# Quantitative Developer, Short-Term Power

How to become the developer who turns a desk's forecasts into trades, every quarter-hour, around the clock.

CAREER ROADMAPS · Energy Trading & ETRM Skills

## The job

You sit between the people who forecast prices and the exchange that trades them. The desk has a model of what power will cost in each quarter-hour, and a battery or a portfolio to run against it. You build the code that turns the model into orders on EPEX and Nord Pool, around the clock, and the code that watches it. Forecast, optimise, execute, monitor: the quants own the first, you own the rest. You are judged on whether the system traded what the model said, and on what it did the night the data arrived late.

Not the same job: the quant researcher builds the forecast, the market maker's developer chases microseconds in C++, the ETRM developer settles trades. This guide is about the developer who makes an intraday desk's automation run.

## Why it is in demand right now

**There are more trades than people can place.**

EPEX SPOT traded 241 TWh in its intraday markets in 2025 and credited part of the growth to algorithmic participation; Nord Pool's intraday volume rose more than 60% in the same year. Since October 2025 the day-ahead auction sets 96 prices a day instead of 24. The desk that places those trades by hand is losing to the one that does not.

**Batteries are the new trader.**

Great Britain had 7.3 GW of grid-scale batteries in June 2026. One German operator runs about 600 MW of batteries and electric-vehicle flexibility across five countries by algorithm. Each one needs software that decides, every quarter-hour, whether to charge, discharge or hold.

**The regulator wants the algorithm on record.**

REMIT II, in force since May 2024, requires anyone trading by algorithm to notify the regulator and keep records of what the algorithm did. Somebody has to build that record.

**Who is hiring.**

This year: Eneco, Statkraft, Danske Commodities, ENGIE, Axpo, Entrix, The Mobility House, InfraBe and FlexPower (Citadel).

### What it pays (2026)

| | |
|---|---|
| London, 2 to 5 years | £85k to £120k |
| London, senior | £120k to £165k |
| Rotterdam, posted | €85k to €120k |
| Zurich, mid-level | CHF 130k to 180k |
| Contract, per day | £450 to £825 |

Indicative. From a March 2026 Eneco posting, 2026 recruiter guides and UK contract postings (£448 inside IR35 to a £785 to £825 median). Energy pays below the hedge funds unless the seat sits next to trading P&L.

### What the interview really tests

- A year of quarter-hourly prices and a 100 MW, 200 MWh battery. Write the dispatch. What happened on the two clock-change days?
- The wind forecast drops 10 GW after the day-ahead auction. What does your system do in the next fifteen minutes?
- The exchange acknowledges an order you never sent. What now?
- Your optimiser charges and discharges at once. Which constraint did you leave out?

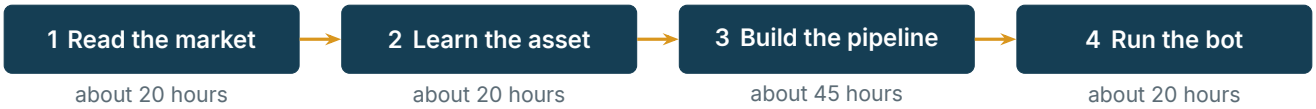
## Where it goes from here, honestly

Net positive, and narrowing. The postings no longer describe a developer who writes what the quants ask for: Eneco wants someone to "scale automated execution" and "operate the algorithmic trading landscape". The developer who turns a quant's notebook into a nightly job is squeezed from two sides: coding tools do most of that translation now, and vendors sell ready-made algorithmic trading platforms.

Put together: the job is safe for the person who owns the path from forecast to order and the controls around it, and can show what the bot did on any day. It is not safe for the translator. The next two pages are for them.

## The roadmap

Four stages, in order. Each stage names the guides and projects to work through in the Energy Trading & ETRM Skills library, roughly how long it takes, and the thing you will have at the end that you can show someone. Guides are textbook-style PDFs; projects are code you build.




Around 105 hours in total, or nine weeks at twelve hours a week.

### Stage 1 · Read the market

Energy Trading Fundamentals course. Why the price moves, where the two short-term markets sit in the day, and how an order actually gets matched. You cannot automate a market you cannot describe.

- Physical Foundations
- The Spark Spread and Power Plant Economics
- Day-Ahead and Intraday Power Markets
- Market Microstructure and Order Books

**What you leave behind:** one page on how a continuous intraday order is matched, what happens to it at gate closure, and why yesterday's intraday price left the day-ahead price behind.

### Stage 2 · Learn the asset

BESS (Battery Storage) Economics course. The thing your code will run. What a battery earns, in which markets, and the constraints that make the optimisation hard: state of charge, power limits, efficiency, degradation.

- BESS Fundamentals: The Battery as a Grid Asset
- Revenue Markets: Where Batteries Earn
- Revenue Stacking
- Dispatch Optimisation

**What you leave behind:** a dispatch for the course's 100 MW, 200 MWh battery over one day of real prices, solved by hand, with the constraint that bound written next to each hour.

### Stage 3 · Build the pipeline

Python for Commodities and the Systems Builder Track. The optimiser in code, on public prices, hardened the way a production job has to be, and wired to an exchange. The thing a hiring manager will open.

- Writing Professional Python
- Production Python for Trading Systems (29 pp, with the `settle` repository)
- Project 1: Price Curve Simulator
- Project 3: A Toy Power Exchange
- Market Data Operations

**What you leave behind:** a public repository: a battery dispatch optimiser on ENTSO-E prices, a thirty-day backtest, the two clock-change days handled in code, and orders submitted to the toy exchange.

### Stage 4 · Run the bot

Practitioner Track. What a strategy is, what a limit is for, what the regulator requires of an automated desk, and how a trading bot is actually run and watched.

- Algorithmic Trading in Power Markets, with the `cadence` bot
- Power Trading Strategies
- Risk Management Fundamentals
- Energy Market Regulation and Compliance, the REMIT II algorithmic trading chapter

**What you leave behind:** a bot that ran for a week on paper, with its control log: every order and cancel, the forecast it acted on, the limit that stopped it once, and a kill switch you have tested.

> **If you already write code for a desk:** skip the Stage 1 guides you could teach, but not the optimiser or the bot. The log is what gets you hired; the CV says you can code, the log shows you can be trusted with the switch.

## The first thirty days

The roadmap is nine weeks. The first four decide whether you finish. Twelve hours a week, half reading and half building; this role is built, not read.

| Week | Do | Done means |
|---|---|---|
| 1 | Physical Foundations. Day-Ahead and Intraday. Project 1, phases 1 to 3. | You can say why intraday left day-ahead yesterday, for one hour. |
| 2 | Market Microstructure. Spark Spread. BESS Fundamentals. Revenue Markets. Project 1, phases 4 to 7. | You can explain continuous matching and write the battery's constraints by hand. |
| 3 | Dispatch Optimisation. Revenue Stacking. Writing Professional Python. A linear programme on one day of ENTSO-E prices. | A dispatch a trader would agree with, and the state-of-charge chart. |
| 4 | Production Python. Harden it: clock-change days, late data, reruns that agree. Thirty-day backtest. | Repository public. The backtest says what it leaves out. |

Weeks five to nine: the integer constraint (no charging and discharging together); wire the optimiser to the toy exchange; Market Data Operations, Algorithmic Trading with `cadence`, Strategies, Risk, the REMIT II chapter; a week of paper trading.

## Prove it: what to put in front of a hiring manager

Not a certificate. Five things they can open.

1. **The optimiser on GitHub.** A battery, public prices, thirty days of results, the two clock-change days handled in code.
2. **One formulation, written out.** The constraints, the one you added, and what it cost in runtime.
3. **The bot's log for one week.** Every order and cancel, the forecast each one acted on, and the kill switch test.
4. **One incident write-up.** The night something went wrong, even on paper: what the system did and what you changed.
5. **A data map.** ENTSO-E, exchange data, weather: what arrives late or wrong, and what the code does then.

Take those five to an interview and the conversation changes. Nobody asks whether you can code.

### Where the material lives

Every guide and project on this roadmap is in **Energy Trading & ETRM Skills**, a private community on Skool. See the plans at a115.co.uk/courses.

The plan for this role: a115.co.uk/courses/quant-developer

**skool.com/careers-in-energy-trading-2706**

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