

Market Monitoring Report

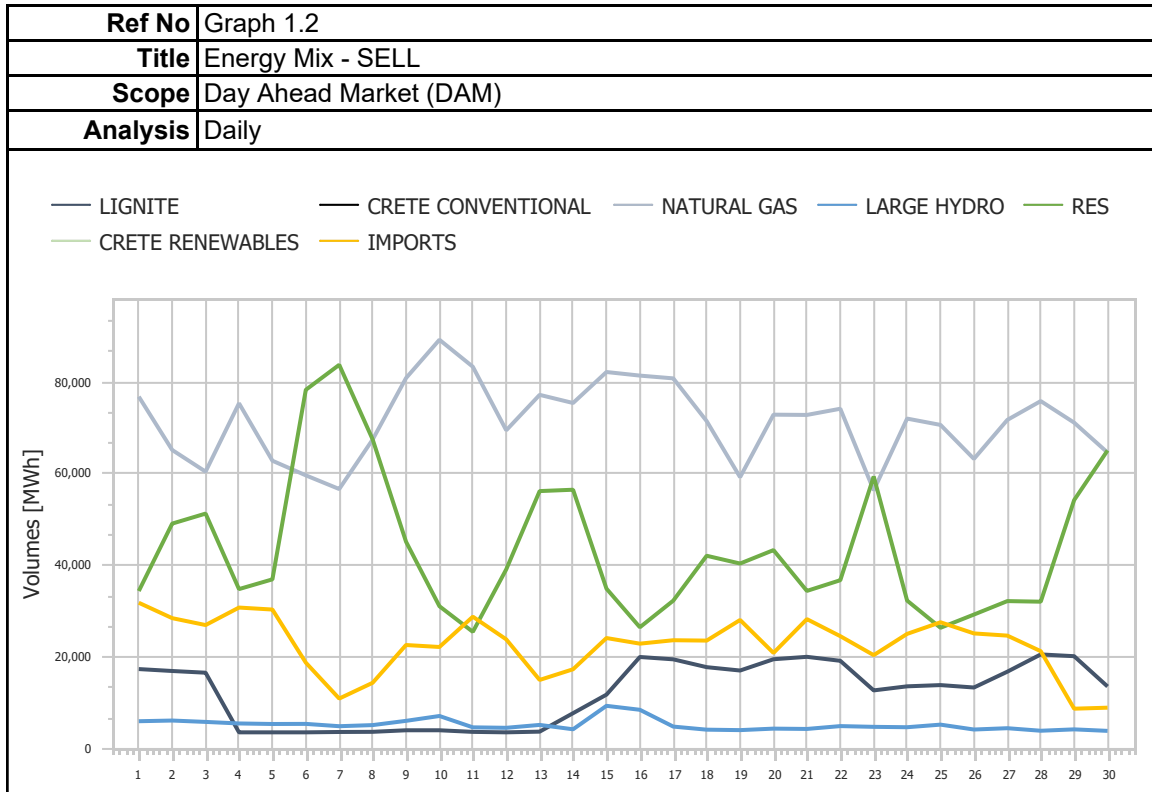
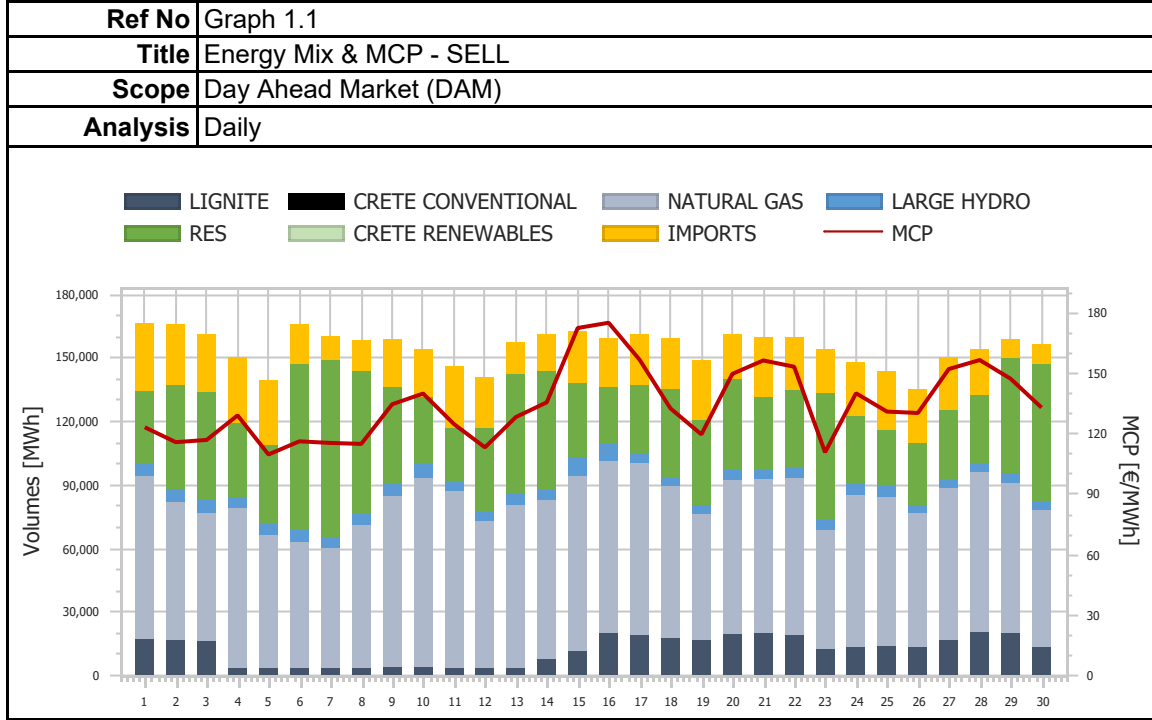
Monthly - Public - 2

09-2021

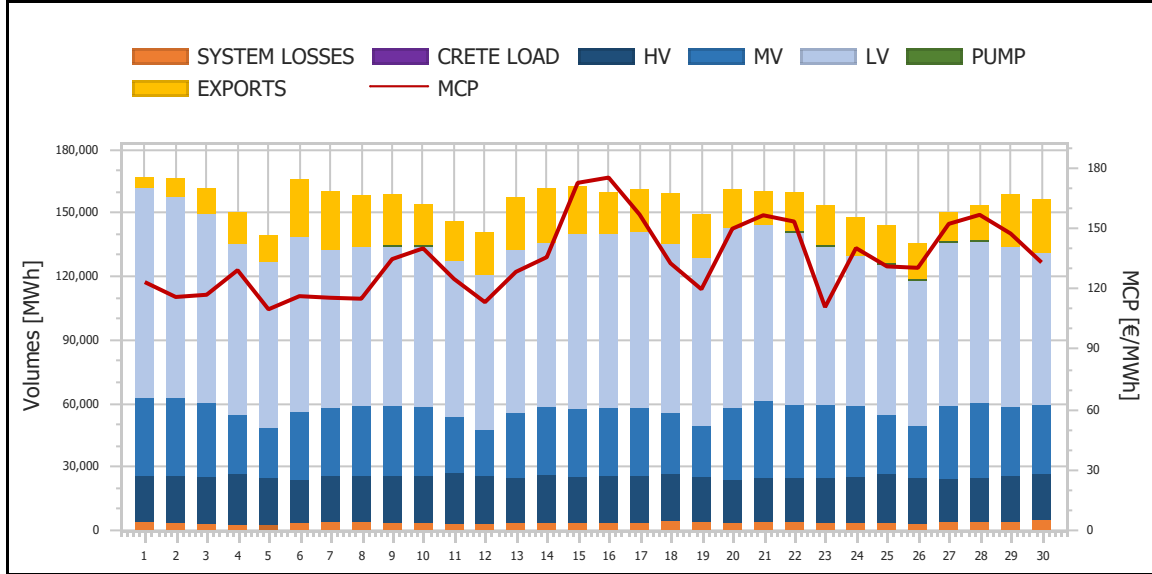


ΡΥΘΜΙΣΤΙΚΗ ΑΡΧΗ ΕΝΕΡΓΕΙΑΣ
REGULATORY AUTHORITY FOR ENERGY

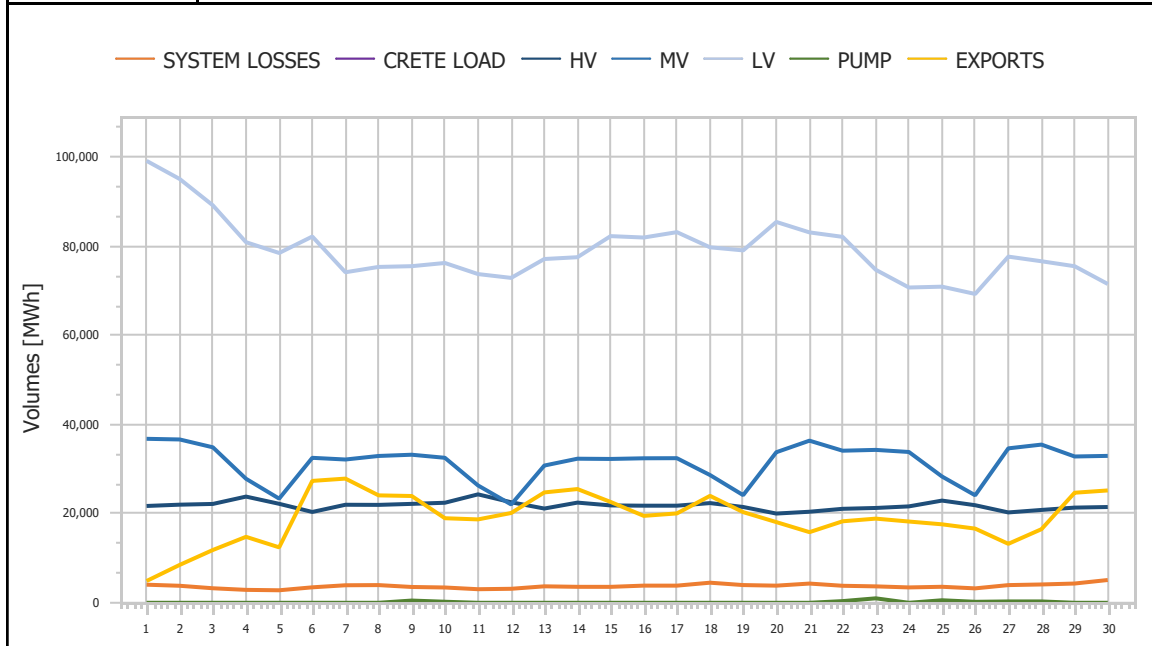
1. Day Ahead Market (DAM)



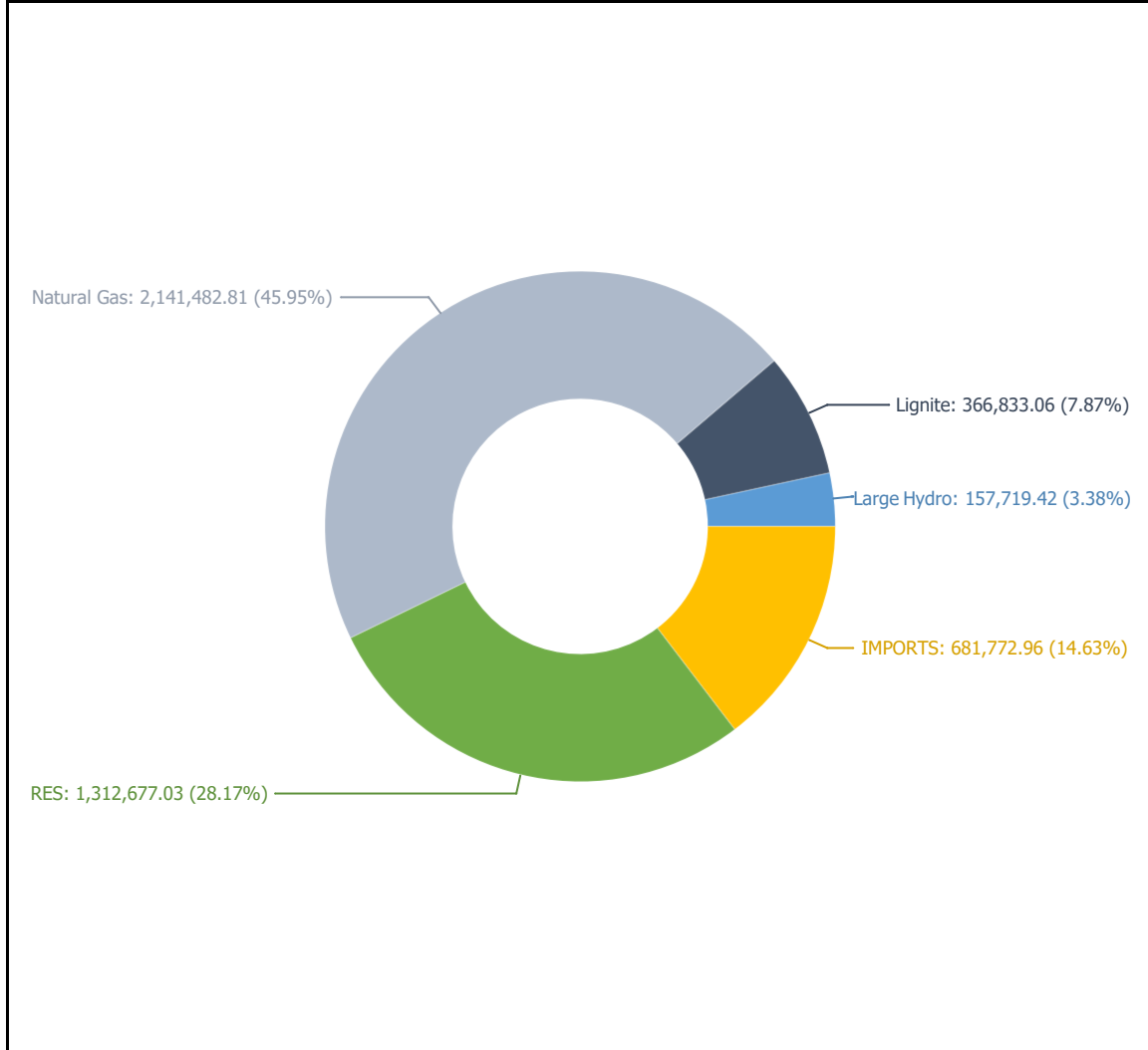
Ref No	Graph 1.3
Title	Energy Mix & MCP - BUY
Scope	Day Ahead Market (DAM)
Analysis	Daily



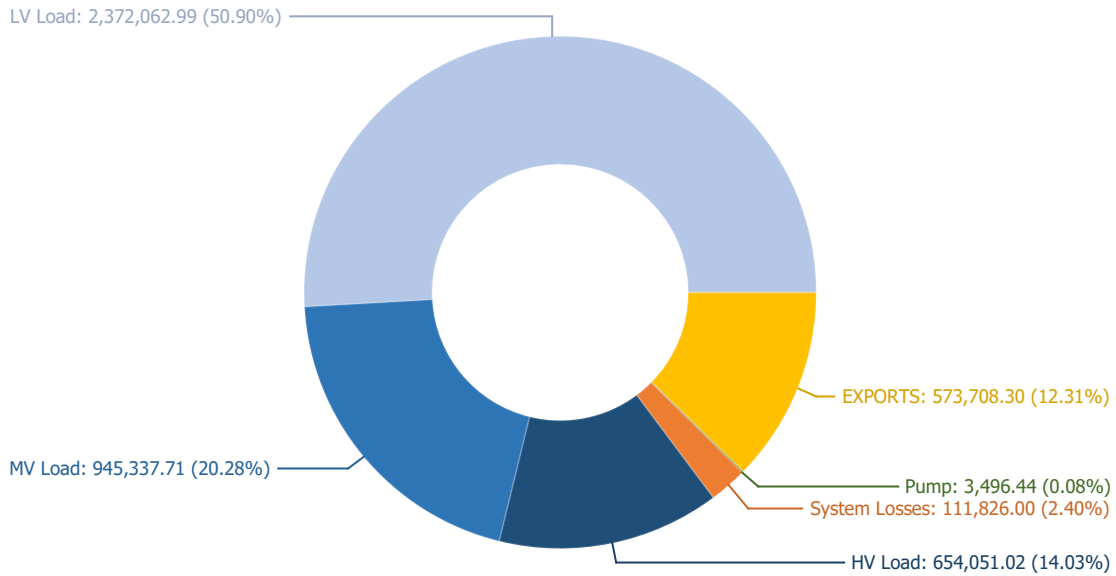
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Title	Energy Mix - BUY
Scope	Day Ahead Market (DAM)
Analysis	Daily



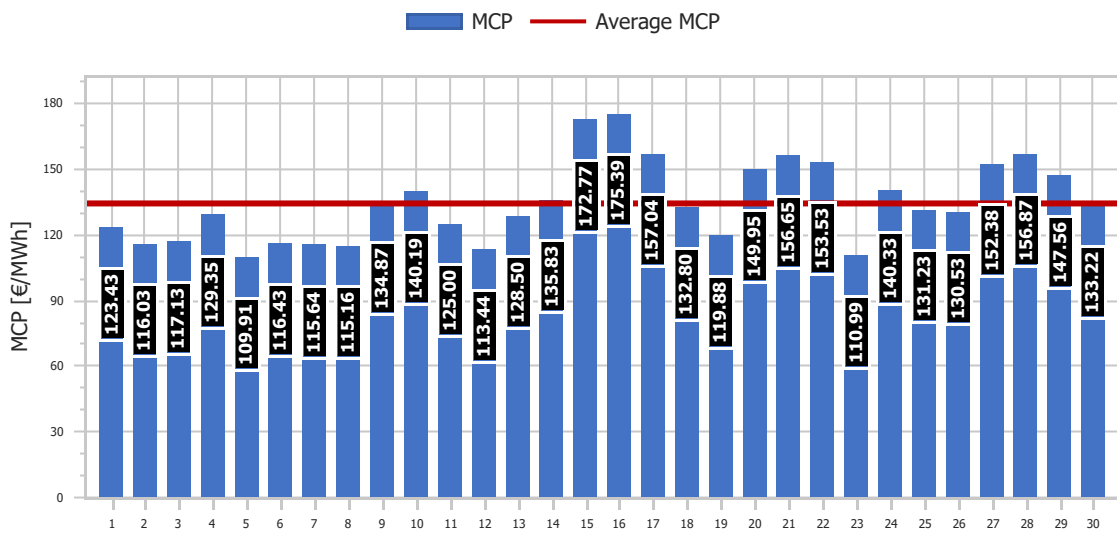
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Title	Energy Mix - SELL
Scope	Day Ahead Market (DAM)
Analysis	Daily



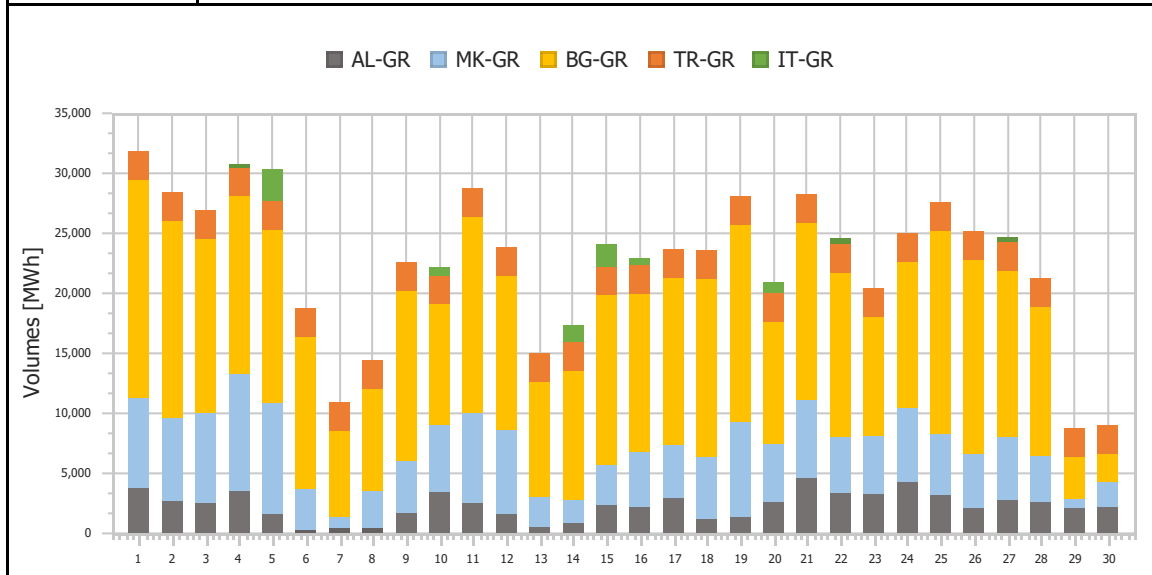
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Title	Energy Mix - BUY
Scope	Day Ahead Market (DAM)
Analysis	Daily



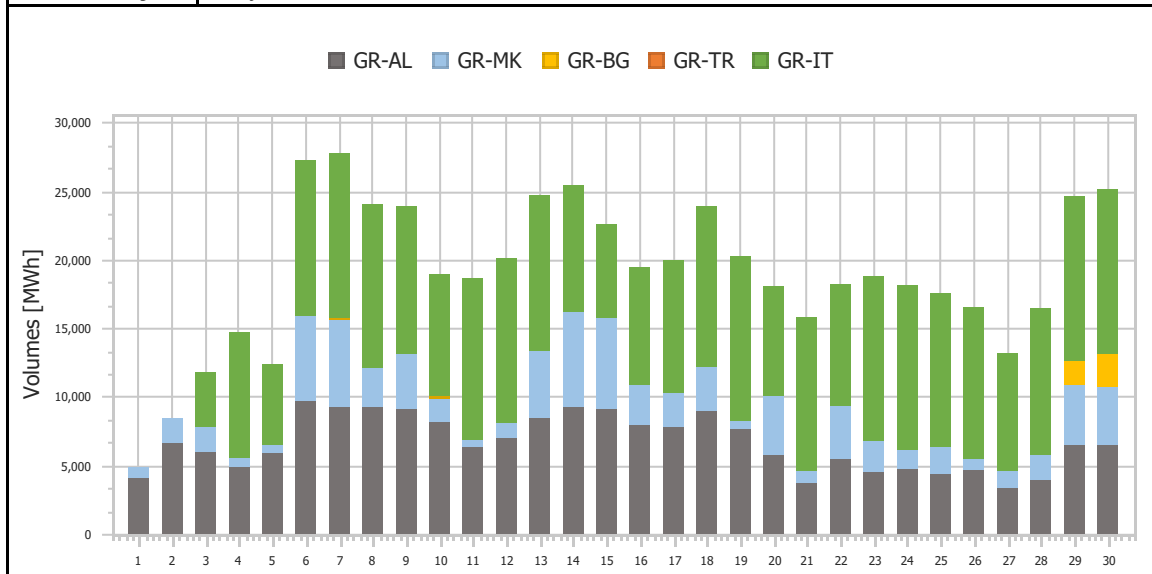
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Title	Market Clearing Price (MCP)
Scope	Day Ahead Market (DAM)
Analysis	Daily



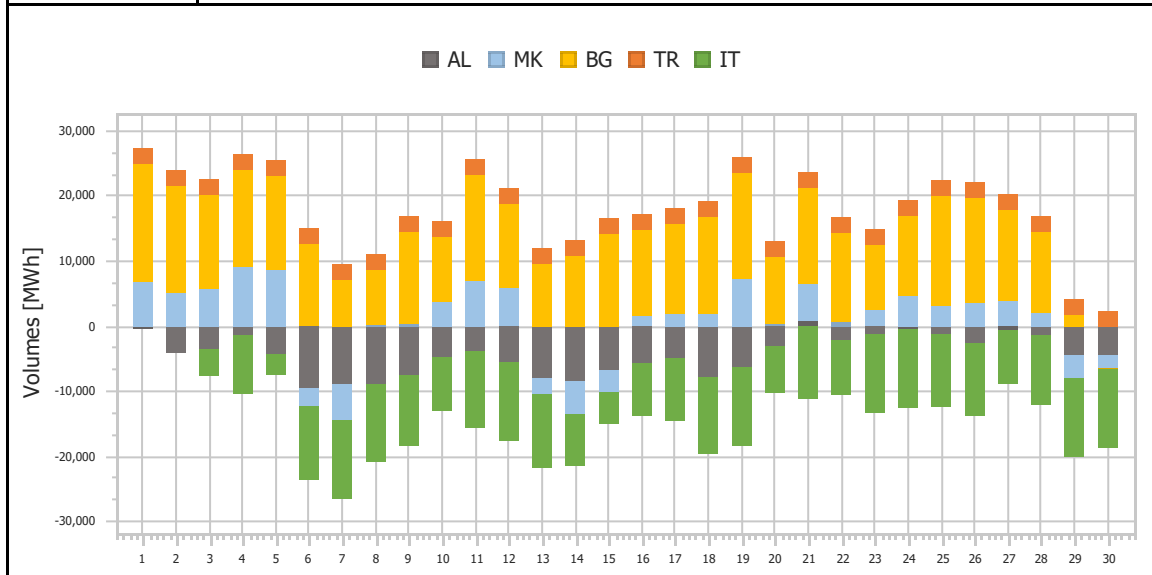
Ref No	Graph 1.8
Title	Imports per Border
Scope	Day Ahead Market (DAM)
Analysis	Daily



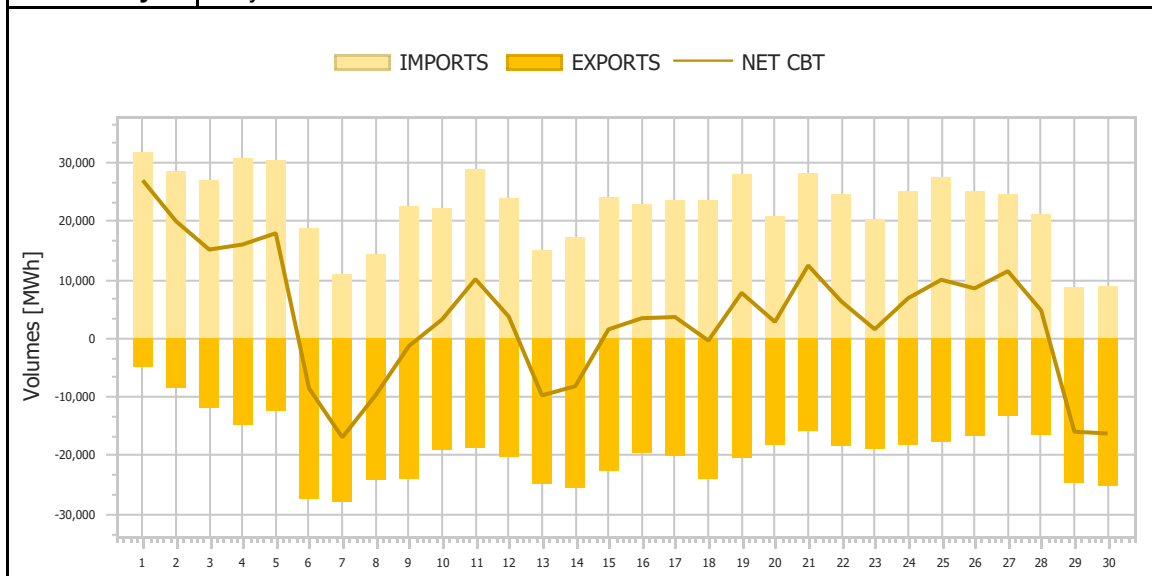
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Title	Exports per Border
Scope	Day Ahead Market (DAM)
Analysis	Daily



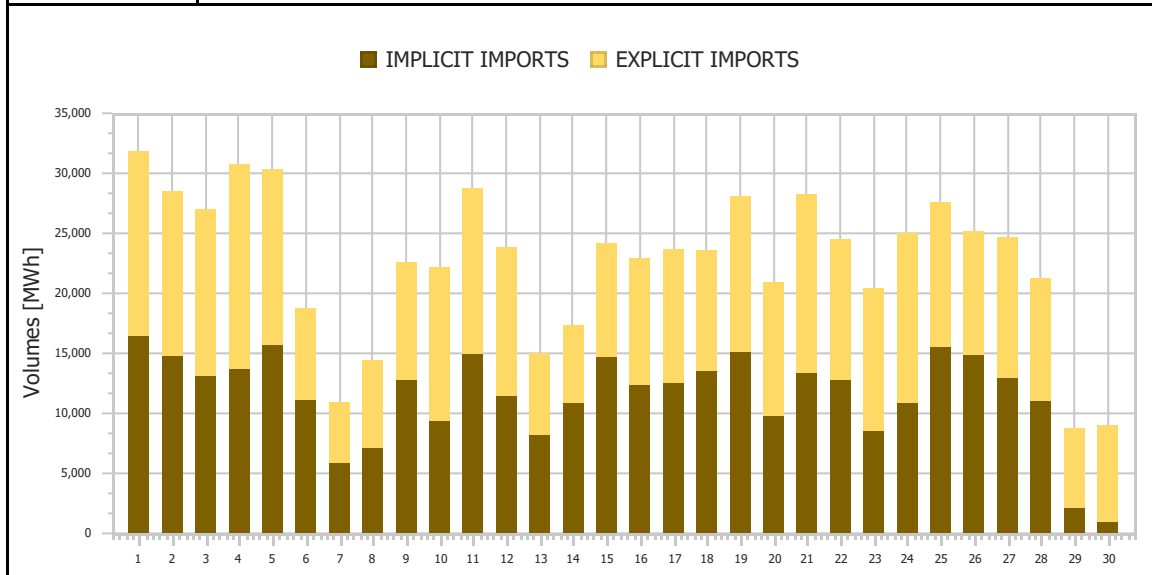
Ref No	Graph 1.10
Title	Net Imports per Border
Scope	Day Ahead Market (DAM)
Analysis	Daily



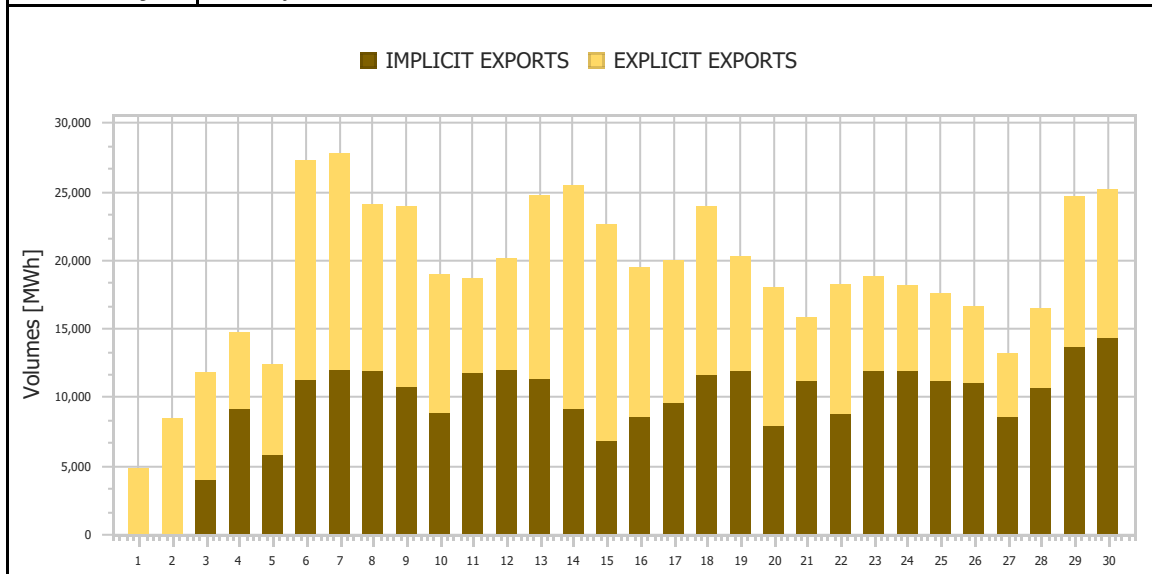
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Title	Total Imports & Exports
Scope	Day Ahead Market (DAM)
Analysis	Daily

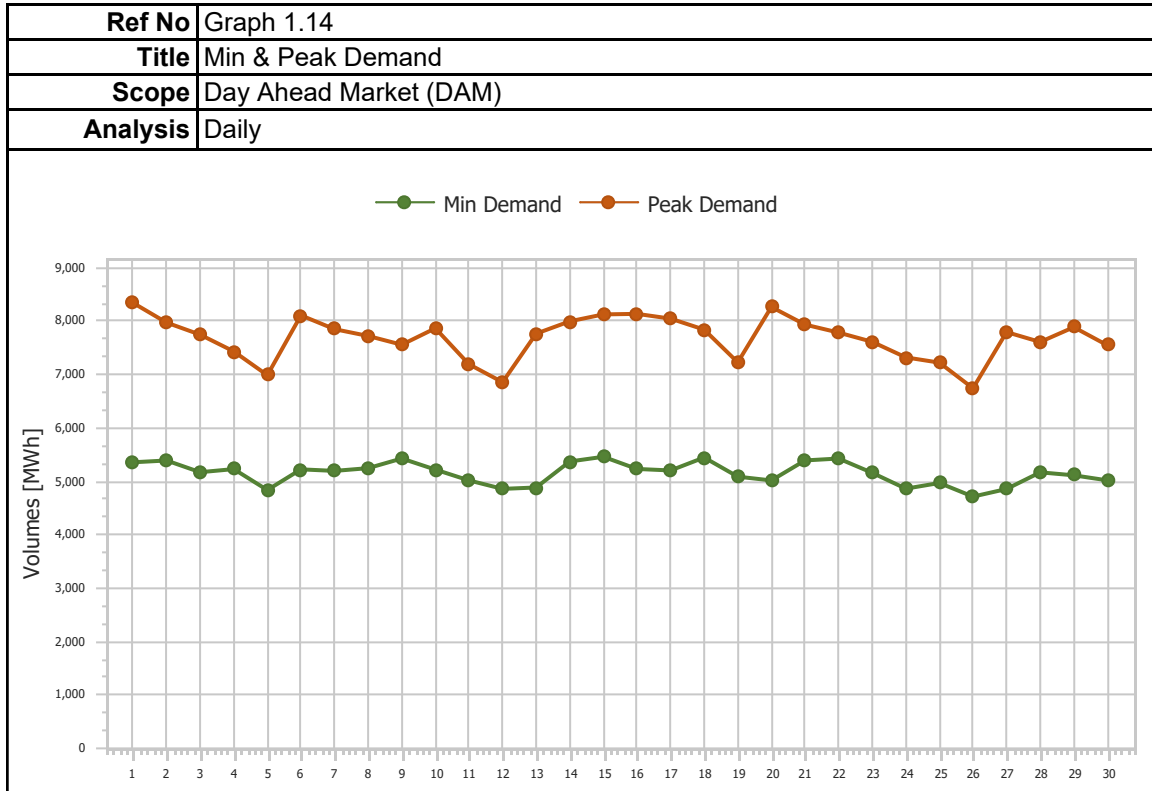


Ref No	Graph 1.12
Title	Imports (Implicit/Explicit)
Scope	Day Ahead Market (DAM)
Analysis	Daily

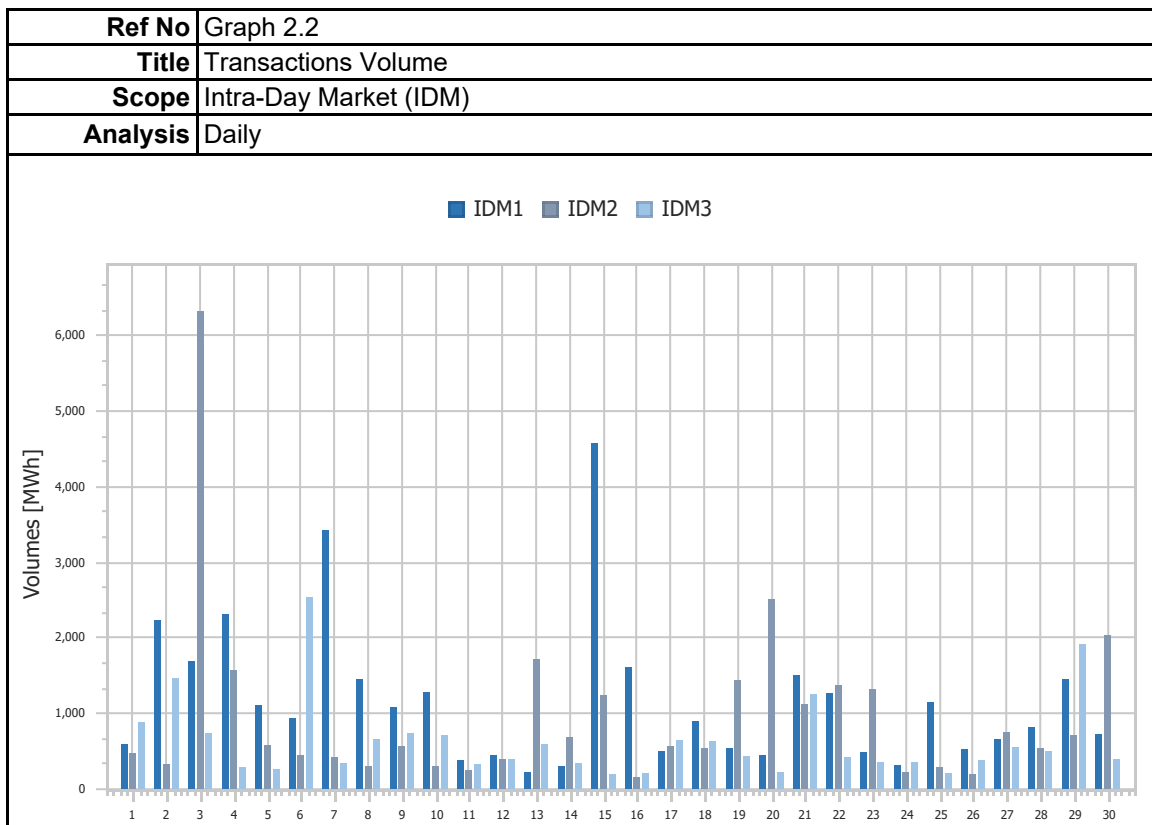
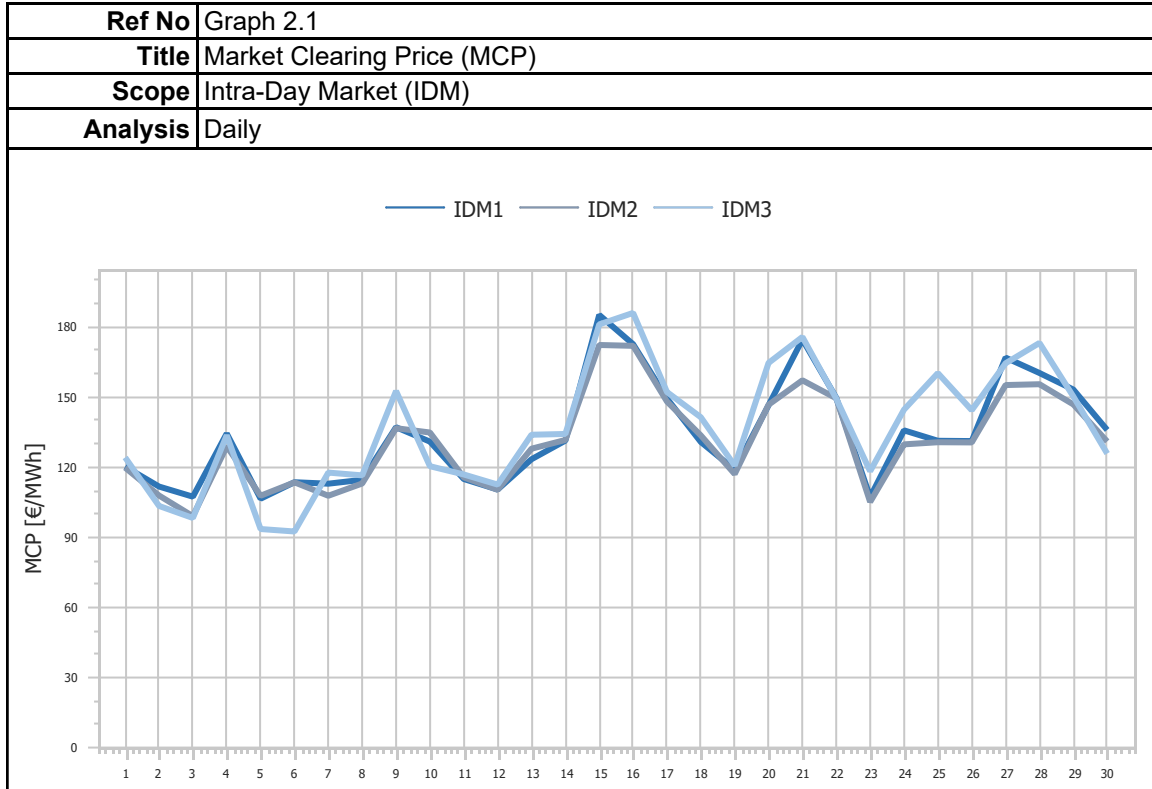


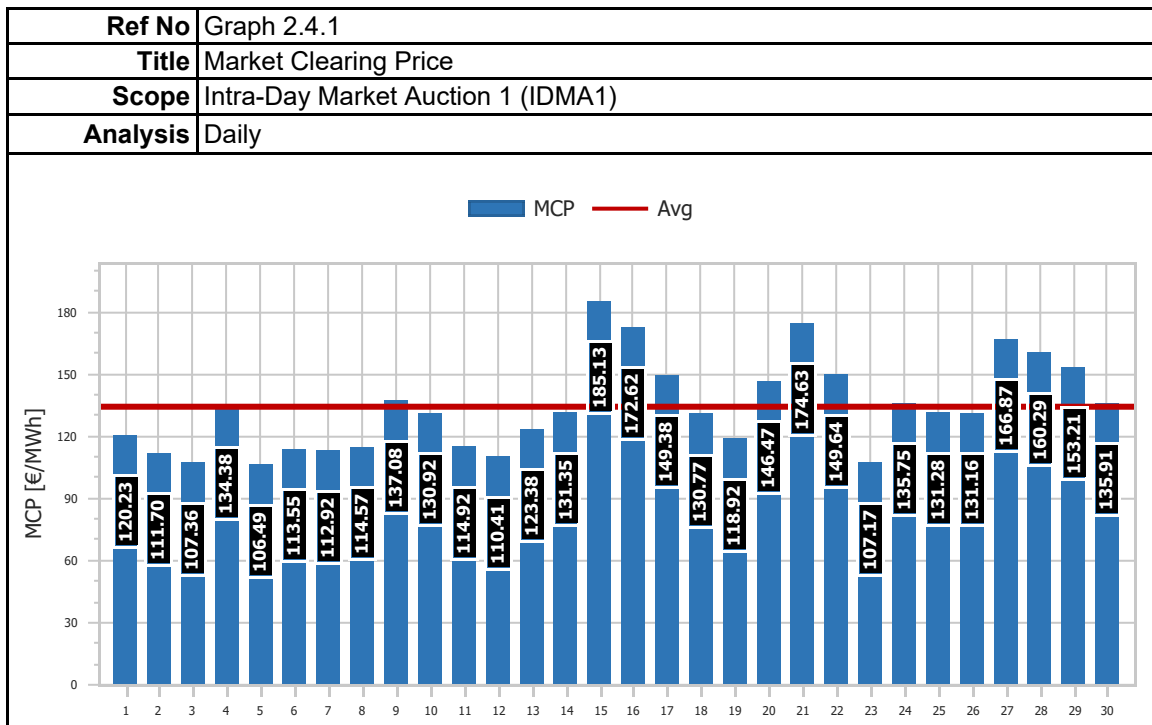
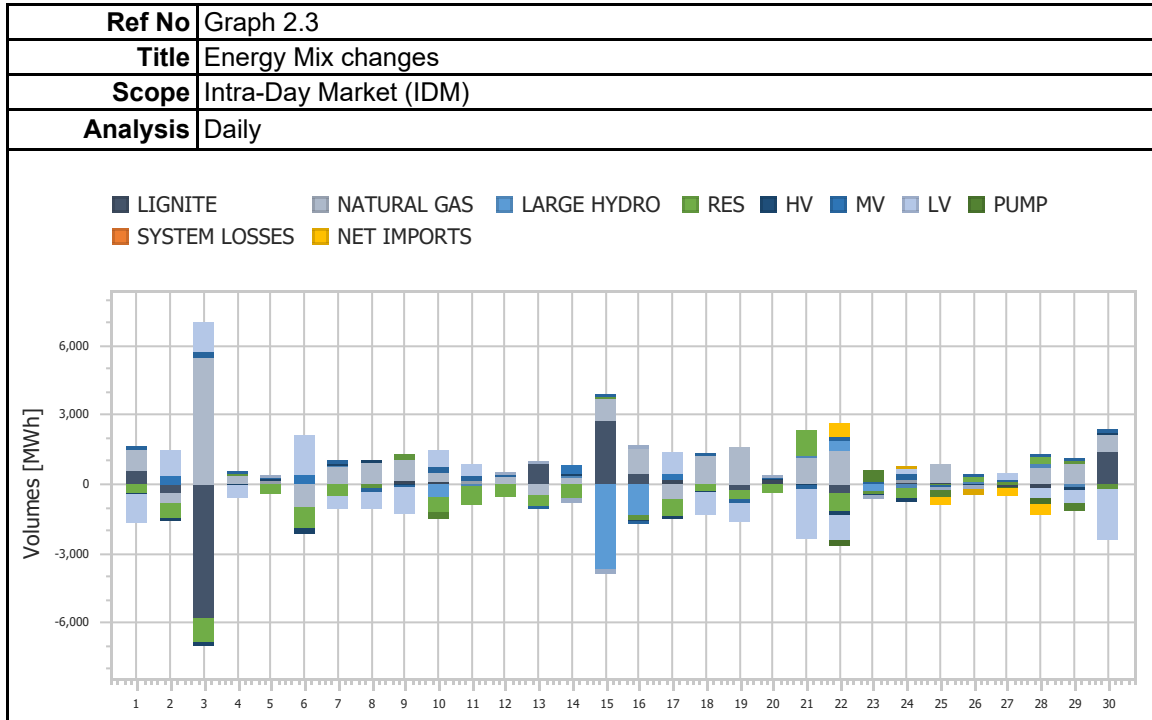
Ref No	Graph 1.13
Title	Exports (Implicit/Explicit)
Scope	Day Ahead Market (DAM)
Analysis	Monthly



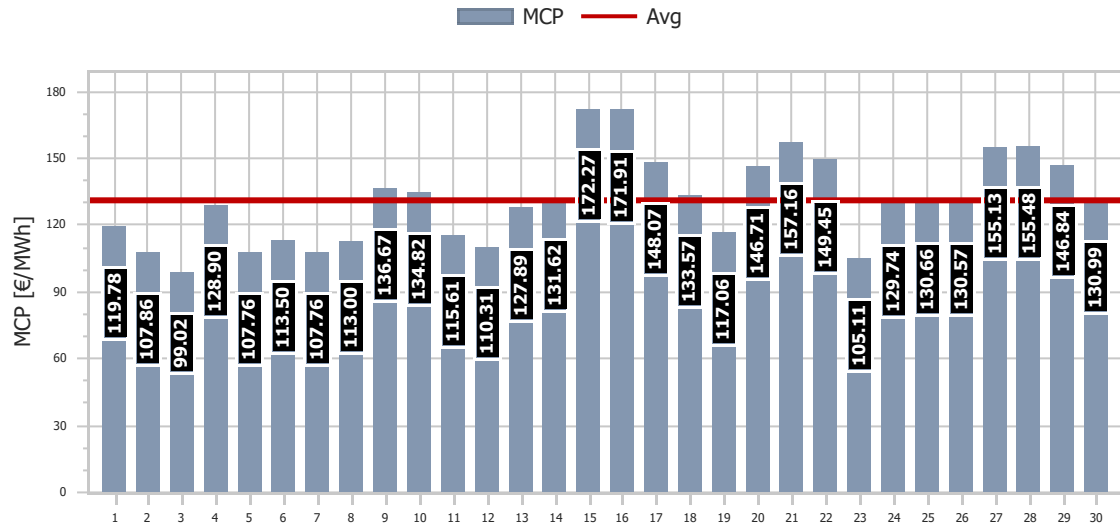


2. Intra-Day Market (IDM)

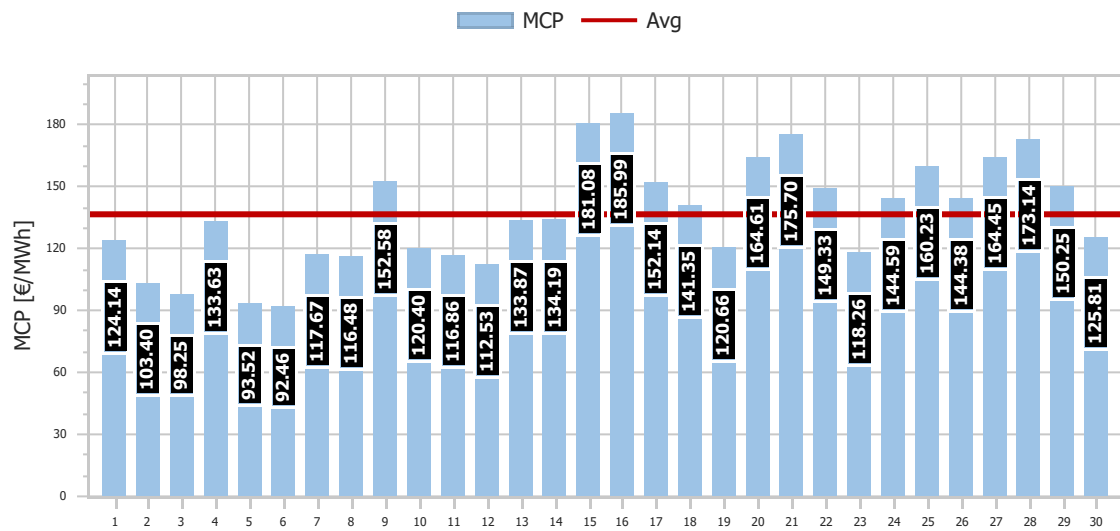


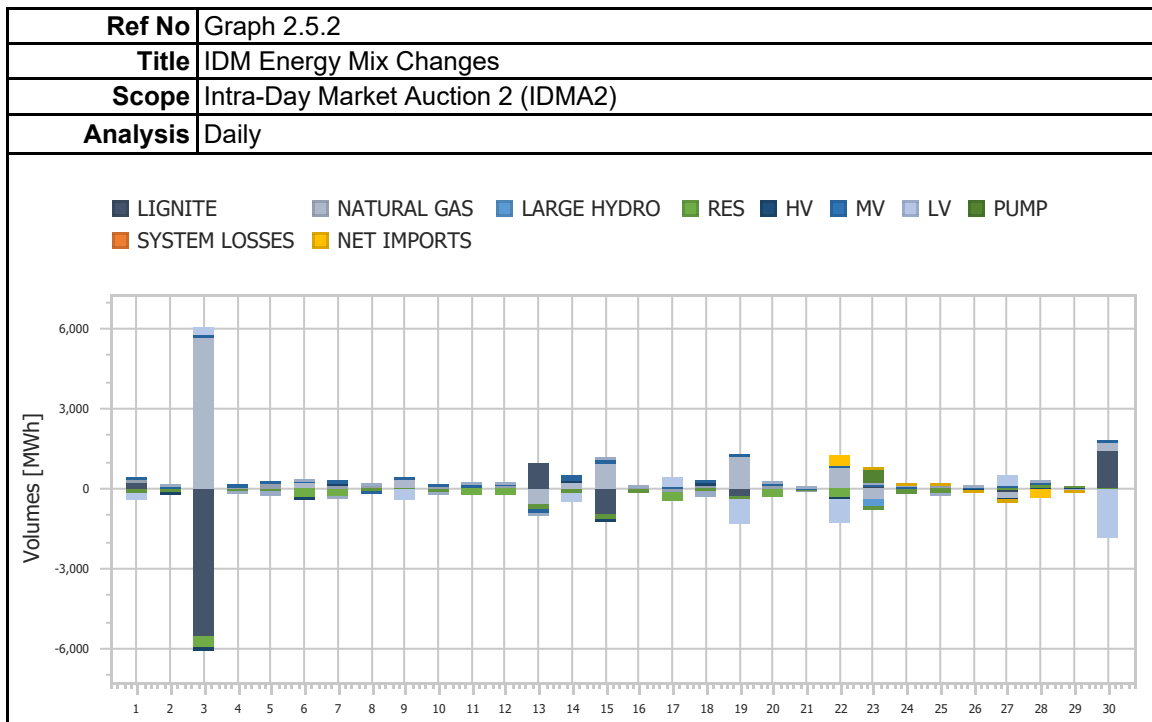
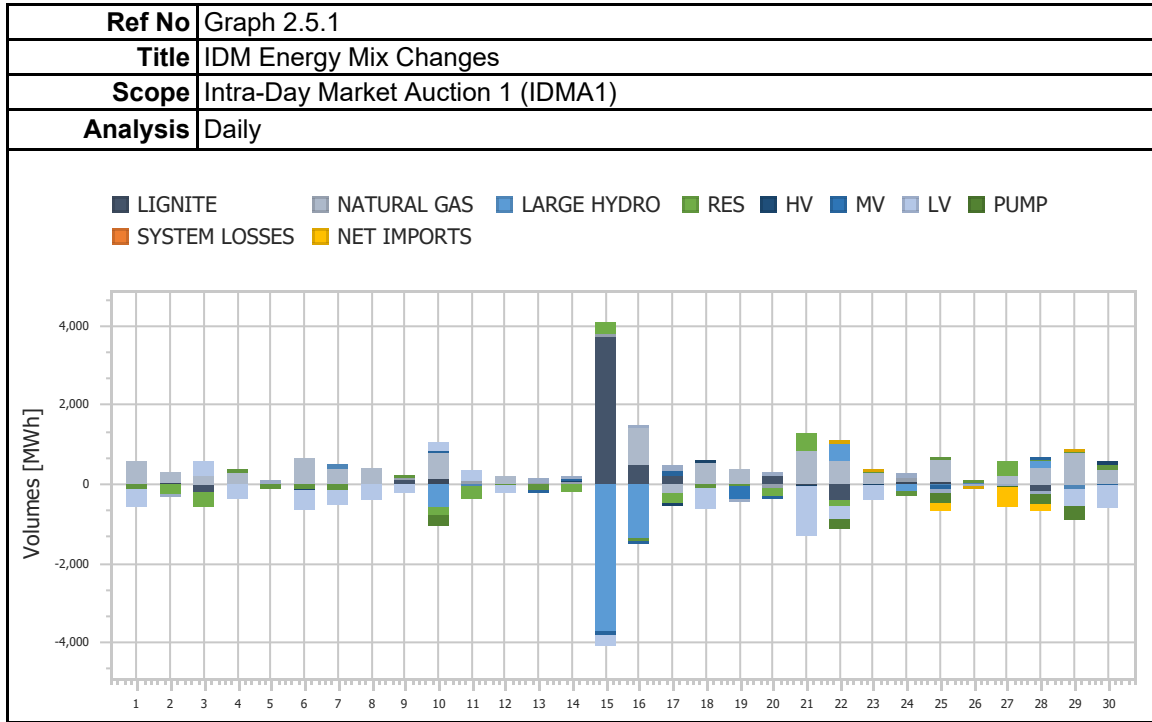


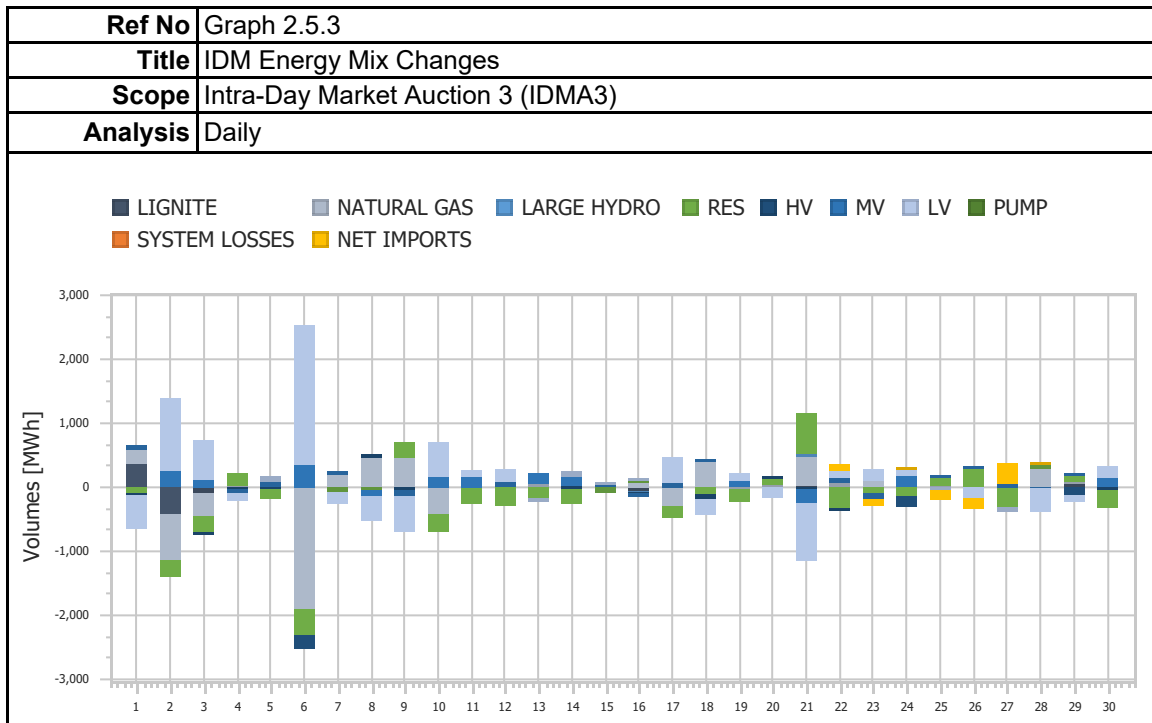
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Title	Market Clearing Price
Scope	Intra-Day Market Auction 2 (IDMA2)
Analysis	Daily



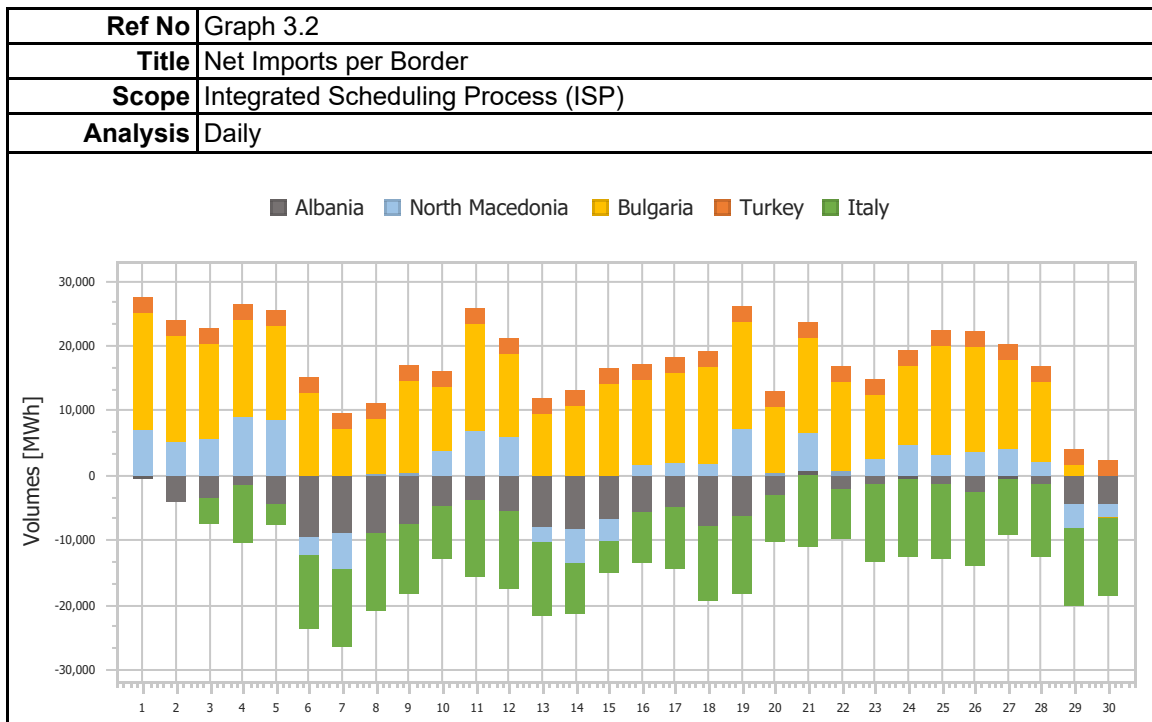
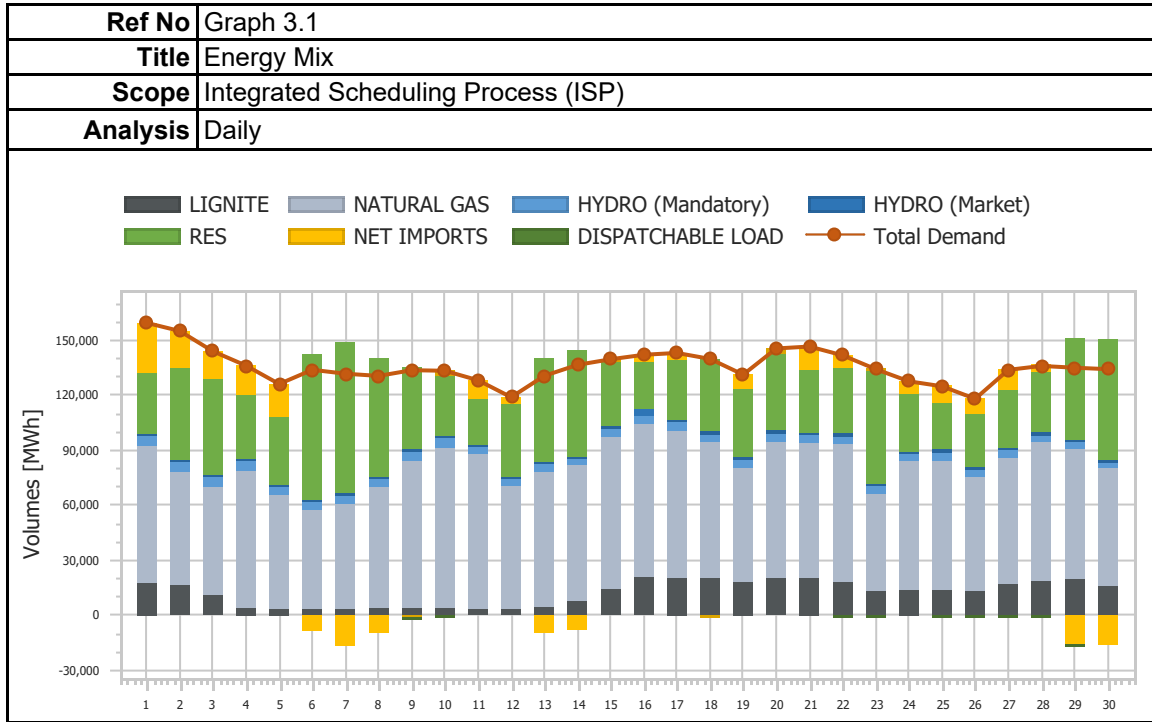
Ref No	Graph 2.4.3
Title	Market Clearing Price
Scope	Intra-Day Market Auction 3 (IDMA3)
Analysis	Daily



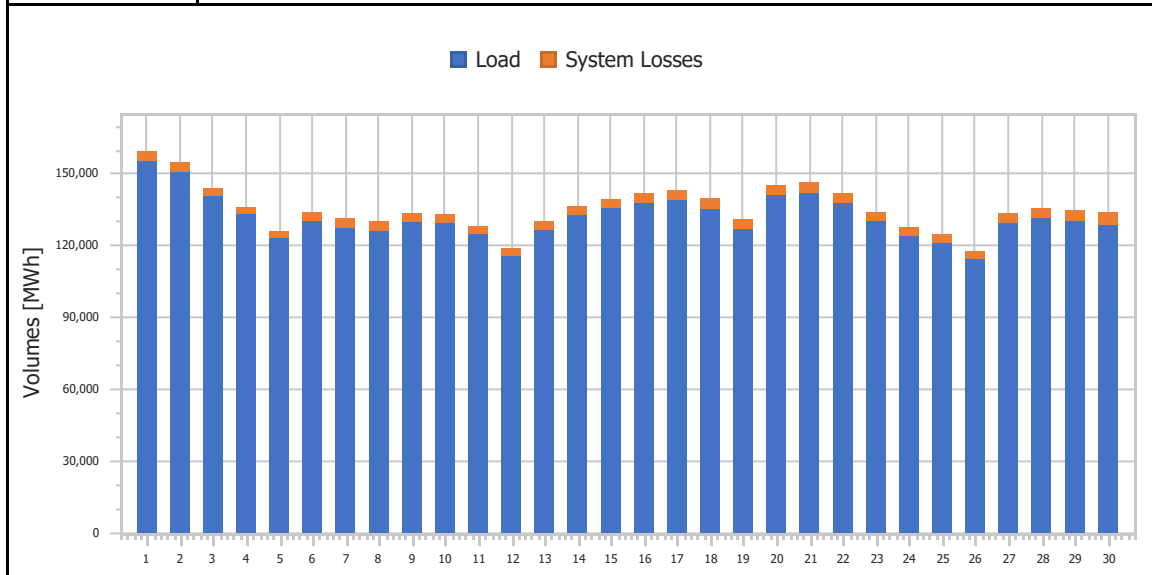




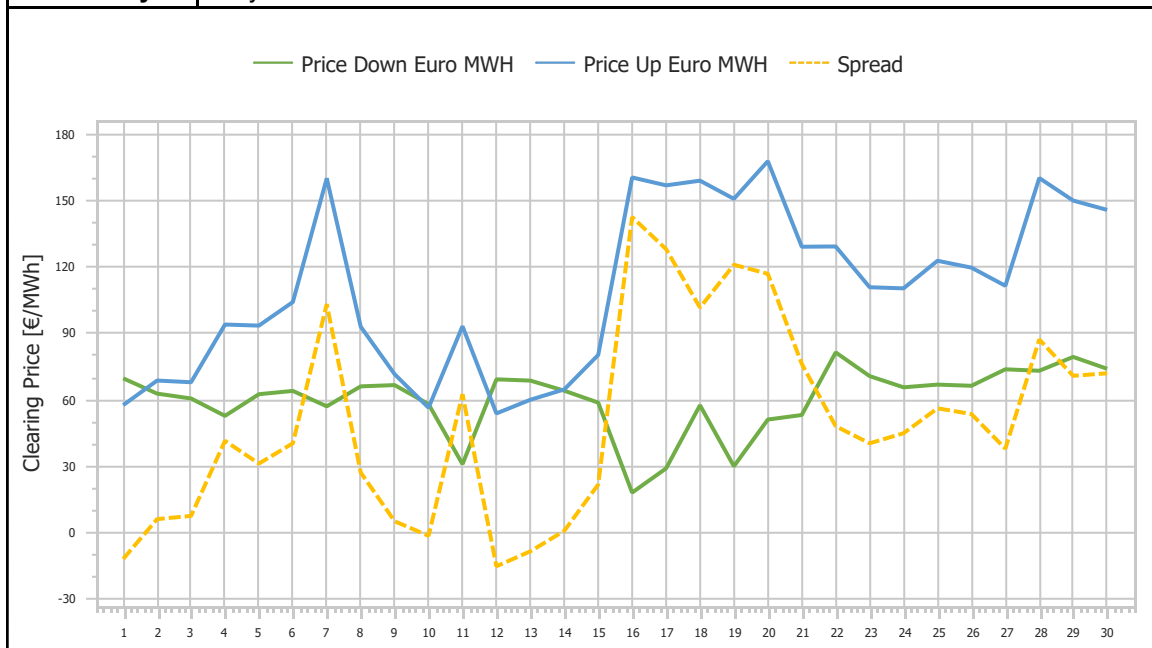
3. Integrated Scheduling Process (ISP)



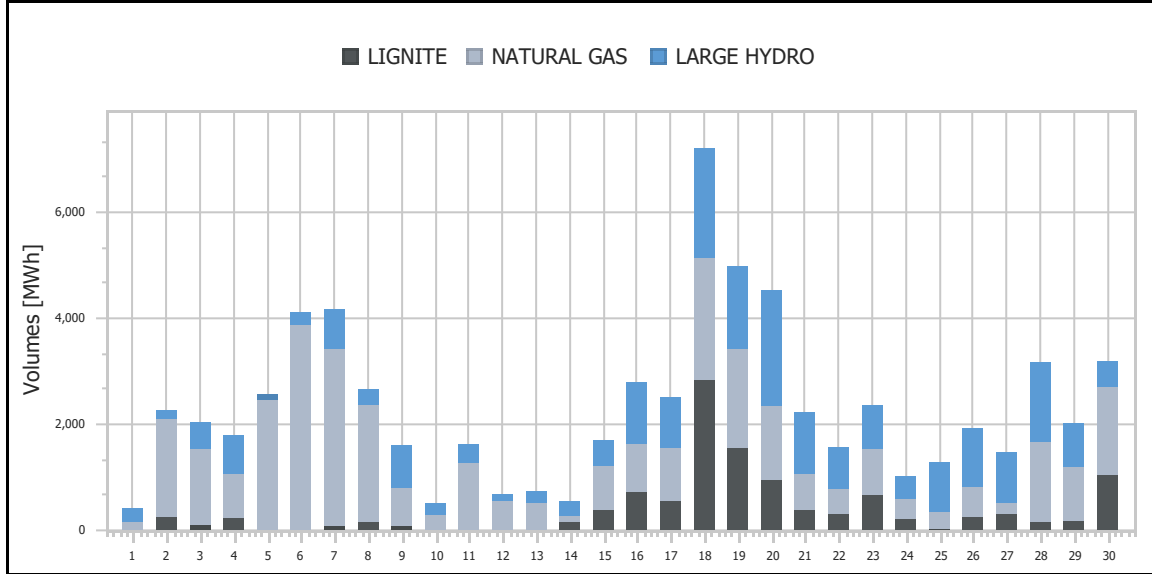
Ref No	Graph 3.3
Title	Demand & System Losses
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



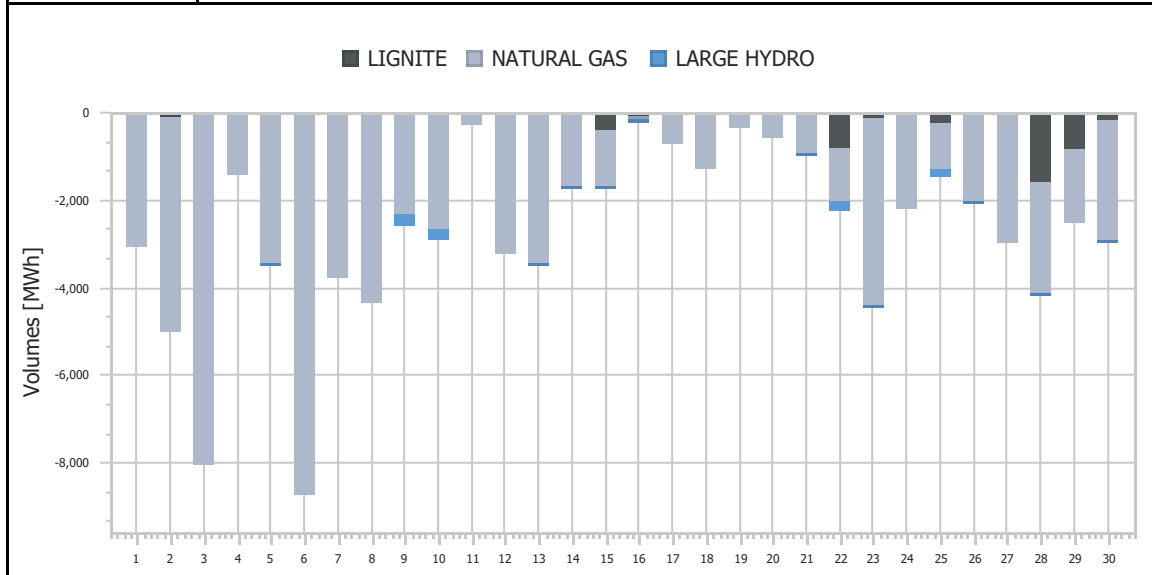
Ref No	Graph 3.4
Title	Clearing Prices
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



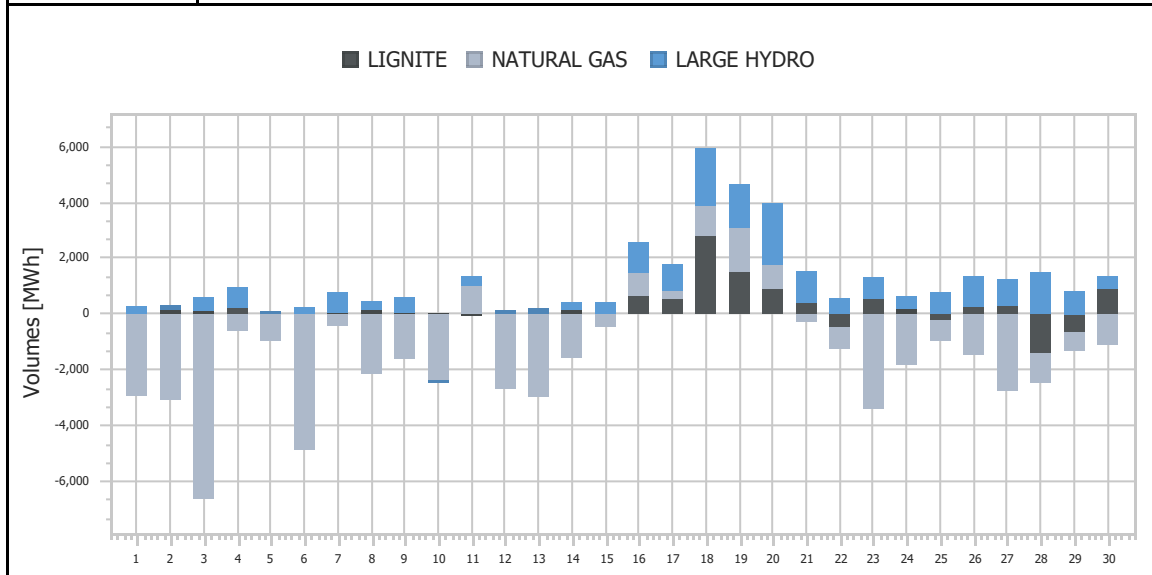
Ref No	Graph 3.5
Title	Upward Activated Balancing energy
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



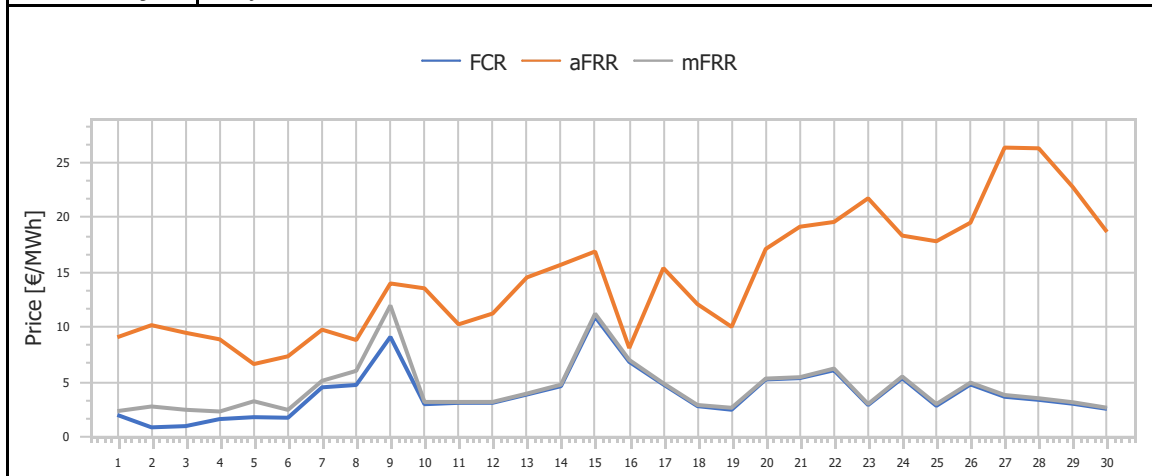
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Title	Downward Activated Balancing energy
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



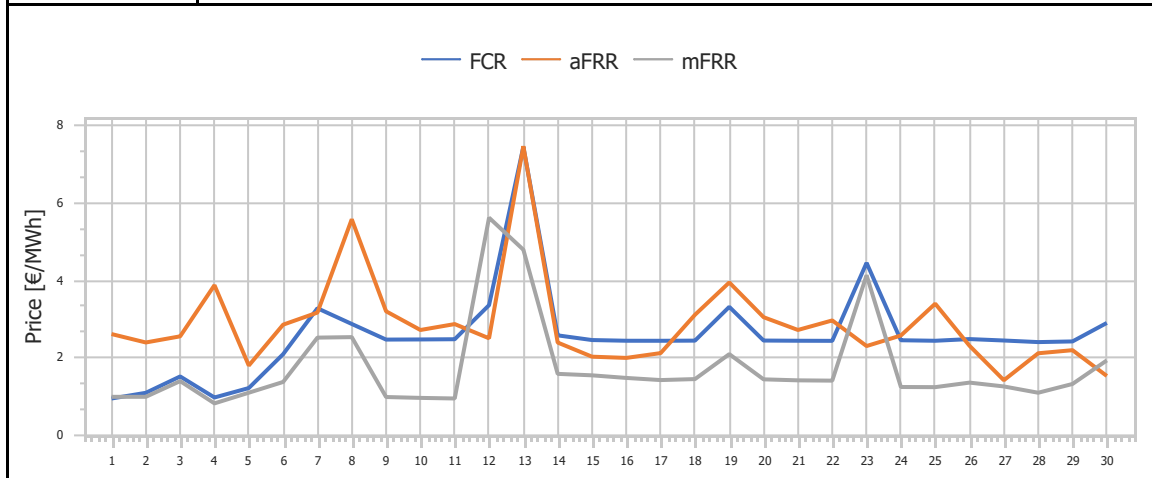
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Title	Net Activated Balancing energy
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



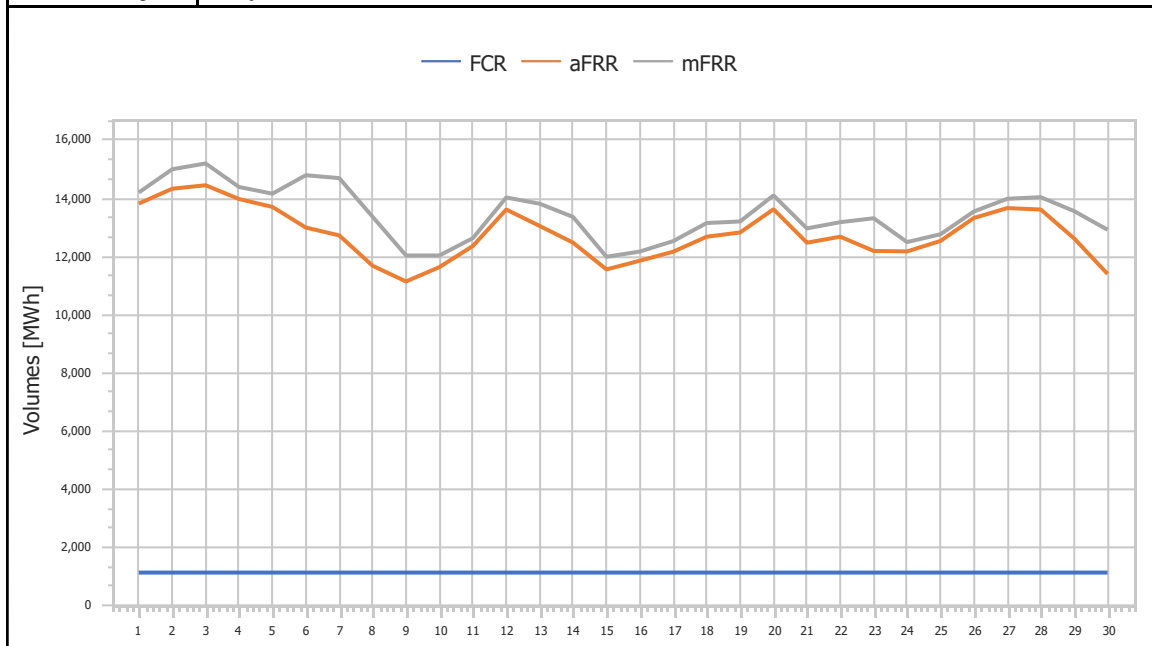
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Title	Upward Capacity Reserves Prices
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



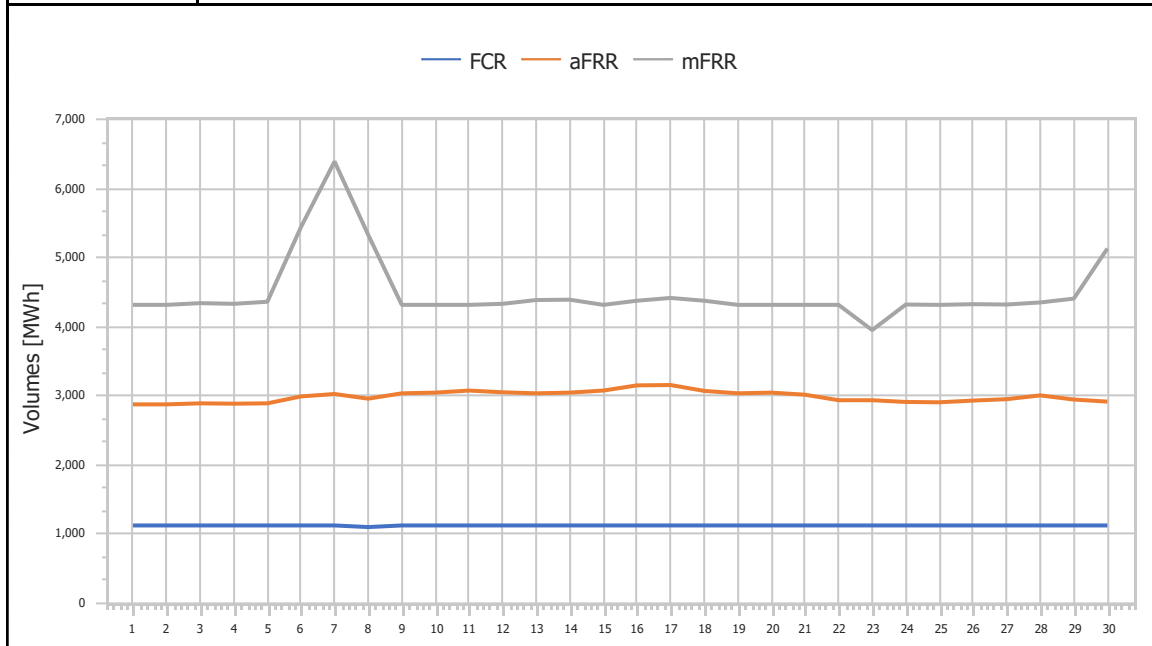
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Title	Downward Capacity Reserves Prices
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



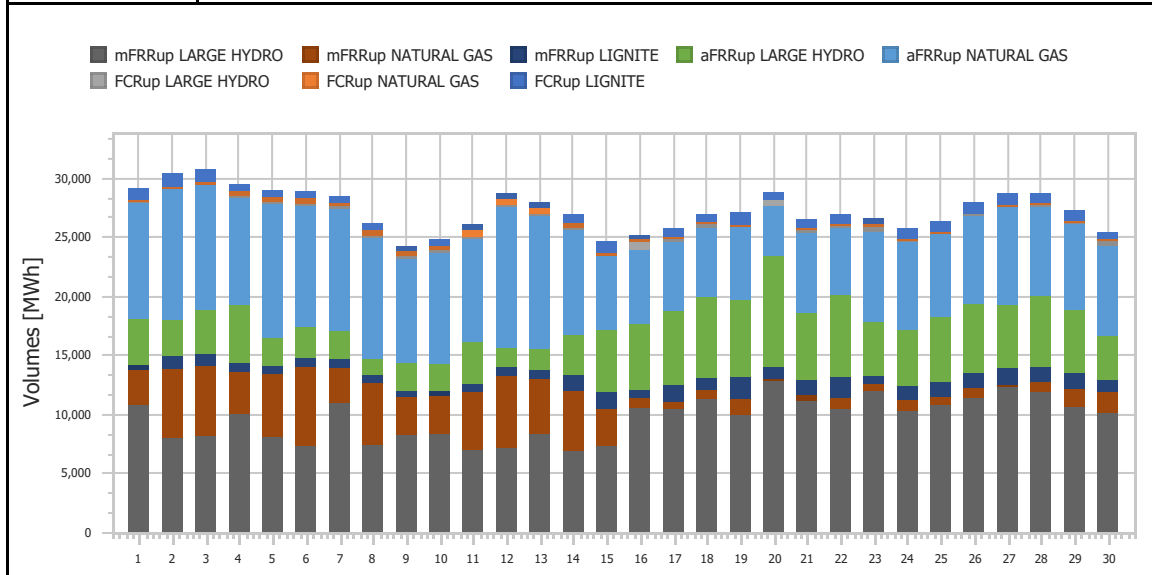
Ref No	Graph 3.10
Title	Upward Capacity Reserves Volumes
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily

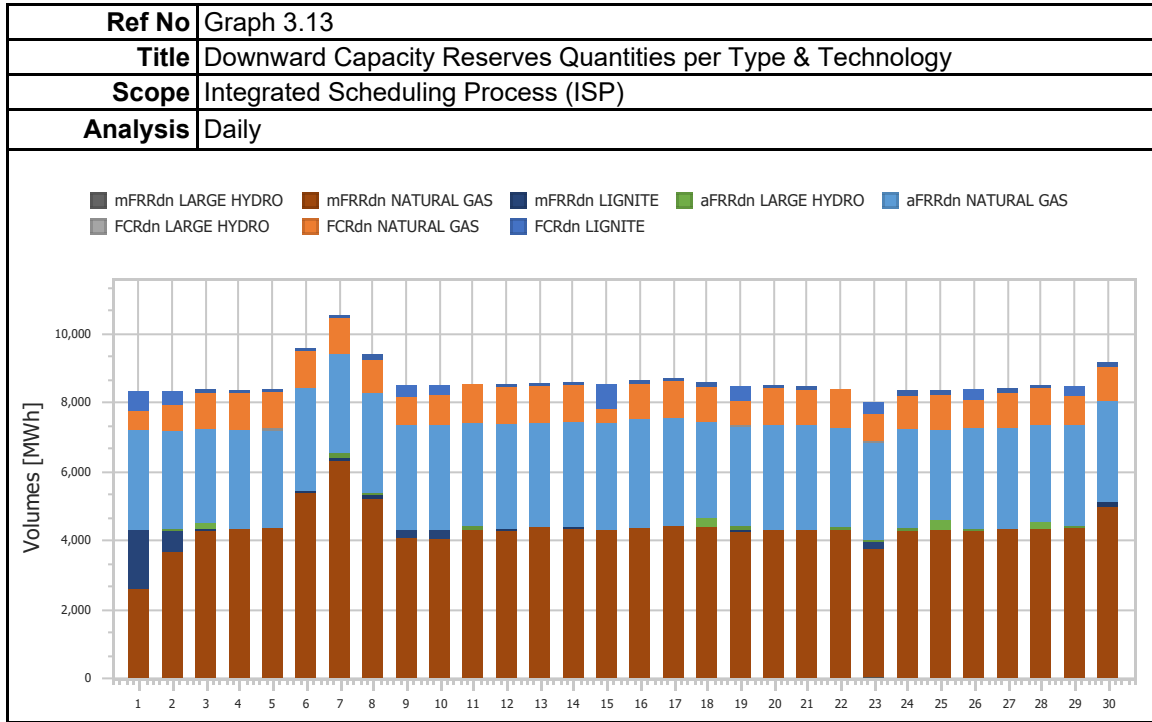


Ref No	Graph 3.11
Title	Downward Capacity Reserves Volumes
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily

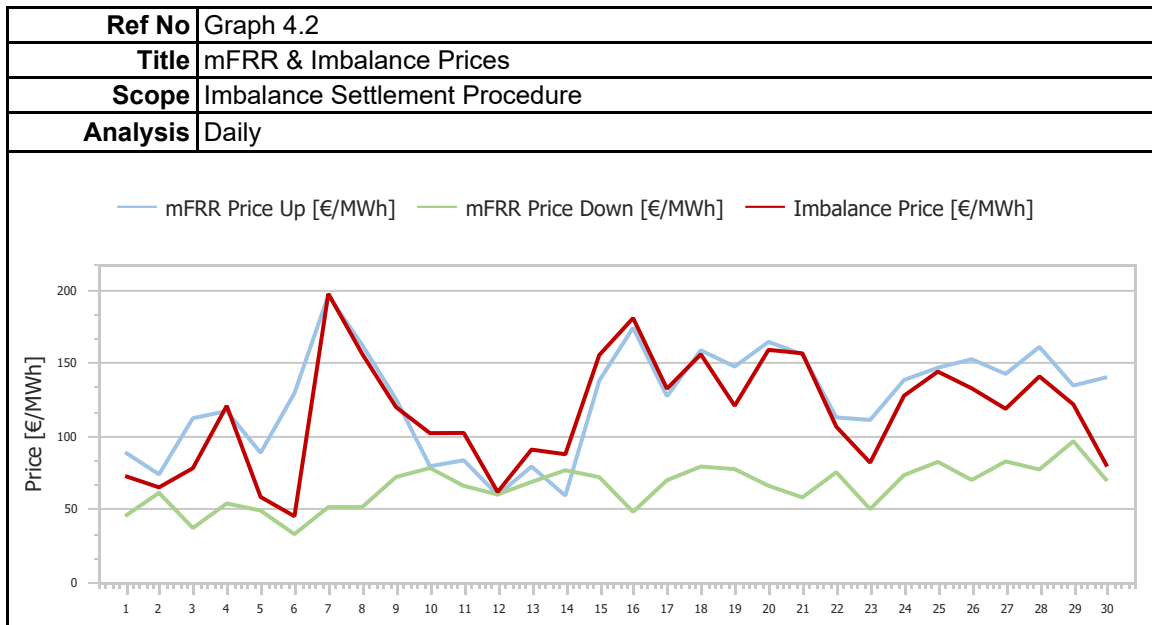
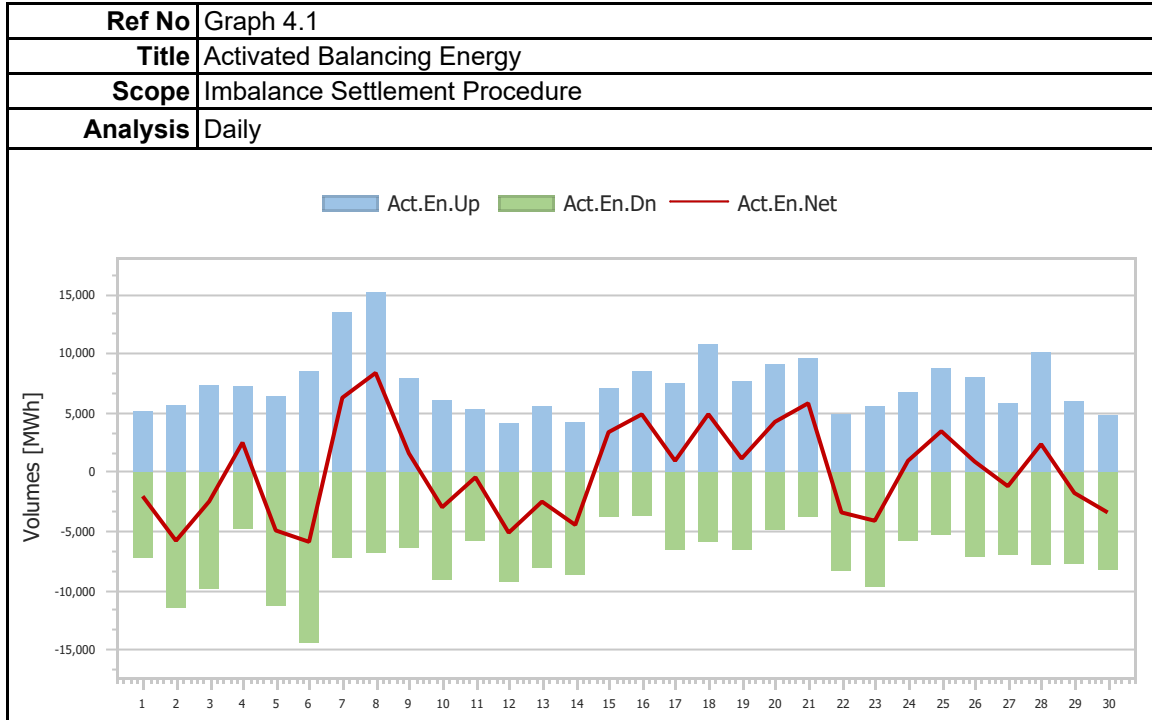


Ref No	Graph 3.12
Title	Upward Capacity Reserves Volumes per Technology
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily

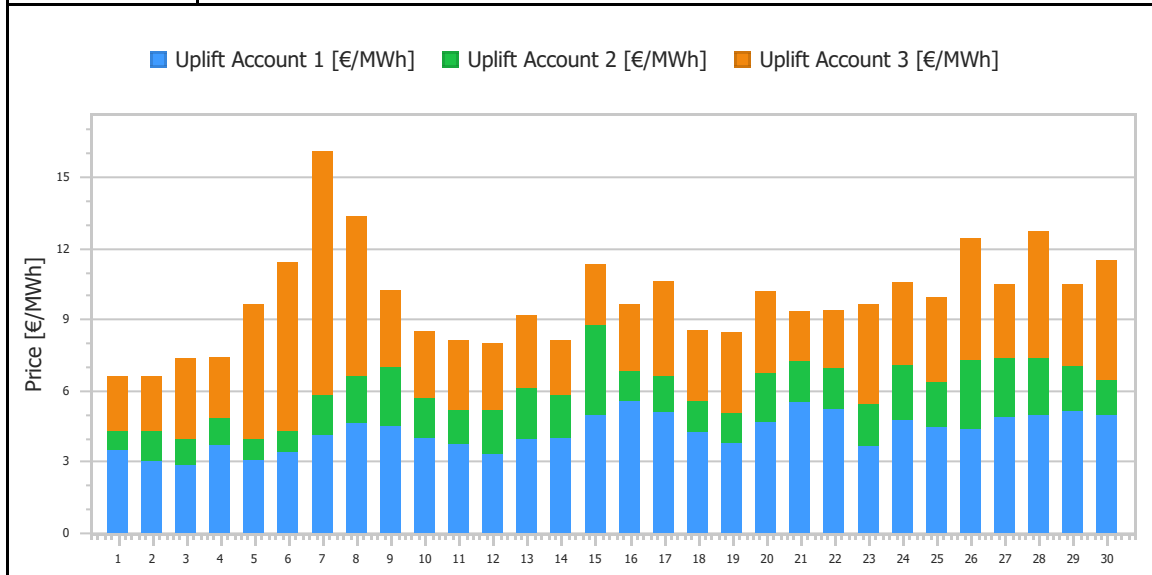




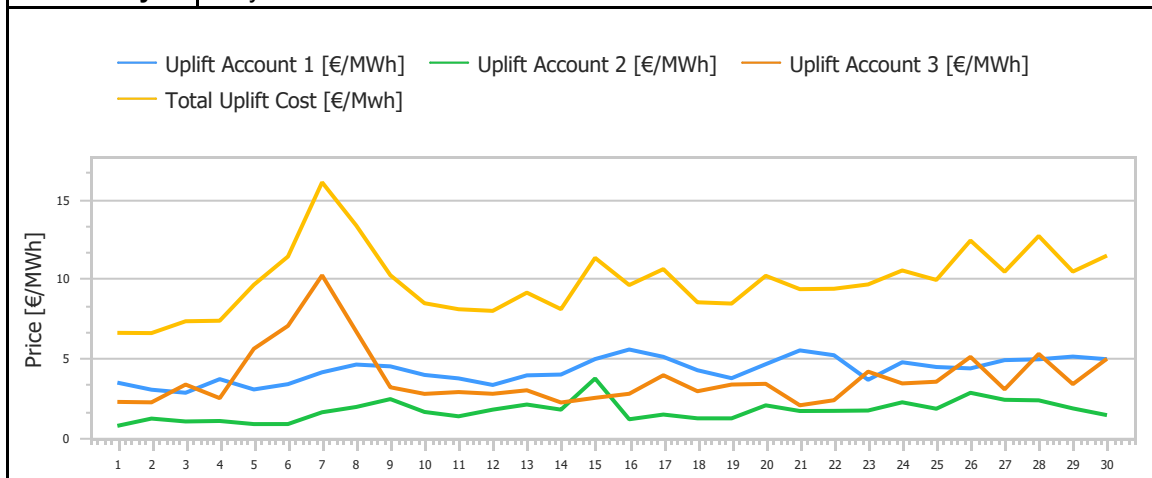
4. Imbalance Settlement Procedure



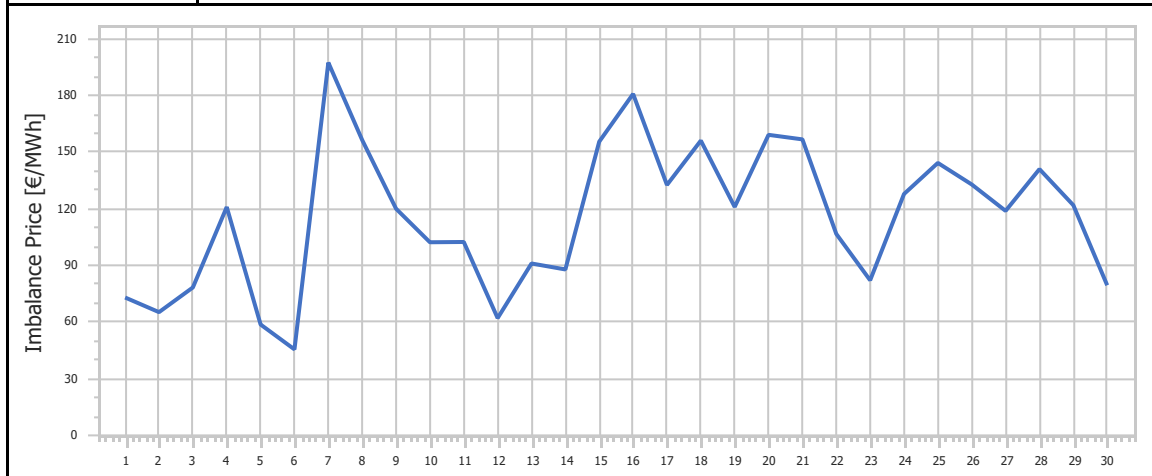
Ref No	Graph 4.3
Title	Uplift Accounts Cost
Scope	Imbalance Settlement Procedure
Analysis	Daily



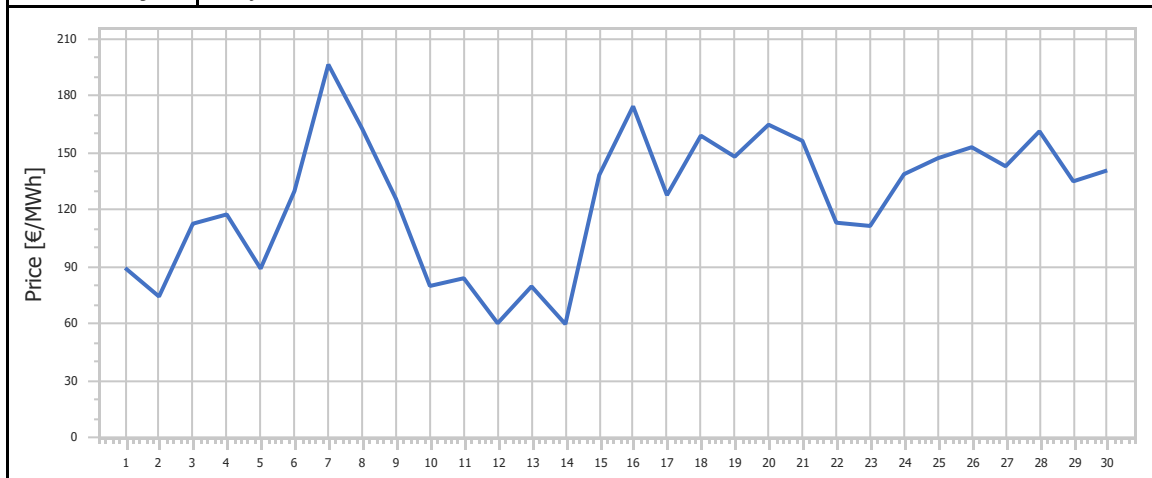
Ref No	Graph 4.4
Title	Uplift Accounts Cost
Scope	Imbalance Settlement Procedure
Analysis	Daily



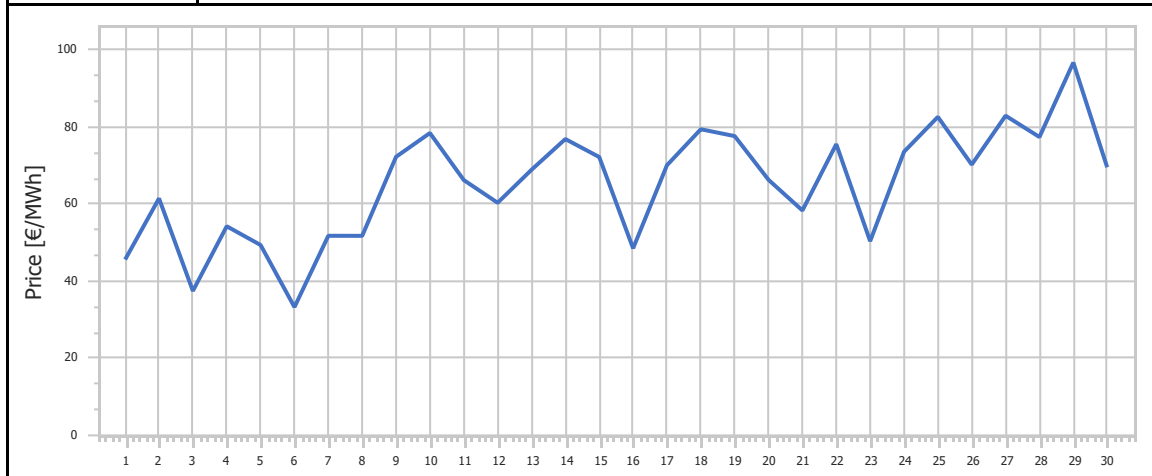
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Title	Imbalance Price
Scope	Imbalance Settlement Procedure
Analysis	Daily



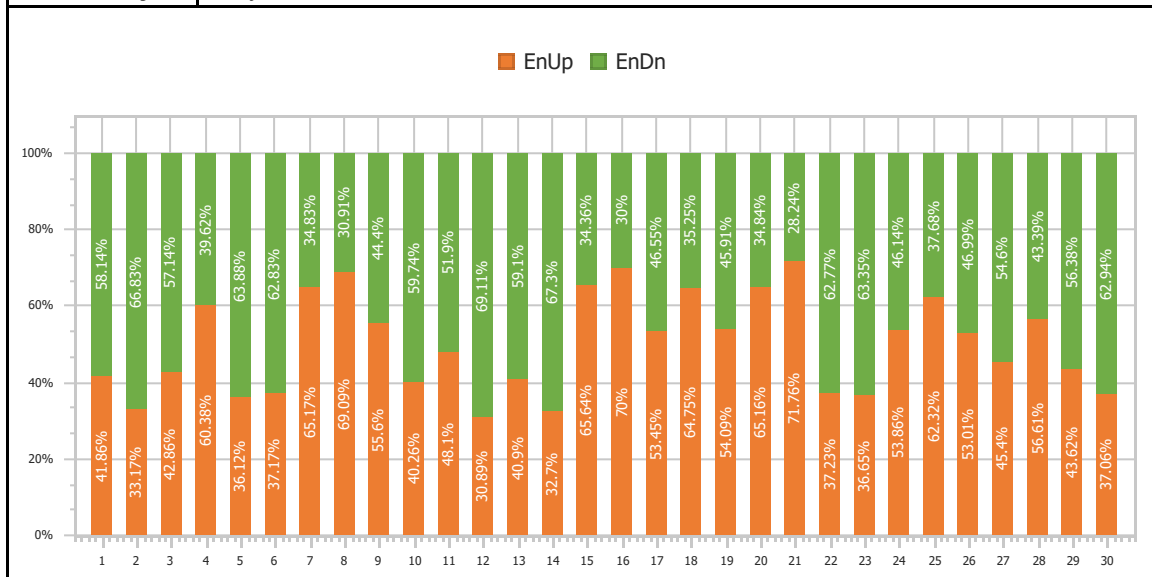
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Title	mFRR Up Price
Scope	Imbalance Settlement Procedure
Analysis	Daily



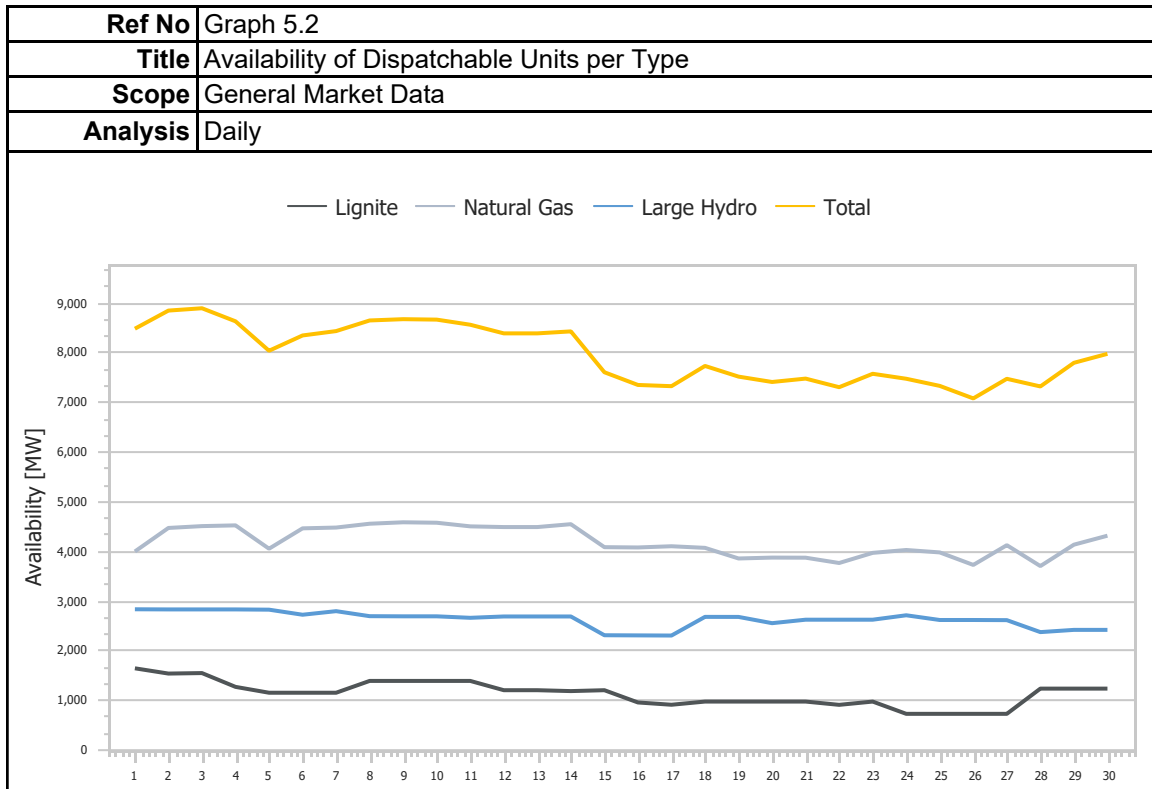
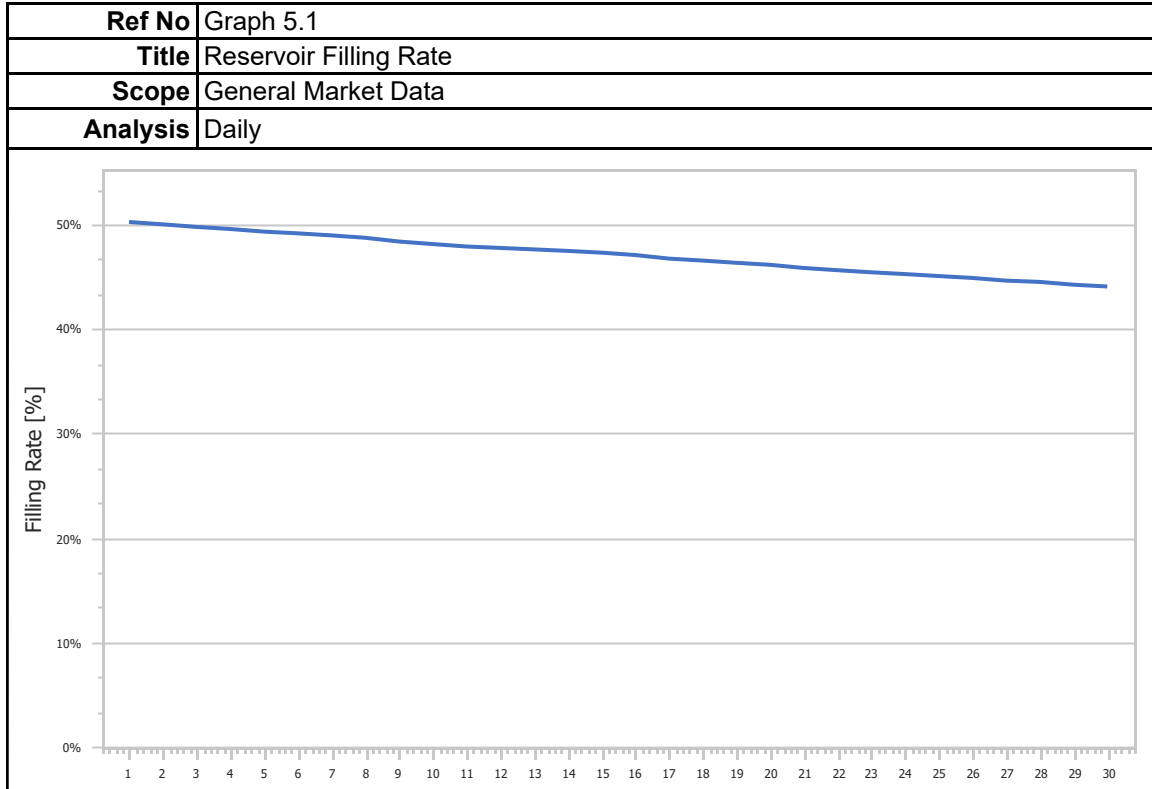
Ref No	Graph 4.7
Title	mFRR Down Price
Scope	Imbalance Settlement Procedure
Analysis	Daily



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	366,833.059	7.87%	52,069,523.21€	8.19%
Crete Conventional	-	0.00%	- €	0.00%
Natural Gas	2,141,482.806	45.95%	296,180,258.05€	46.60%
Large Hydro	157,719.415	3.38%	24,489,930.97€	3.85%
RES	1,312,677.027	28.17%	171,543,624.58€	26.99%
Crete Renewables	-	0.00%	- €	0.00%
Imports	681,772.960	14.63%	91,248,265.04€	14.36%
Total	4,660,485.272	100.00%	635,531,601.86€	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	-	4,660,485.27	366,833.06	2,141,482.81	157,719.42	1,312,677.03	681,772.96
Average	134.73	155,349.51	12,227.77	71,382.76	5,257.31	43,755.90	22,725.77
Min	109.91	135,426.13	3,624.00	56,406.97	3,944.00	25,545.15	8,781.60
Min day	5	26	12	23	30	11	29
Max	175.39	166,653.94	20,619.52	89,251.02	9,405.37	83,785.30	31,888.97
Max day	16	1	28	10	15	7	1
Spread	65.48	31,227.81	16,995.52	32,844.04	5,461.37	58,240.16	23,107.37
Standard Deviation	17.90	8,004.71	6,597.91	8,315.64	1,249.23	15,127.13	6,082.95

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	111,826.000	2.40%	15,276,601.22€	2.40%
Crete Load	-	0.00%	- €	0.00%
HV Load	654,051.018	14.03%	87,406,586.37€	13.75%
MV Load	945,337.710	20.28%	129,564,371.74€	20.39%
LV Load	2,372,062.987	50.90%	325,644,522.38€	51.24%
PUMP	3,496.440	0.08%	357,493.04€	0.06%
Exports	573,708.300	12.31%	77,281,668.66€	12.16%
Total	4,660,482.459	100.00%	635,531,243.42€	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	-	4,660,482.46	111,826.00	654,051.02	945,337.71	2,372,062.99	3,496.44	573,708.30
Average	134.73	155,349.42	3,727.53	21,801.70	31,511.26	79,068.77	437.06	19,123.61
Min	109.91	135,425.97	2,805.50	20,022.49	22,063.01	69,309.75	220.00	4,887.78
Min day	5	26	5	20	12	26	26	1
Max	175.39	166,653.97	5,110.00	24,333.82	36,799.12	99,181.84	1,000.00	27,868.54
Max day	16	1	30	11	1	1	23	7
Spread	65.48	31,228.00	2,304.50	4,311.33	14,736.11	29,872.09	780.00	22,980.76
Standard Deviation	17.90	8,004.71	479.42	933.34	3,992.81	6,674.58	241.46	5,379.29

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	1,505,564.170	67.56%	4,767,143.57€	74.75%
FCR	115,475.910	5.18%	208,012.15€	3.26%
mFRR	607,492.840	27.26%	1,402,464.80€	21.99%
Total	2,228,532.920	100.00%	6,377,620.53€	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	353,776.820	34.78%	356,616.03€	41.97%
FCR	132,971.920	13.07%	146,747.13€	17.27%
mFRR	530,310.740	52.14%	346,291.90€	40.76%
Total	1,017,059.490	100.00%	849,655.06€	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	133,767.980	59.77%	22,128,871.60€	59.30%
mFRR	90,019.350	40.23%	15,190,891.25€	40.70%
Total	223,787.330	100.00%	37,319,762.85€	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	84,684.900	38.13%	4,991,132.27€	36.17%
mFRR	137,406.040	61.87%	8,806,623.75€	63.83%
Total	222,090.940	100.00%	13,797,756.01€	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	4,660,485.27	98.21%
IDMA1	34,979.55	0.74%
IDMA2	29,412.67	0.62%
IDMA3	19,012.42	0.40%
IDM (Total)	83,404.65	1.76%
Balancing Energy (Up)	223,787.33	4.72%
Balancing Energy (Dn)	222,090.94	4.68%
Balancing Energy (Total)	1,696.39	0.04%
Total	4,745,586.31	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	635,531,601.86€	93.80%
IDMA1	4,995,001.01€	0.74%
IDMA2	3,749,021.92€	0.55%
IDMA3	2,488,635.06€	0.37%
IDM (Total)	11,232,657.99€	1.66%
Balancing Capacity (Up)	6,377,620.53€	0.94%
Balancing Capacity (Dn)	849,655.06€	0.13%
Balancing Capacity (Total)	7,227,275.58€	1.07%
Balancing Energy (Up)	37,319,762.85€	5.51%
Balancing Energy (Dn)	13,797,756.01€	2.04%
Balancing Energy (Total)	23,522,006.84€	3.47%
Balancing Market (Total)	30,749,282.42€	4.54%
Total	677,513,542.27€	100.00%