

# Navigating Volatility in Short Term Markets



MONTEL

# Agenda

- Sequence of markets
- Increasing balancing and profile risk
- Impacts of harmonization
- [Link to introductory webinar](#)



# There are clues in the sequence of markets

From forward market to ancillary services availability fees, to day-ahead, intraday auctions, activation curves for balancing markets, to within day continuous trading.

There are many clues to be picked up along the process, apart from fundamentals and weather, to prepare yourself for volatility.



# Predicting Volatility

Volatility announces itself through a sequence of forecasts and feedback loops.

If you are able to read the signs, you will be able to navigate successfully.

There is a lot to watch out for, but setting up the right 'trading cockpit' will allow you to make the right decisions more easily.

**It's all about the Delta's!**





# Weather

In short term markets, weather forecasts alone are insufficient to deal with all the events happening in real time:

- Congestion
- Price dependent bidding
- Commercial curtailment
- Environmental curtailment
- Redispatch

Live data and “nowcasting” based on actuals can help find the forecast deltas.



# Demand & Generation Forecasts

Demand, generation forecasts, power plant availability remain important drivers.

It's derived data that adds real insight:

- Residual load
- Spinning reserve
- Ramping of assets and renewables

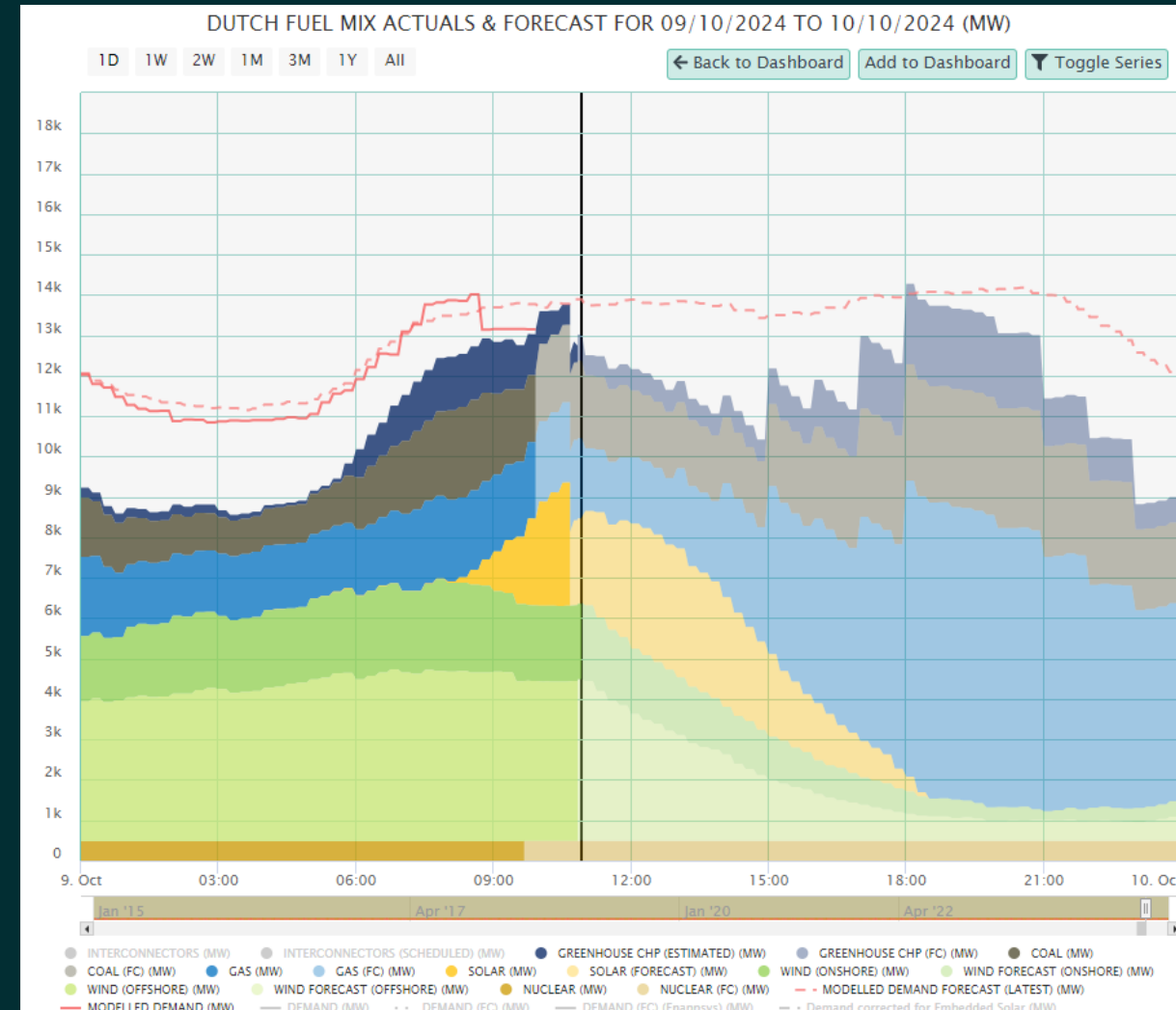


# Ramps

With low spinning reserve due to few online power plants, a combined down-ramp of solar and wind, may require more speed than the online assets can deliver.

On an autumn day this results in a 5 GW ramp for gas assets.

This impacts intraday trading and balancing markets

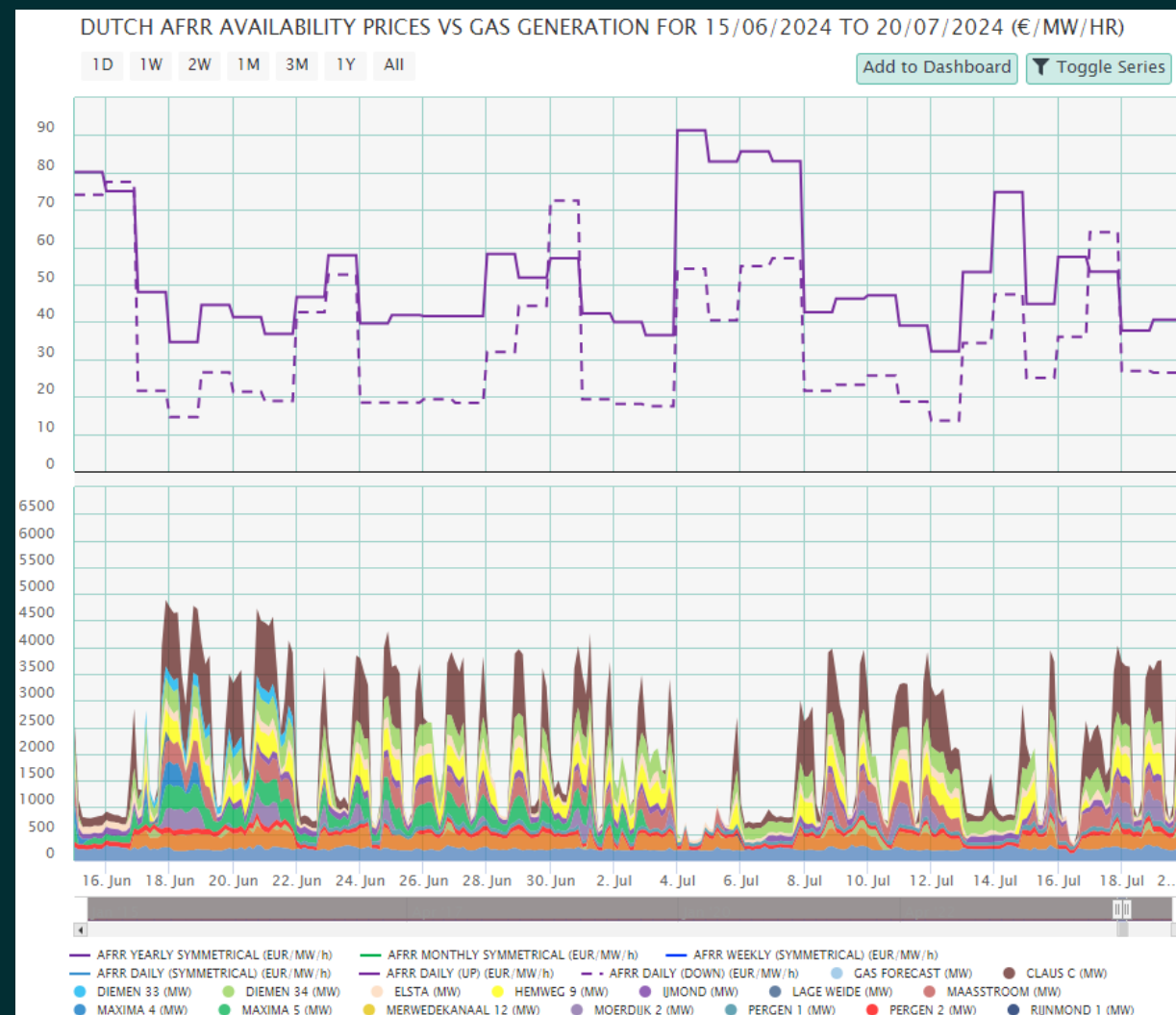


# Ancillary Services Prices

Ancillary Services auctions run before the day ahead auction

A high price in general means full utilization of the asset fleet, or low utilization, with few online assets.

A high downward price points towards extremely low spinning reserve and very few online assets.



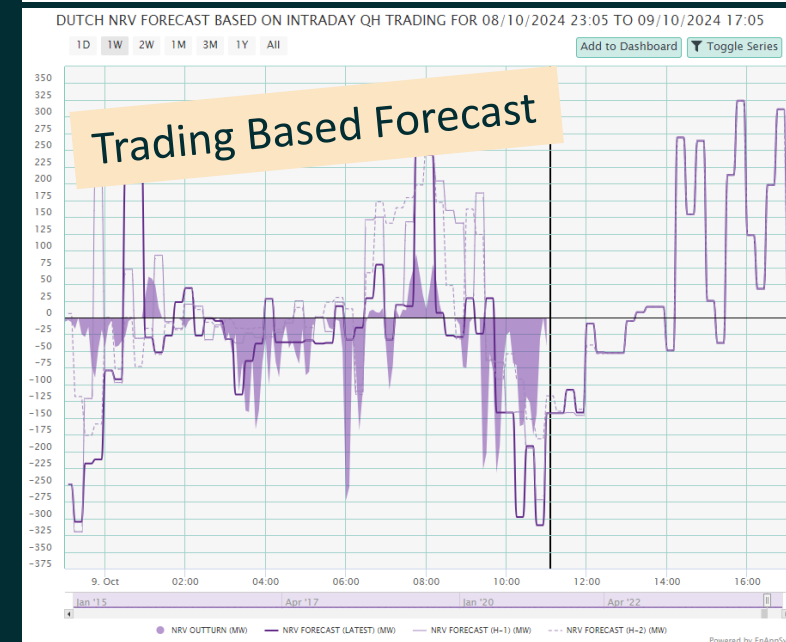
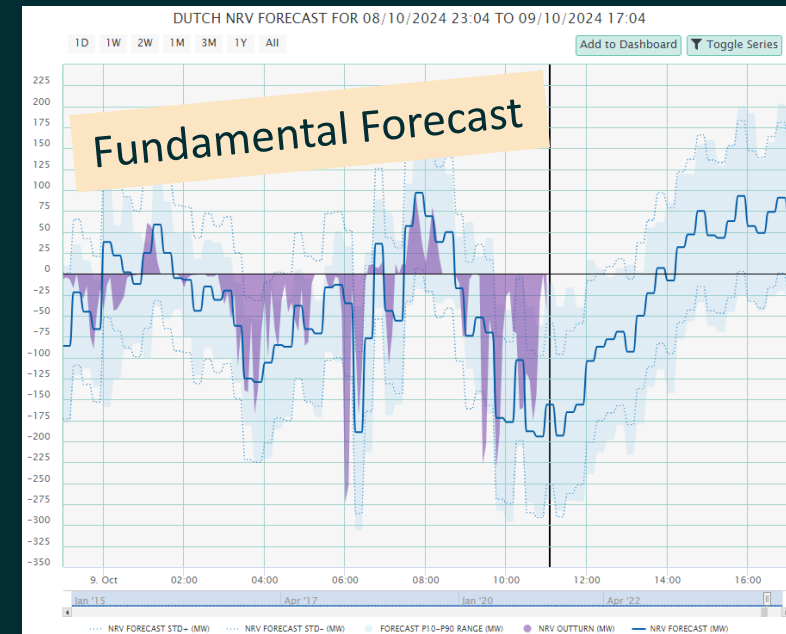


# Auction and Continuous Trading Results

An obvious indicator for market sentiment and a brilliant way to crowd source your opinions on the market are the markets themselves.

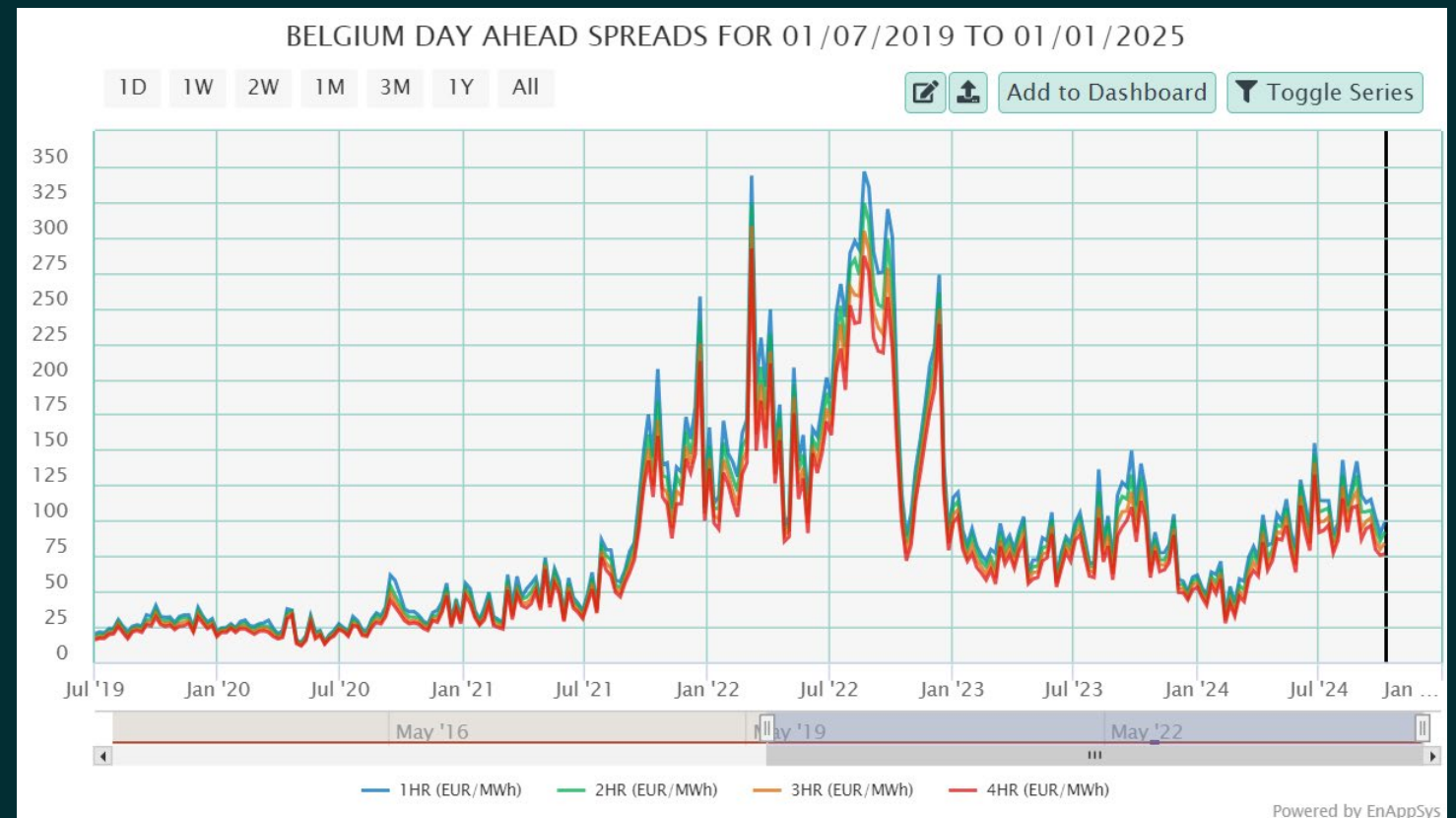
Applying this information to compare between markets and for example the balancing market, allows you to form an opinion yourself.

Is the market right?



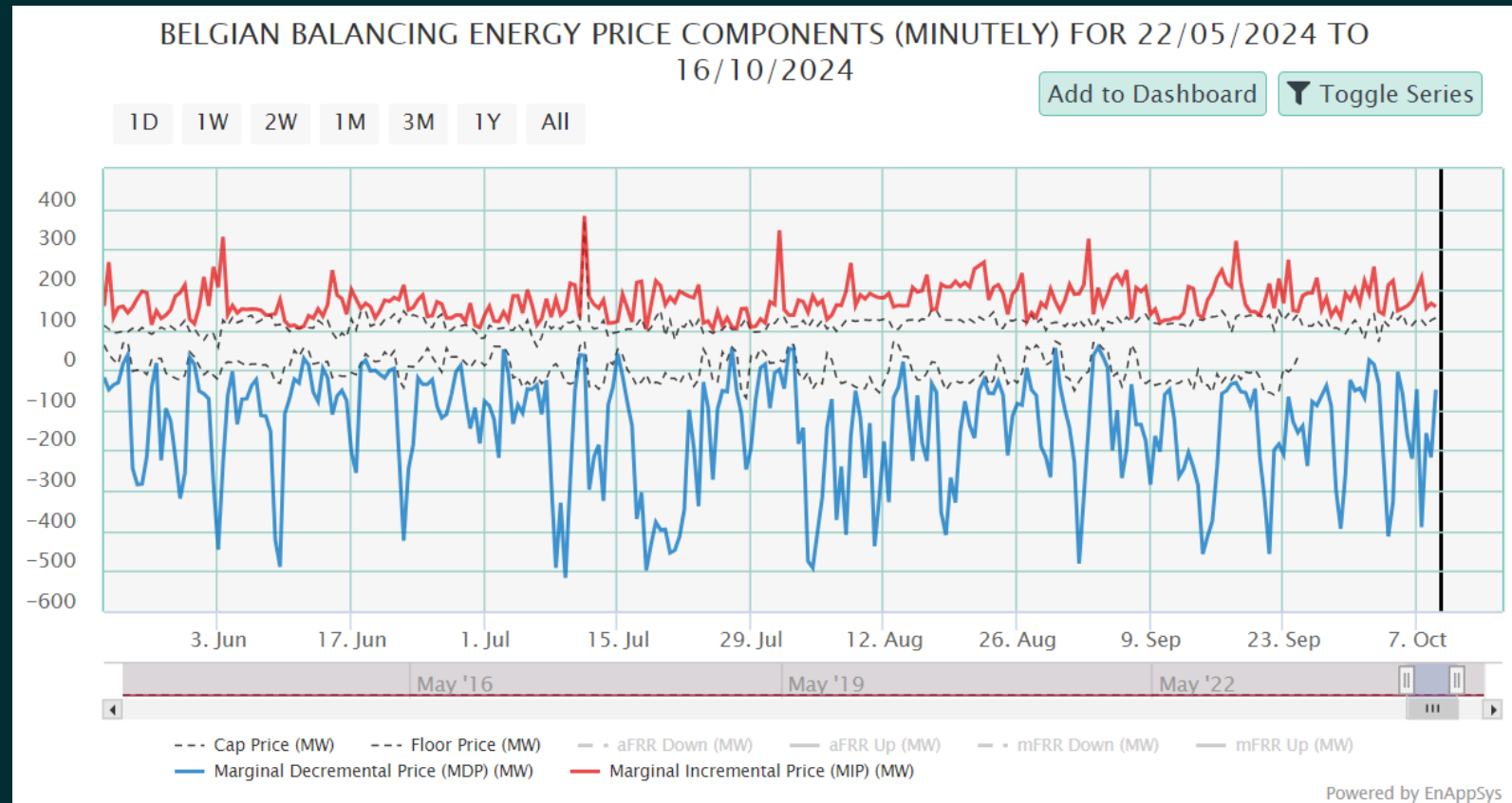
# Increasing Balancing and Profile Risk

- Massive build-out of renewables in a relatively small area
- Similar weather for all assets, therefore similar generation profile, Cannibalisation
- Impact on evening peak, the whole region needs to ramp
- Increasing spreads!



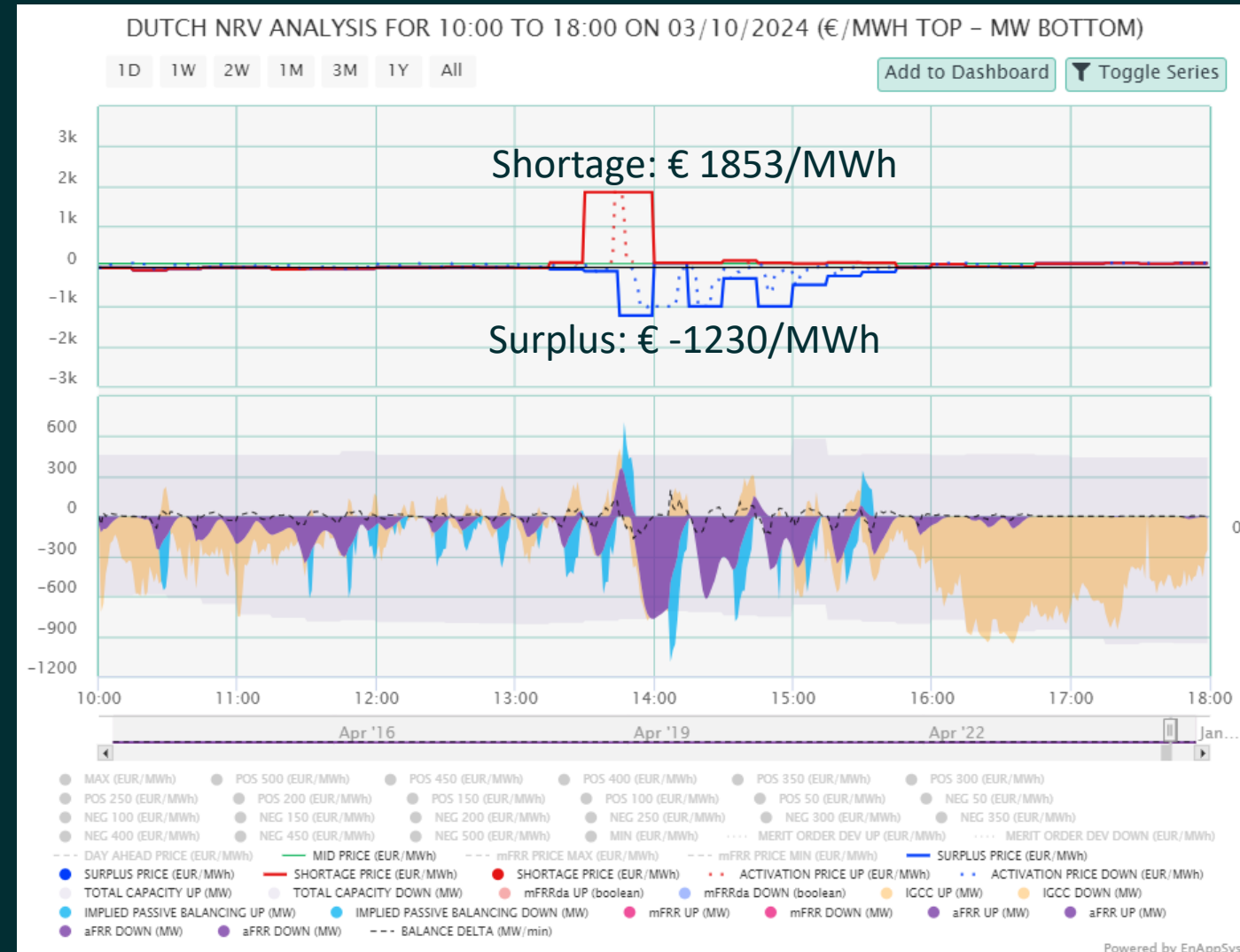
# Balancing Market Volatility Belgium

- Belgian spinning reserve is low:
  - Must-run nuclear
  - Renewables
  - Imports from countries with online flex
- Asymmetric balancing risk?
  - Downward activation prices go much more extreme



# The Special Case of Netherlands

- Netherlands sees extreme balancing volatility:
  - TSO activates entire balancing stack at marginal price when it needs speed
  - With operators aiding to restore the balancing, financial incentives are so strong, they can “flip” the imbalance
  - Dual Imbalance pricing





# Balancing Harmonisation: The cure for volatility?

- The Picasso project aims to link all European balancing markets for aFRR (automatic Frequency Restoration Reserve).
- Bids are submitted in a Common Merit Order List (CMOL) and activated in order of merit when a country needs balancing power.
- Limitations:
  - Cross Border Capacity
  - Different balancing price algorithms across markets
- Italy joined and pulled back out due to unforeseen consequences
- Belgium has postponed acceding to the mechanism, due to expected undesired outcomes

Netherlands starts in Picasso on the 14<sup>th</sup> of October



# What to expect?

- Difficult to say!
  - No communication about parallel runs
  - Very little communication at all from TSO
  - TSO expects very little impact



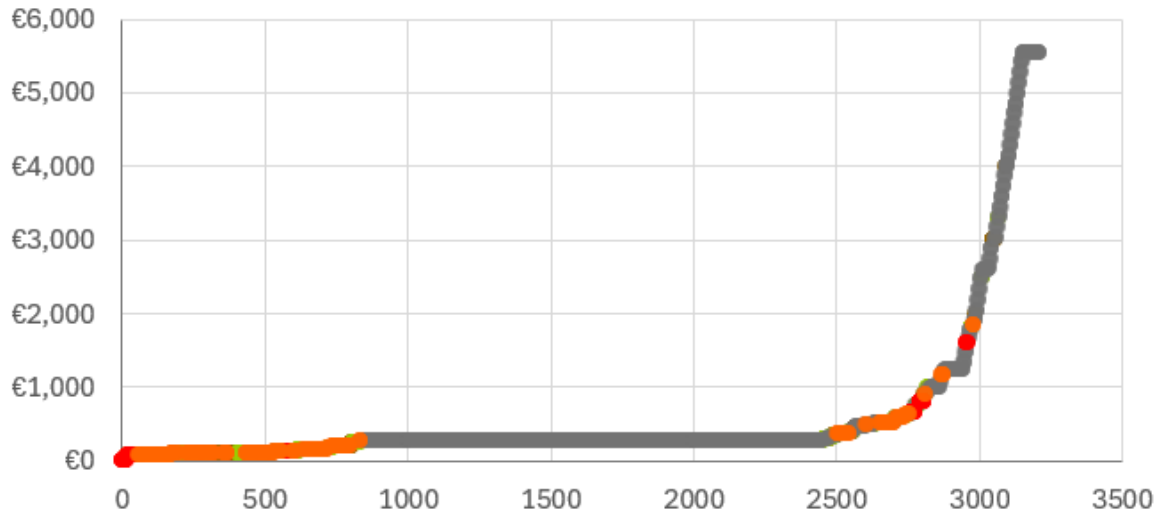


# Simulation Results



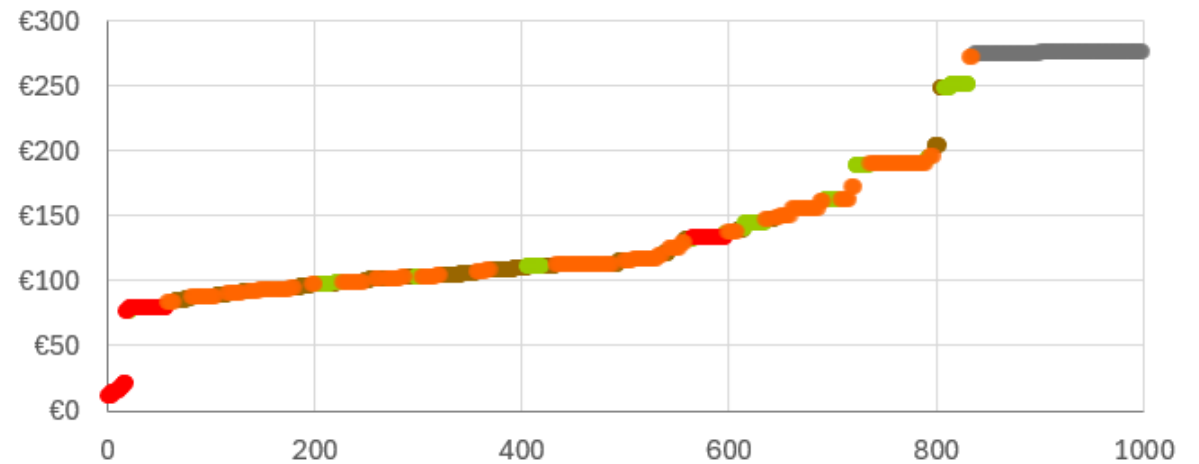
Picasso Upward CMOL - 2024-10-02 - 13:00

● AT ● CZ ● DE ● DK ● NL



Picasso Upward CMOL - 2024-10-02 - 13:00  
First 1000 MW

● AT ● CZ ● DE ● DK ● NL

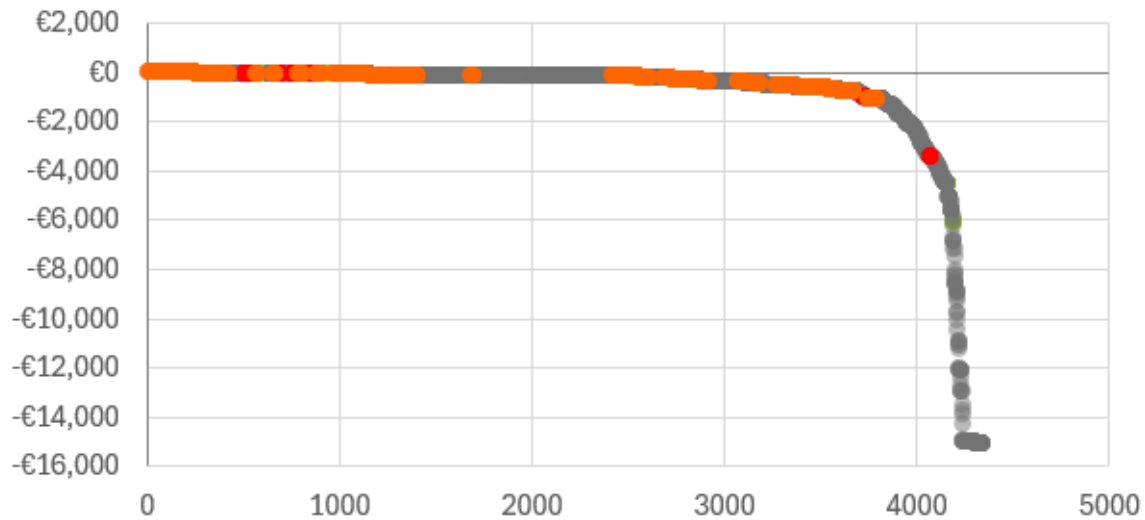


# Simulation Results



Picasso Downward CMOL - 2024-10-02 - 13:00

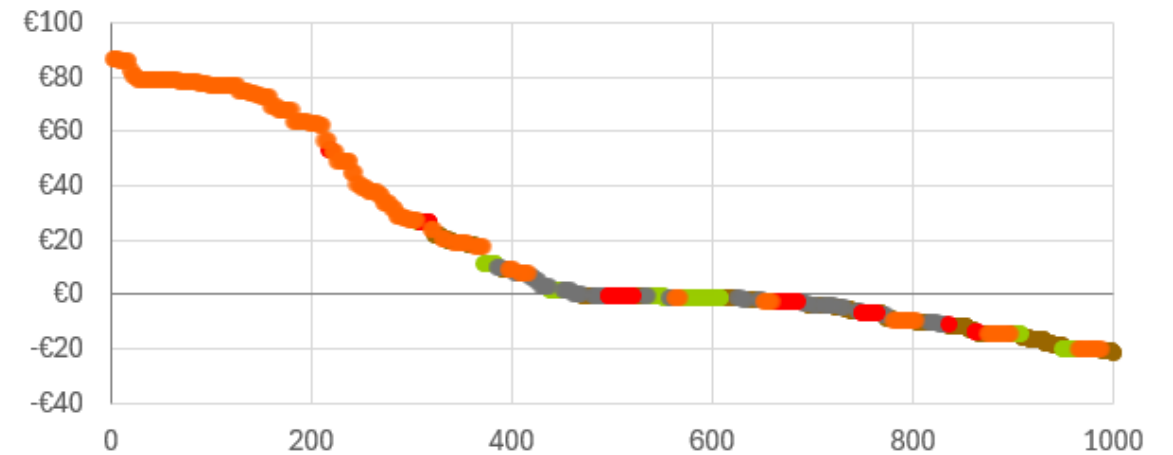
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Picasso Downward CMOL - 2024-10-02 - 13:00

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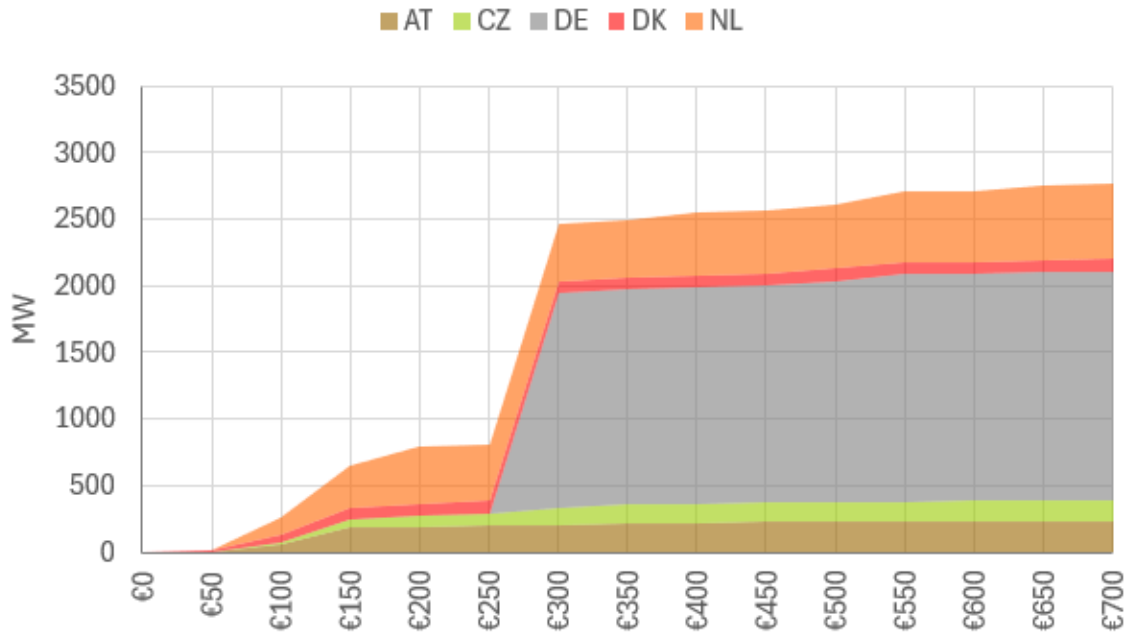




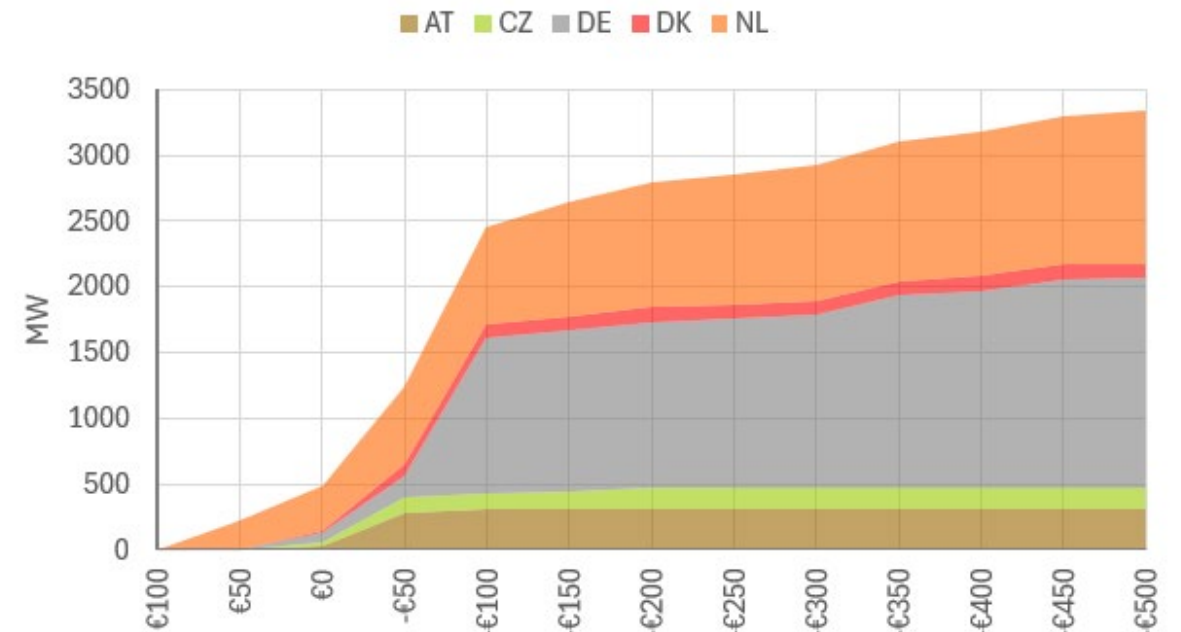
# Simulation Results



Picasso Upward CMOL - 2024-10-02 - 13:00  
Aggregated Volume by Price Level until € 700



Picasso Downward CMOL - 2024-10-02 - 13:00  
Aggregated Volume by Price Level until € -500









# Simulation Results

	<b>Total</b>	<b>AT</b>	<b>CZ</b>	<b>DE</b>	<b>DK</b>	<b>NL</b>
Total MWh Up	1385	141	227	140	224	653
Total MWh Down	-2403	-64	-29	-686	-32	-1593
Up Share %		10%	16%	10%	16%	47%
Down Share %		3%	1%	29%	1%	66%

# 4 Days to go!

- Prepare:
  - Cross Border Capacity Evolution
  - Spinning Reserve in NL, DE
  - Steep Ramps
  - NRV/Balancing volume fundamentals



THANK YOU!

Contact us for more...



# Shameless plug:

## Dual Price Probability Forecast Launches today:

