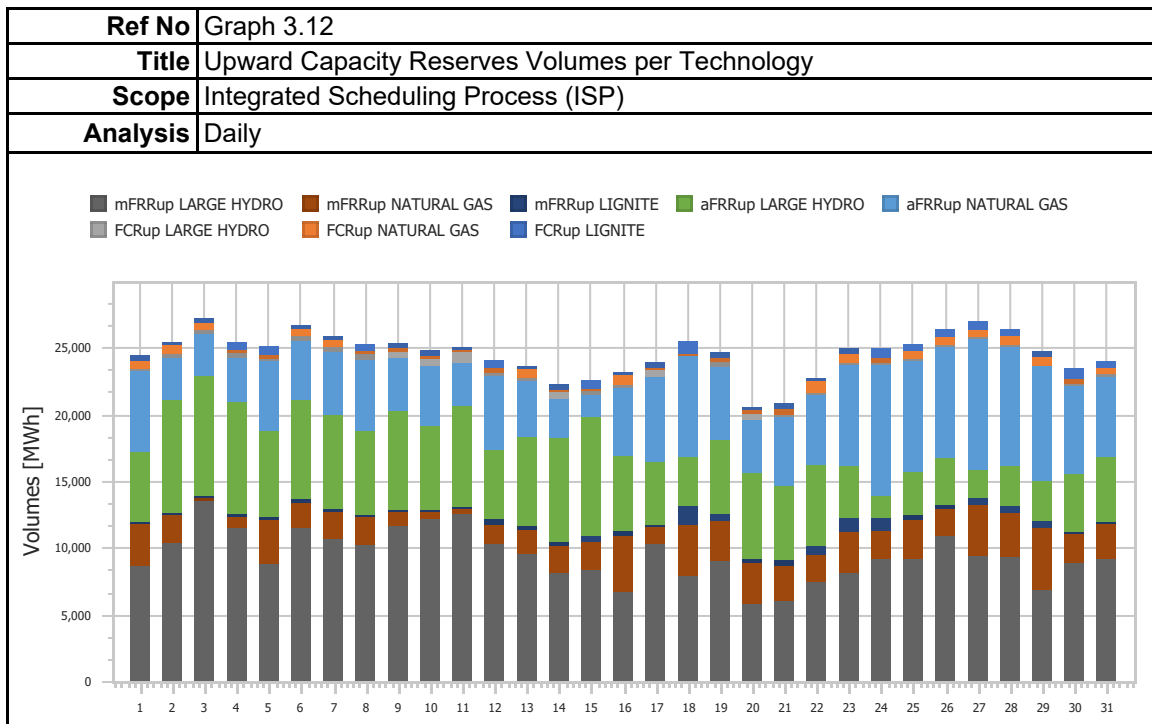
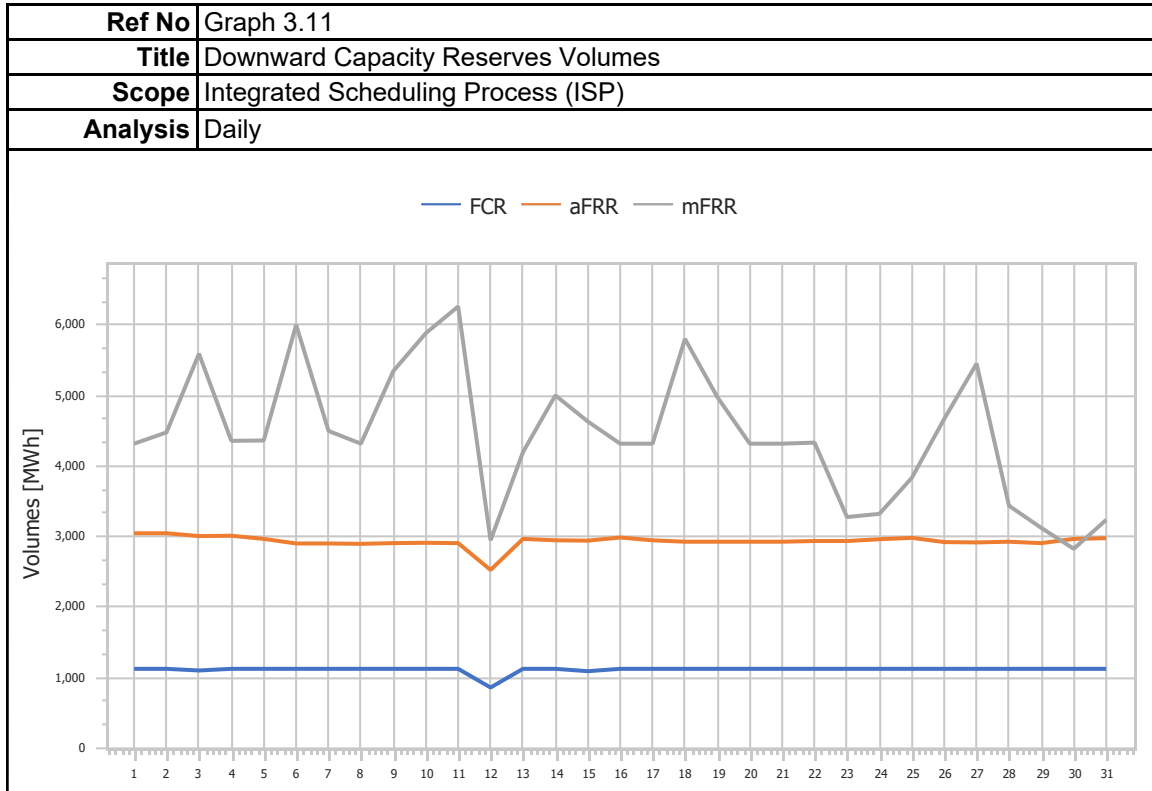


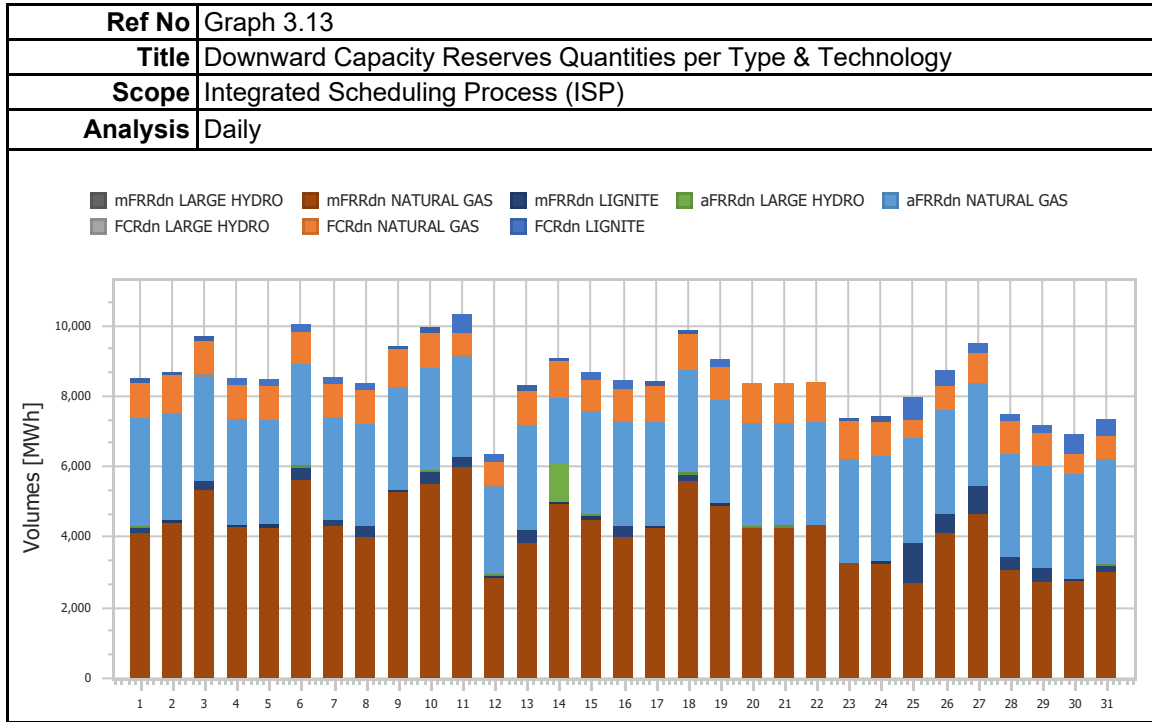
Ref No	Graph 3.9
Title	Downward Capacity Reserves Prices
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



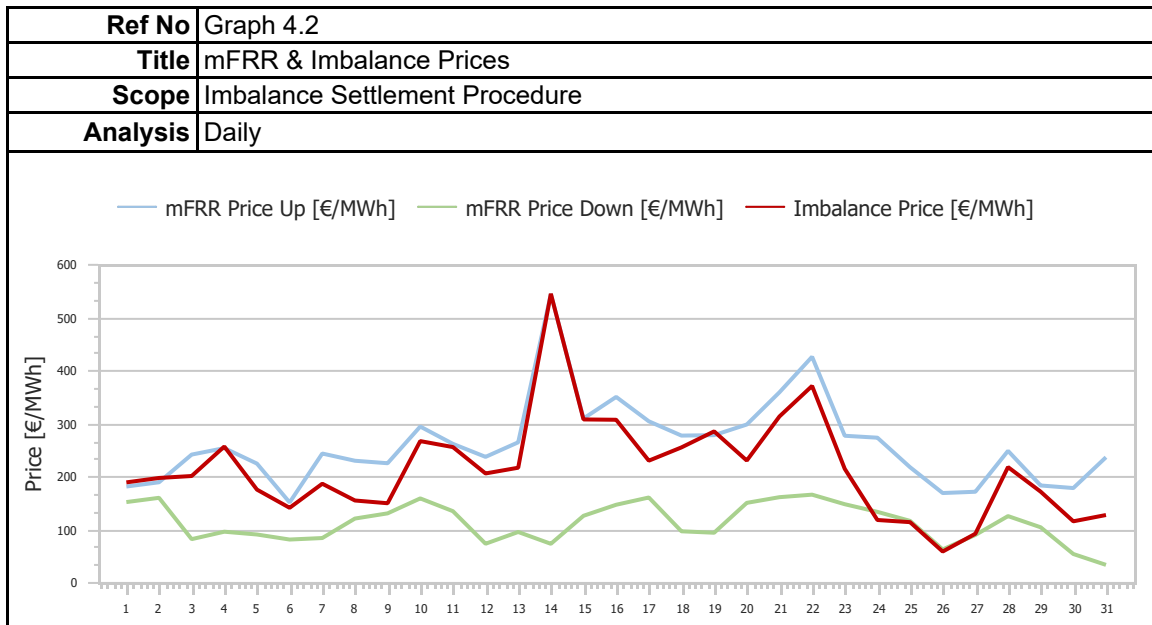
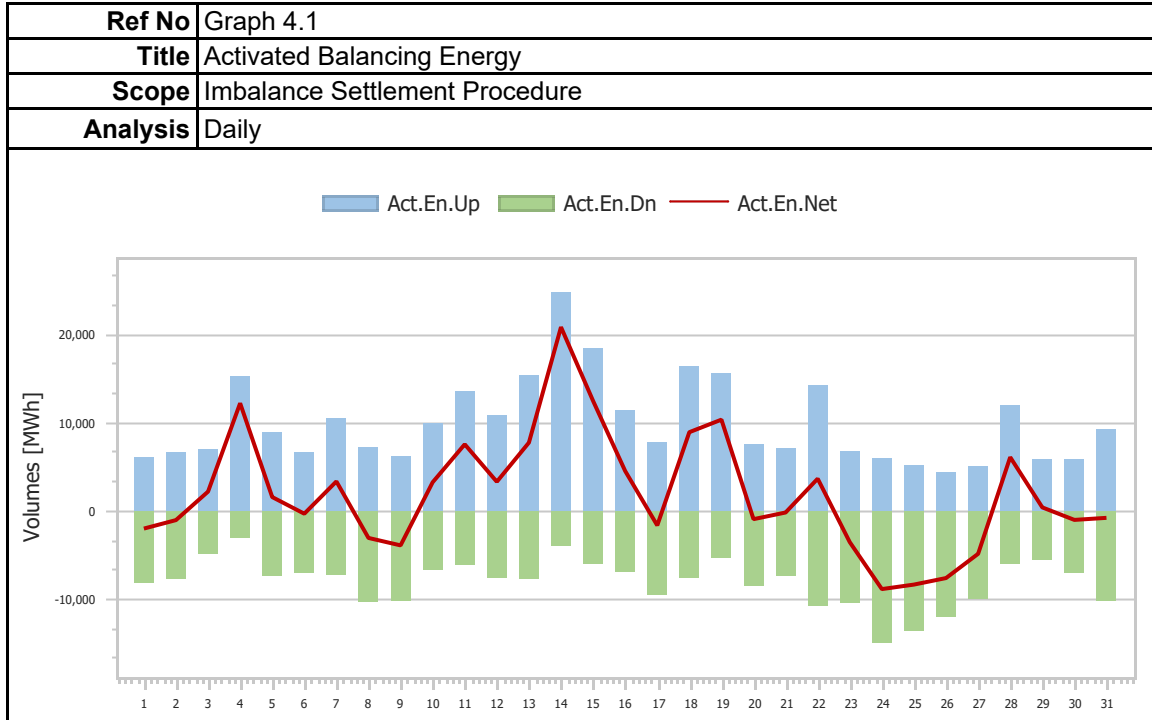
Ref No	Graph 3.10
Title	Upward Capacity Reserves Volumes
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



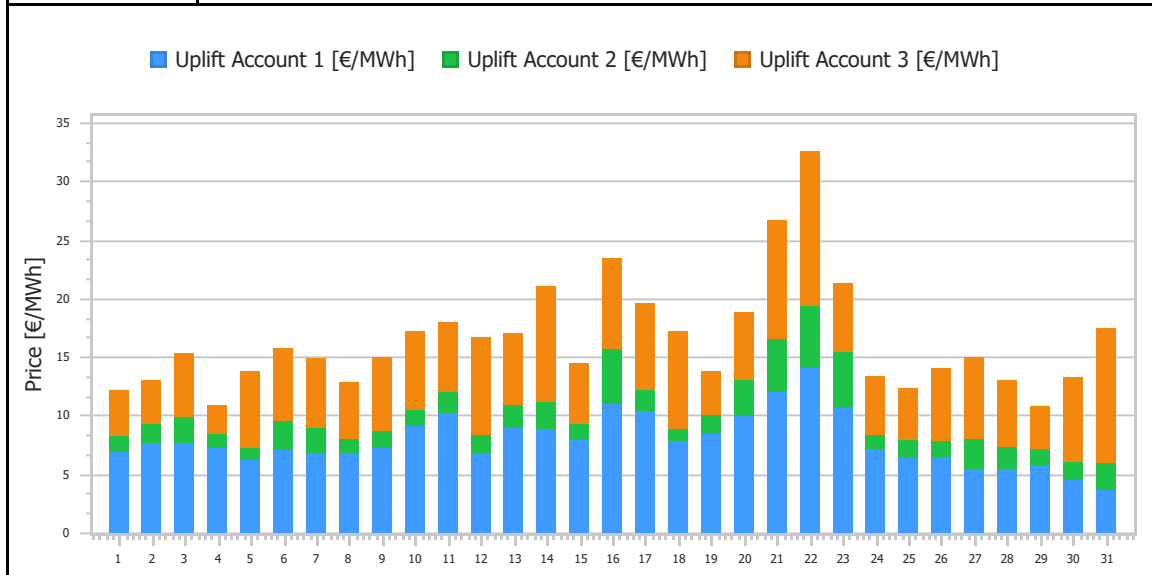




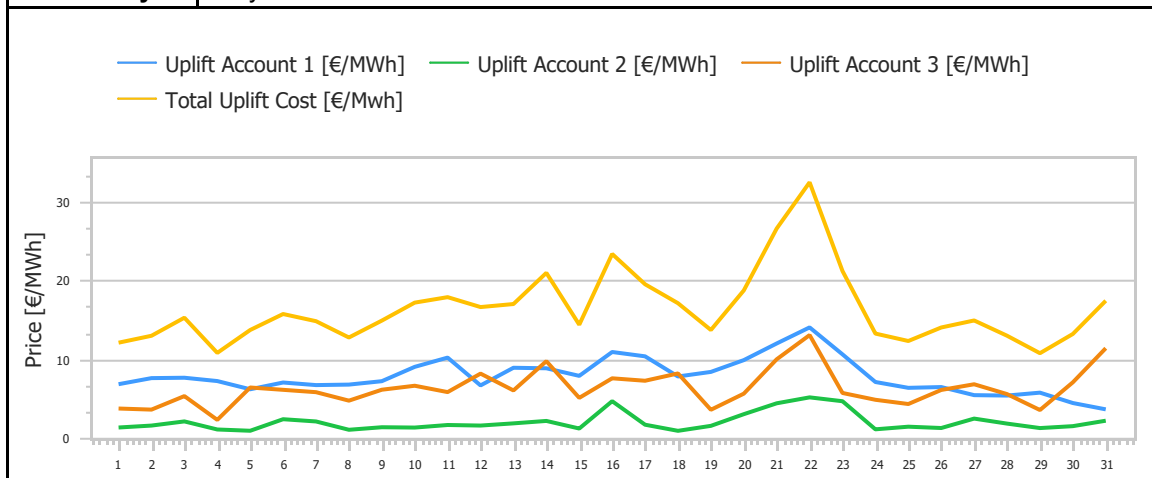
4. Imbalance Settlement Procedure



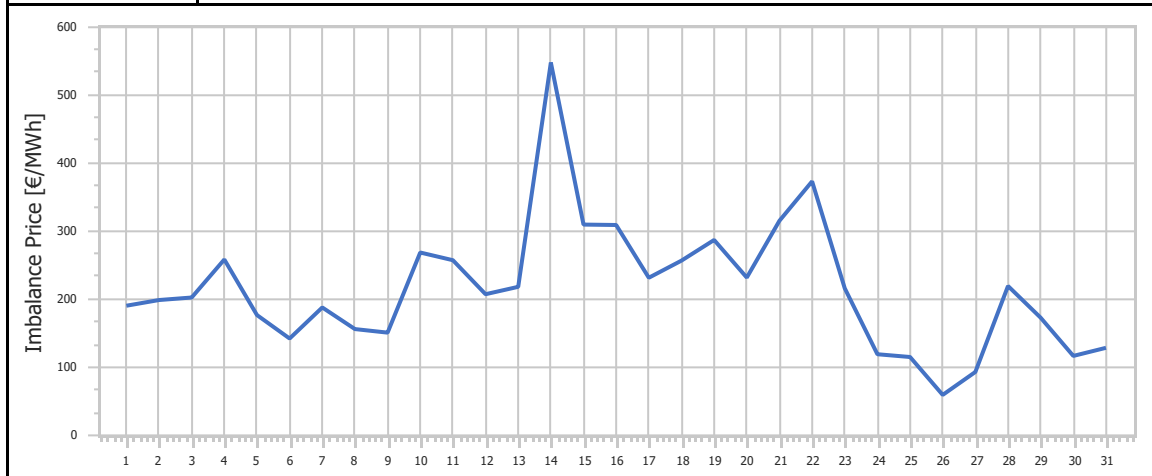
Ref No	Graph 4.3
Title	Uplift Accounts Cost
Scope	Imbalance Settlement Procedure
Analysis	Daily



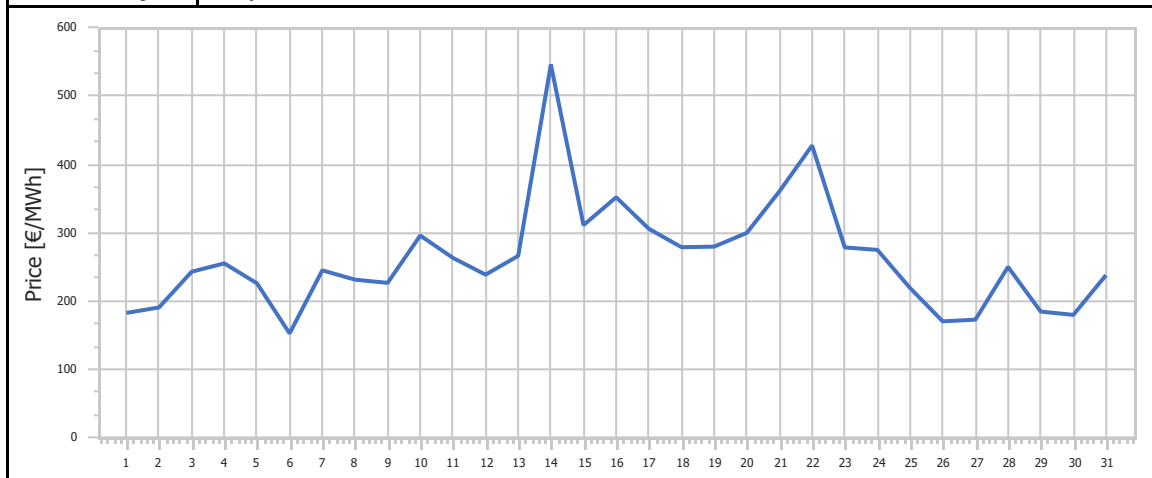
Ref No	Graph 4.4
Title	Uplift Accounts Cost
Scope	Imbalance Settlement Procedure
Analysis	Daily



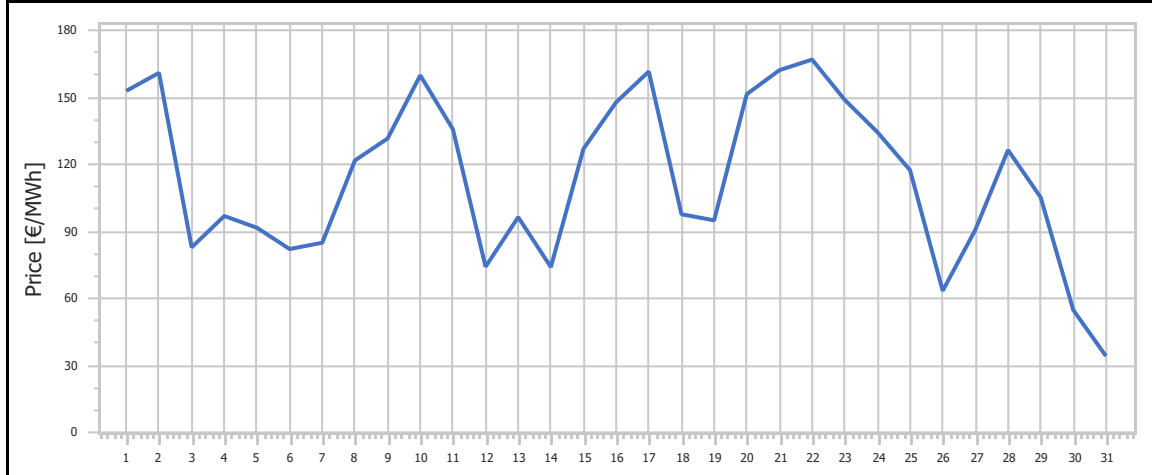
Ref No	Graph 4.5
Title	Imbalance Price
Scope	Imbalance Settlement Procedure
Analysis	Daily



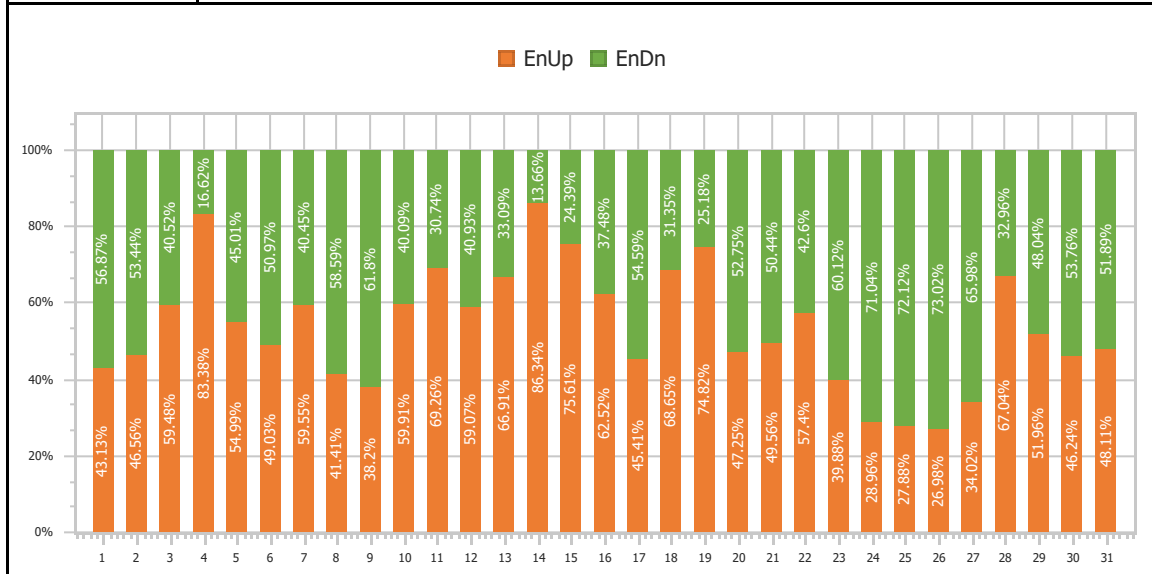
Ref No	Graph 4.6
Title	mFRR Up Price
Scope	Imbalance Settlement Procedure
Analysis	Daily



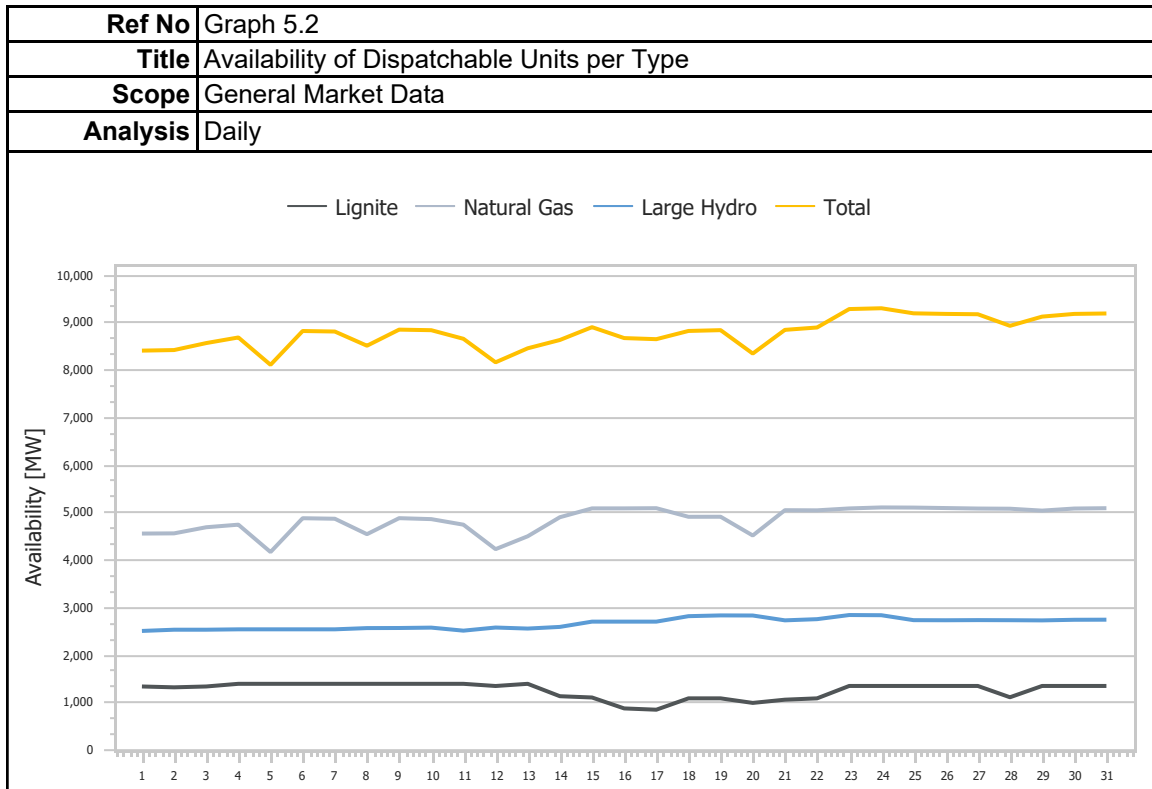
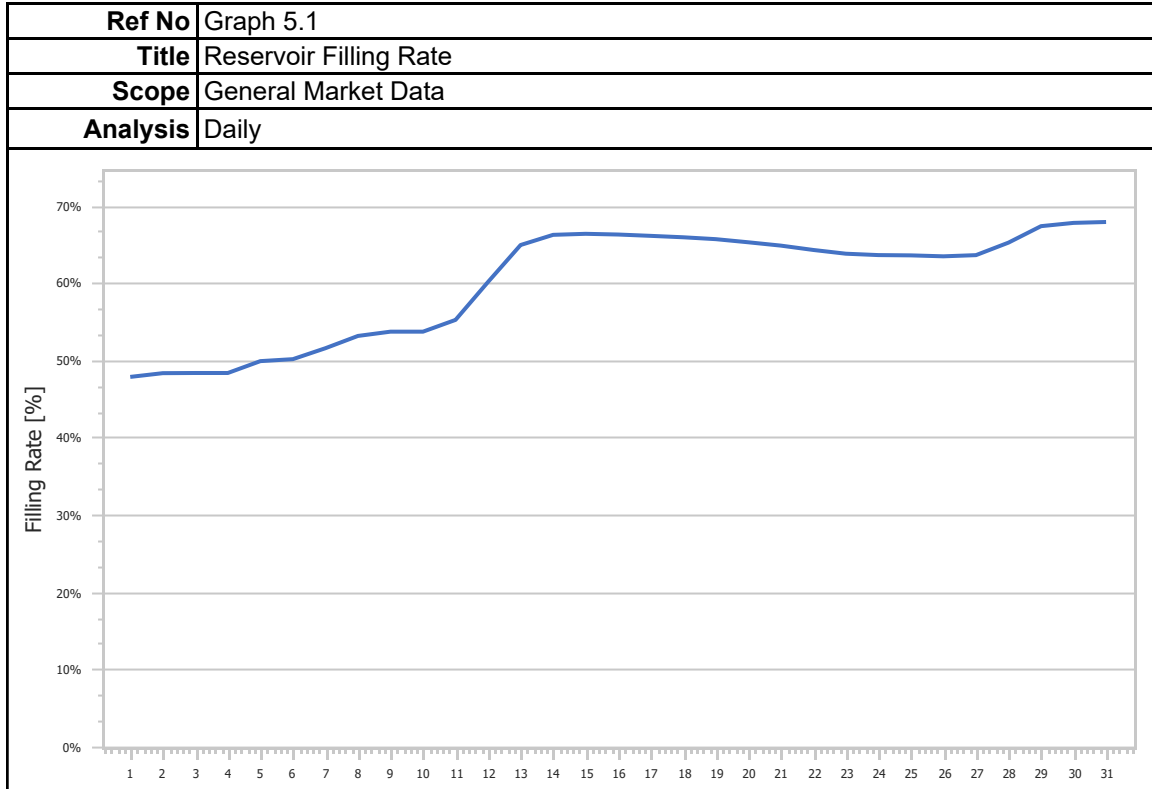
Ref No	Graph 4.7
Title	mFRR Down Price
Scope	Imbalance Settlement Procedure
Analysis	Daily



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



5. General Market Data



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	487,058.355	8.80%	120,950,643.47€	8.90%
Crete Conventional	178,847.440	3.23%	43,937,115.72€	3.23%
Natural Gas	2,032,767.818	36.72%	539,054,304.33€	39.68%
Large Hydro	688,478.207	12.44%	176,565,095.31€	13.00%
RES	1,604,914.644	28.99%	356,973,300.64€	26.28%
Crete Renewables	48,740.500	0.88%	11,901,953.63€	0.88%
Imports	494,624.020	8.94%	109,200,825.27€	8.04%
Total	5,535,430.980	100.00%	1,358,583,238.37€	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	-	5,535,430.98	487,058.36	178,847.44	2,032,767.82	688,478.21	1,604,914.64	48,740.50	494,624.02
Average	235.38	178,562.29	15,711.56	5,769.27	65,573.16	22,208.97	51,771.44	1,572.27	15,955.61
Min	117.23	149,573.23	8,532.00	4,634.00	28,411.02	7,955.22	22,046.13	723.70	5,648.10
Min day	31	5	2	11	31	1	22	25	21
Max	415.94	207,325.95	30,144.00	7,650.20	105,349.94	32,723.02	75,749.83	2,629.30	26,226.00
Max day	22	15	24	25	22	21	18	19	29
Spread	298.72	57,752.72	21,612.00	3,016.20	76,938.92	24,767.80	53,703.70	1,905.60	20,577.90
Standard Deviation	62.39	15,735.55	6,122.08	847.51	18,746.22	8,197.17	15,882.87	494.39	5,990.52

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	124,626.000	2.25%	30,152,955.04€	2.22%
Crete Load	243,935.700	4.41%	60,507,951.80€	4.45%
HV Load	619,799.364	11.20%	144,130,282.04€	10.61%
MV Load	852,970.741	15.41%	210,140,412.18€	15.47%
LV Load	3,014,346.749	54.46%	749,838,662.95€	55.19%
PUMP	12,214.349	0.22%	1,746,241.72€	0.13%
Exports	667,539.240	12.06%	162,066,992.77€	11.93%
Total	5,535,432.141	100.00%	1,358,583,498.51€	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	-	5,535,432.14	124,626.00	243,935.70	619,799.36	852,970.74	3,014,346.75	12,214.35	667,539.24
Average	235.38	178,562.33	4,020.19	7,868.89	19,993.53	27,515.19	97,236.99	469.78	21,533.52
Min	117.23	149,573.15	2,734.50	6,252.00	18,912.12	18,293.67	84,012.68	220.00	12,579.66
Min day	31	5	5	5	13	26	5	11	4
Max	415.94	207,325.99	5,330.50	8,933.80	22,596.69	31,790.09	111,040.31	750.00	35,941.40
Max day	22	15	10	21	4	21	20	31	15
Spread	298.72	57,752.83	2,596.00	2,681.80	3,684.57	13,496.42	27,027.64	530.00	23,361.74
Standard Deviation	62.39	15,735.56	542.68	617.64	821.30	4,295.29	8,603.46	121.66	6,190.89

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	1,361,534.020	64.39%	4,259,130.93€	56.66%
FCR	127,558.380	6.03%	569,767.79€	7.58%
mFRR	625,470.320	29.58%	2,687,713.61€	35.76%
Total	2,114,562.720	100.00%	7,516,612.34€	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	358,003.500	34.96%	1,388,465.83€	57.75%
FCR	135,914.790	13.27%	323,956.43€	13.47%
mFRR	530,264.230	51.77%	691,883.39€	28.78%
Total	1,024,182.530	100.00%	2,404,305.64€	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	118,293.580	38.21%	36,894,466.48€	36.78%
mFRR	191,331.810	61.79%	63,413,562.90€	63.22%
Total	309,625.380	100.00%	100,308,029.37€	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	87,246.200	35.20%	7,794,405.30€	29.85%
mFRR	160,591.110	64.80%	18,320,113.28€	70.15%
Total	247,837.310	100.00%	26,114,518.58€	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	5,535,430.98	96.36%
IDMA1	59,336.99	1.03%
IDMA2	44,408.29	0.77%
IDMA3	43,367.85	0.75%
IDM (Total)	147,113.13	2.56%
Balancing Energy (Up)	309,625.38	5.39%
Balancing Energy (Dn)	247,837.31	4.31%
Balancing Energy (Total)	61,788.07	1.08%
Total	5,744,332.18	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	1,358,583,238.37€	91.78%
IDMA1	15,647,621.71€	1.06%
IDMA2	10,955,328.29€	0.74%
IDMA3	10,961,397.08€	0.74%
IDM (Total)	37,564,347.08€	2.54%
Balancing Capacity (Up)	7,516,612.34€	0.51%
Balancing Capacity (Dn)	2,404,305.64€	0.16%
Balancing Capacity (Total)	9,920,917.98€	0.67%
Balancing Energy (Up)	100,308,029.37€	6.78%
Balancing Energy (Dn)	26,114,518.58€	1.76%
Balancing Energy (Total)	74,193,510.79€	5.01%
Balancing Market (Total)	84,114,428.77€	5.68%
Total	1,480,262,014.22€	100.00%