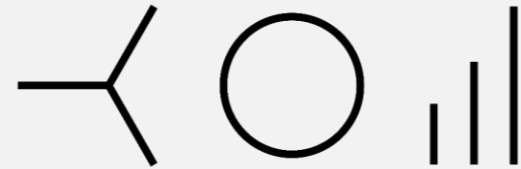


Power Trading



About Neon

[Neon](#) is a Berlin-based boutique consulting firm for energy economics, founded in 2014. We help our international [clients](#) from the public and private sectors to design and navigate power systems and markets through studies, advisory and trainings.

We work on seven [topics](#): the market value of renewables, electricity market design, redispatch, (whole) system costs, balancing energy, power market modeling and open source / open data.

About your instructor

Prof. Dr. Lion Hirth is founder and director of Neon and teaches at Hertie School in Berlin. Lion is energy economist and expert in wind and solar energy, power market modeling, and electricity market design. He has five years of industry experience, holds a Ph.D. in energy economics, has published numerous highly cited academic articles, and regularly advises public and private sector clients.

- » [Curriculum vitae](#)
- » [Publications](#)
- » [Project references](#)

Executive training seminar

- » For energy professionals in industry, finance, policy and think tanks
- » Extend your analytical understanding of electricity markets and energy economics
- » Understand Europe's electricity sector during crisis, transformation and decarbonization
- » Applied and relevant, yet scientifically sound and rigorous

Pricing and booking

- » EUR 1200 + VAT
- » 40% discount for NGOs and public sector, 10% early bird discount
- » English or German
- » In-house seminars and group discounts
- » Registration: neon.energy/seminars
- » hirth@neon.energy
- » [+49 1 57 55 199 715](tel:+4915755199715)

In person or online

- » In person: two intensive days with alternating lectures and discussions.
- » Online: three days with pre-recorded lectures in the morning (4 hours each) and discussions in the afternoon (2 hours each).



1. Pricing Electricity

- » Pricing on wholesale electricity markets
- » The merit order model
- » The screening curve model
- » Capacity markets
- » Energy-only markets and scarcity pricing

Day-ahead, intraday, balancing: navigate European spot markets for electricity.

2. Wholesale Markets

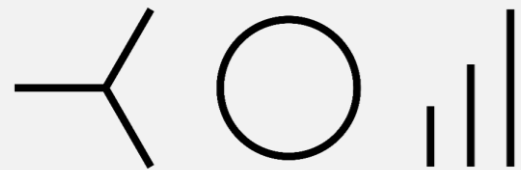
- » The European market model
- » European wholesale markets for electricity
- » Financial vs. spot markets
- » Power exchanges vs. over-the-counter trading

3. Spot Markets

- » The day-ahead auction
- » Continuous intraday trading
- » Auction theory
- » Bid curves vs. demand/supply curves
- » European power exchanges: EPEX SPOT, Nord Pool, EXAA
- » Liquidity
- » Trading strategies
- » Negative prices

4. Financial Markets

- » Futures and forwards
- » Products traded at EEX
- » Cleared and non-cleared OTC trading
- » Purchasing power agreements
- » Trading strategies
- » Hedging

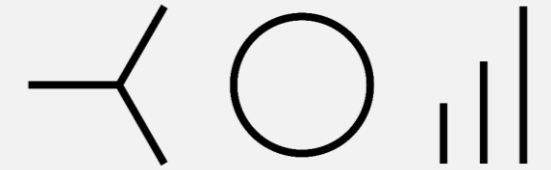


5. Balancing Energy

- » Balancing system
- » Procurement auctions for balancing reserves
- » Imbalance settlement
- » Taking positions against the imbalance settlement price reBAP
- » Forecasting reBAP

6. Case study: June 2019

- » When things go wrong
- » The June 2019 imbalances in Germany's power system
- » Perverse incentive, speculation and regulatory backlash



Trading on short-term power markets requires intimate knowledge of the regulatory and physical forces that shape prices.

This is what this training is all about.

7. International Trading

- » European market coupling
- » Explicit market coupling
- » Net transfer capacity-based implicit market coupling
- » Flow-based market coupling

8. Data Sources for Trading

- » ENTSO-E Transparency Platform
- » EEX and Nord Pool transparency platforms
- » Platts, Genscape, Wattsight & Co.
- » Weather forecast providers

9. Forecasting ID Prices

- » Use machine learning to forecast intraday prices
- » What ID prices?
- » Trading volumes on EPEX Spot
- » The surprising performance of simple LASSO and Random Forest models