

Price Scenarios @Fraunhofer ISE

Services by the department of energy system analysis

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www.ise.fraunhofer.de

Our Service: Prices Scenarios and Energy Market Analysis

Analysis of electricity prices

What we offer:

1

Detailed data market analysis on
electricity markets and electricity prices

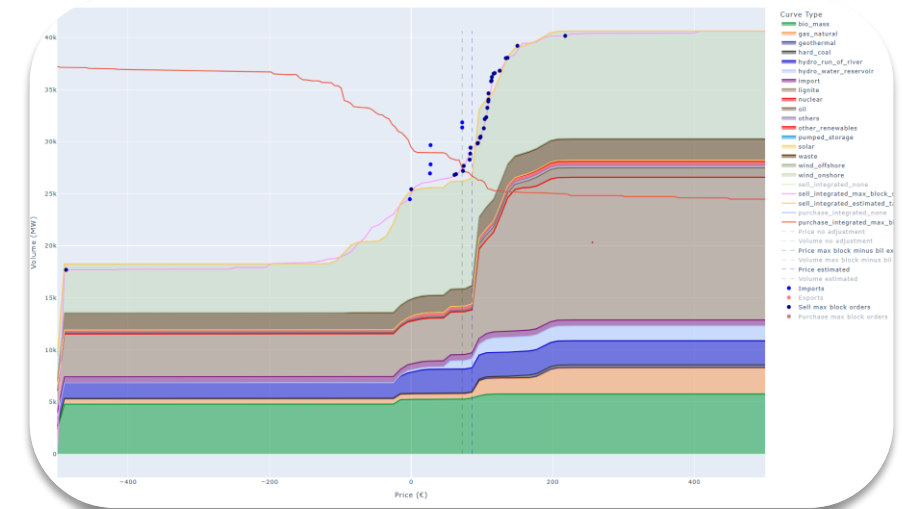
2

Short-term (2-7 days) Price scenarios:
Day-Ahead, intraday markets, reserve markets

3

Long-term (1-20 years) Price scenarios:
Day-Ahead

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Based on our competences

Detailed data on market behavior
of different production technologies

Detailed data on **market coupling**
effects and complex bids

Our Service: Price Scenarios

Types, Trainings & methods



AI-Short-Term 3-7 days

AI

stable

Features

- Multi-Layer-Perceptron
- Rolling training and forecast horizon
- Uses real forecasts – solar, wind, load

AI-Long-Term (>15 years)

AI

stable

Features

- Fully Connected neural network
- High-dimensional black-box model
- Uses ISE-REMOD projection - electricity generation, load, import, export

MO-Long-Term

Fundamental

experimental

Features

- Merit-Order-Regression
- Models supply behavior & market curves
- Uses ISE-REMOD projection - capacities, load, import, export

AR-Long-Term

Time-series

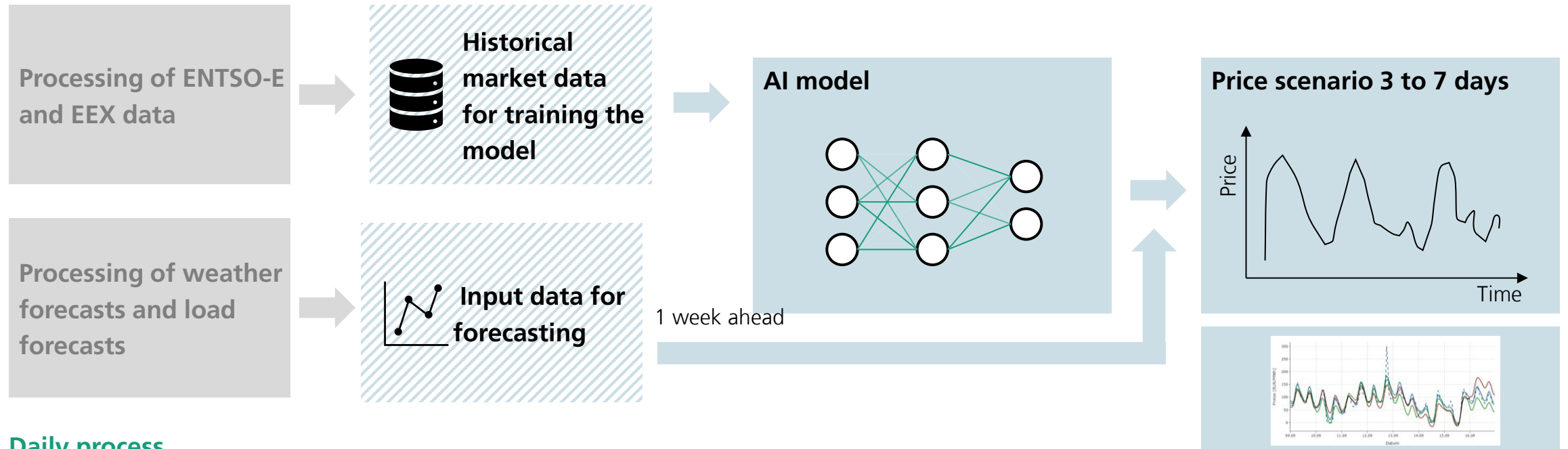
planned

Features

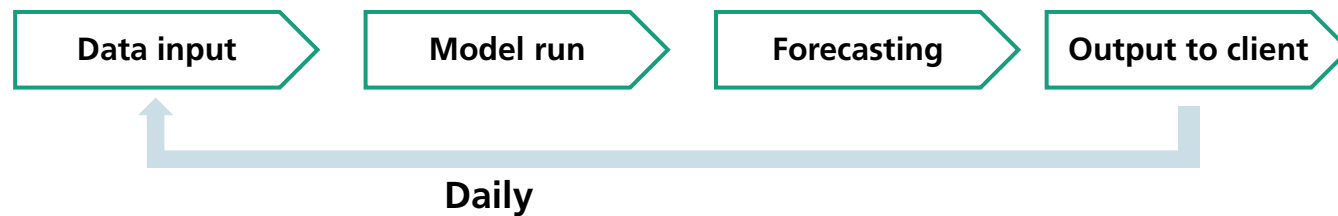
- Auto-Regression
- Only historical prices required
- No errors due to incorrect projections

AI-Short-Term Price Scenarios for next 3-7 Days

Process for price scenario

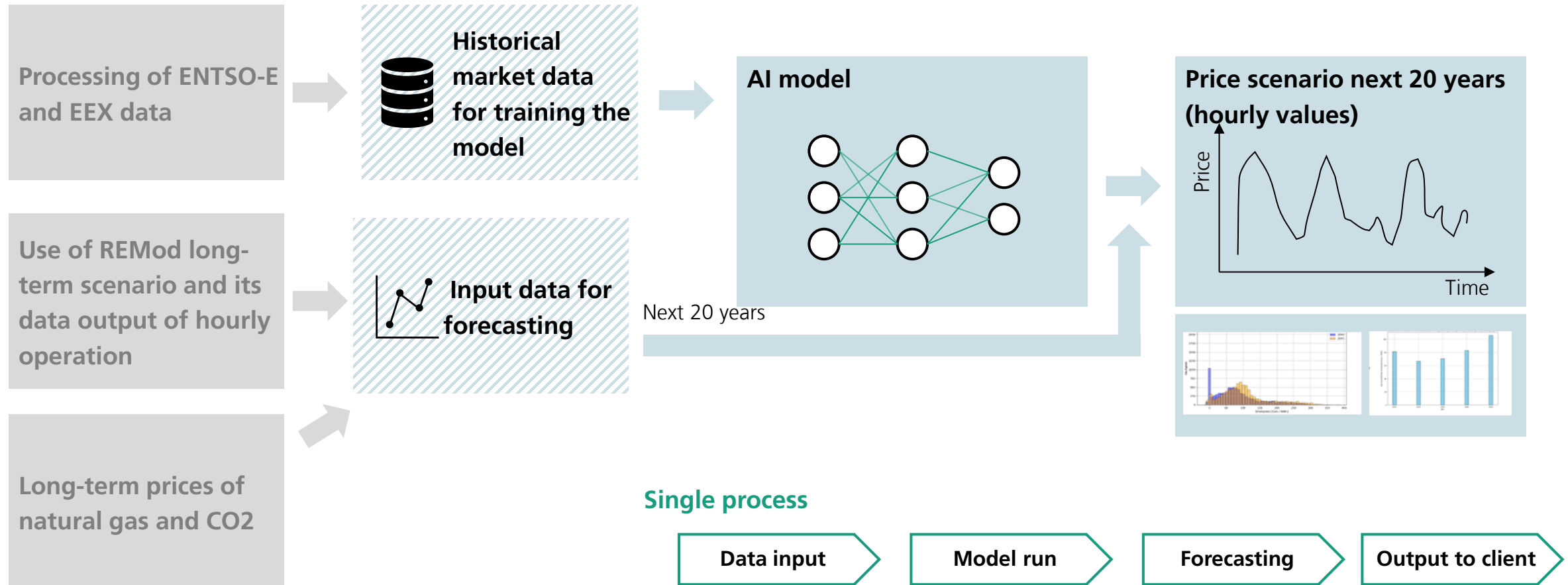


Daily process



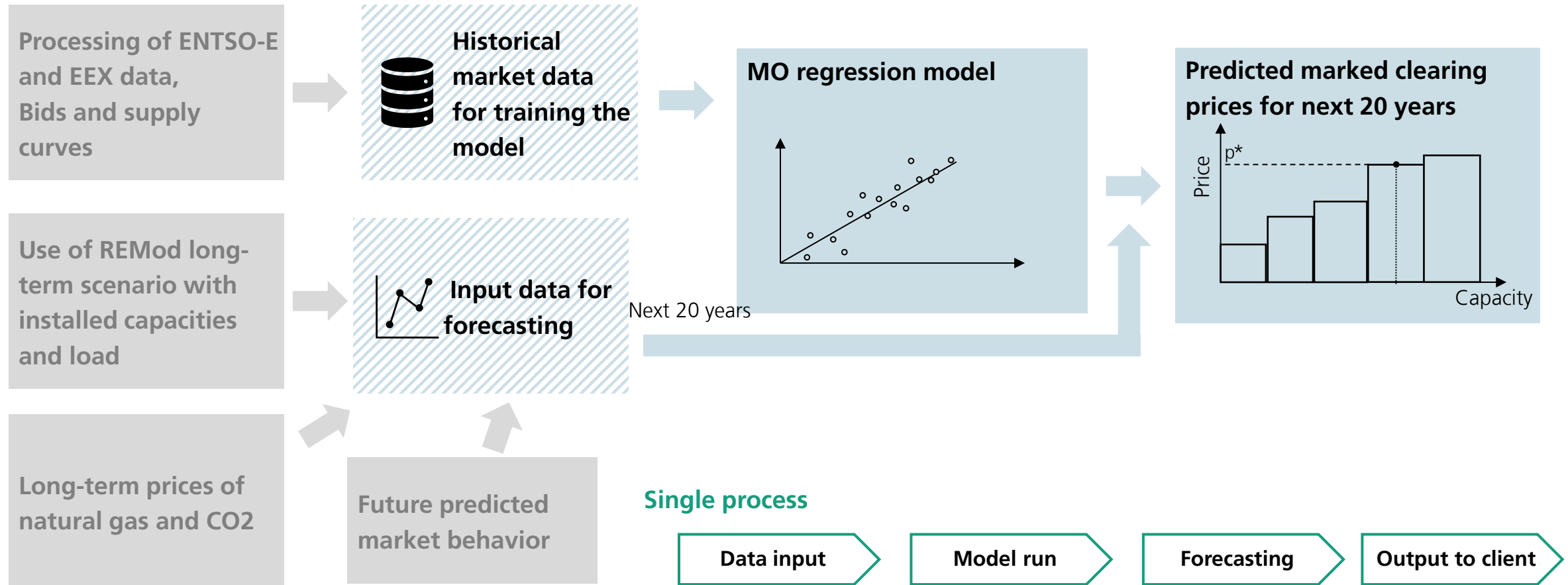
AI-Long-Term Price Scenarios for next 5 to 20 Years

Process for price scenario

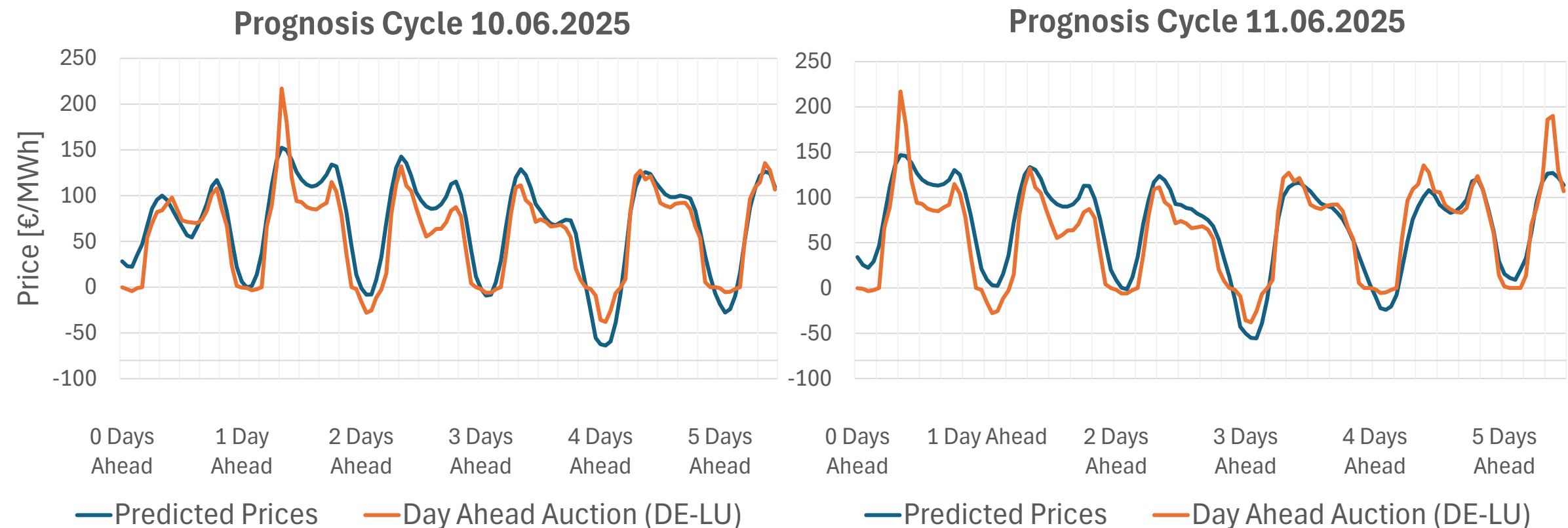


MO-Long-Term Price Scenarios for next 5 to 20 Years

Process for price scenario



Short-Term Price Prognosis



*Each forecast cycle generated using updated solar, wind, and load forecasts from Refinitiv.

Contact

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