

Energy Trading & Optimization Lead

NatPower is a global Energy Enabler for the energy transition.

Its role is to enable complex energy systems to emerge, connect and operate at scale, transforming energy needs, industrial constraints and climate objectives into sustainable, operational and bankable infrastructure.

Founded in 2019 as an independent company, NatPower was conceived to operate where complexity prevents traditional models from working. Rather than focusing on single assets or technologies, NatPower integrates development, infrastructure, finance and territories into coherent energy ecosystems.

The Group works with industrial partners, utilities, investors and public institutions **to originate, structure and orchestrate projects** that translate the energy transition from ambition into execution. Today, NatPower operates across multiple geographies with dedicated teams in Europe, North America and Central Asia, managing a global development pipeline exceeding **24 GW across multiple technologies**.

Further demonstrating its industrial strength and ability to develop complex energy infrastructure, in 2025 NatPower Italia, through the Scara Project, secured approximately 250 MWh of energy storage capacity under Terna's MACSE auction, contributing to the overall 10 GWh of capacity awarded nationwide, with commercial operations expected to begin in 2028.

NatPower Marine was established with the ambition to accelerate the decarbonization of port ecosystems through the development, management and optimization of onshore power supply (OPS) infrastructure, enabling the supply of renewable energy to vessels while at berth.

NatPower Marine Italia is the Group's operating company in Italy and aims to act as an industrial partner for the management of shore power infrastructure and the deployment of the investments required to support the full electrification of Italian ports.

The company's model is built around the integrated management of shore power infrastructure throughout its entire lifecycle, close operational integration with terminal operators, and the supply of energy to shipping companies through transparent and competitive tariffs. This is supported by renewable energy procurement, Battery Energy Storage Systems (BESS) and long-term Power Purchase Agreements (PPAs).

Job Description | Energy & Optimizaiton Lead

Regulatory and Commercial Energy-Trading Capability Framework

Prepared to translate the role's key responsibilities into the concrete regulatory relationships, market mechanisms, contract structures and analytical capabilities the role requires – from initial tender-stage energy cost optimization through to integrated, cross-concession energy portfolio management.

Role Context and Objective

The Energy & Optimization Lead owns the energy component of NatPower's business model across two horizons. During tender preparation, the role must produce defensible energy price assumptions, cost structures and risk allowances that feed the Financial Model / Piano Economico Finanziario (PEF) and the OPS tariff definition. During operation, the role manages live procurement, supplier and market relationships, and progressively builds toward integrated optimization of the energy portfolio across all concessions – treating generation, storage and consumption as a single book rather than a set of independent contracts.

The responsibilities described in the job description sit at the intersection of two capability domains that must be built together: a regulatory domain (understanding and managing the interfaces with ARERA, CSEA, Terna, the DSOs and GME) and a commercial domain (procurement strategy, supplier and trader negotiation, PPA structuring, BESS/renewables integration and portfolio optimization). Sections 2 and 3 define each domain; Section 4 maps every JD responsibility to the specific capabilities it requires; Section 5 sequences the build-out; Section 6 aligns the requested profile to the capability set.

Main Responsibilities

- Assess different procurement structures, including fixed-price, indexed contracts and PPAs;
- Define the Energy Procurement strategy for the different concessions;
- Analyze and optimize energy costs to support tender offers and OPS tariff definition;
- Scout and negotiate with utilities, suppliers and energy traders, including framework supply agreements;
- Evaluate the integration of BESS and renewable generation to optimize energy costs;
- Support Financial Models/PEFs through energy price scenarios, forecasts and sensitivities;
- Manage the relevant interfaces with CSEA, ARERA, DSOs/Terna and other energy-market stakeholders;
- Develop energy forecasting, cost optimization and portfolio management capabilities;
- Assess, in the medium term, potential direct access to electricity markets/GME and the related organizational requirements.

2. Regulatory Capability Framework

The Italian electricity market is a central-dispatching model in which four institutions define the rules, costs and obligations that any procurement or optimization strategy must operate within. The role needs a working, not superficial, command of each.

2.1 ARERA – Autorità di Regolazione per Energia Reti e Ambiente

ARERA is the independent regulator (established under Law 481/1995) for electricity, gas, water, waste and district heating. It sets network tariff methodologies and connection conditions, defines quality-of-service standards, regulates the general system charges applied to bills, and issues the resolutions (delibere) that determine how dispatching, imbalance and ancillary-service costs are allocated to market participants. It funds itself through contributions from regulated operators and coordinates internationally through ACER and CEER.

Interface point	What the role must manage
Tariff & dispatching resolutions	Monitor ARERA consultations (documenti per la consultazione) and resolutions affecting network tariffs, general system charges and dispatching cost pass-through; assess impact on concession energy cost lines before they are finalised.
TIDE (Testo Integrato del Dispacciamento Elettrico)	Track the phased reform of the dispatching framework, which is progressively widening ancillary-service and balancing-market participation to storage and smaller resources – directly relevant to BESS strategy and to future direct market access.
Reporting & unbundling obligations	Ensure any activity that touches metering, supply or distribution complies with ARERA's functional/accounting separation and reporting duties.
Consumer & contract transparency rules	Apply ARERA's contractual transparency and quality standards when structuring supply agreements with utilities/traders.

2.2 CSEA – Cassa per i Servizi Energetici e Ambientali

CSEA administers the parafiscal 'oneri di sistema' (general system charges, including the ASOS and ARIM components) collected through bills, manages incentive-fund flows, and – most relevant commercially – runs the register and verification process for energy-intensive users ('imprese a forte consumo di energia' / energivore) that qualify for reduced system charges under the national scheme implementing EU state-aid guidelines.

Interface point	What the role must manage
Energy-intensive user (energivori) qualification	Assess whether concession entities meet electro-intensity thresholds; where they do, prepare and file the periodic CSEA declaration to secure system-charge reductions – a direct, recurring line-item saving relevant to tender cost optimization.
Annual compliance & audit	Maintain the documentation trail (consumption data, energy-cost ratios) CSEA and GSE require to sustain the benefit and survive verification audits.
System-charge cost pass-through	Understand how ASOS/ARIM components move independently of the commodity price, so they are modelled separately in price scenarios and PEF sensitivities rather than bundled into a single 'energy price' assumption.

2.3 Terna and the Distribution System Operators (DSOs)

Terna is Italy's Transmission System Operator: it owns the central dispatching model, schedules generation and consumption units, and runs the Mercato dei Servizi di Dispacciamento (MSD) through which it procures balancing and ancillary services. Access to flexibility markets increasingly runs through qualification as a Balancing Service Provider (BSP), including via aggregation schemes such as UVAM (Unità Virtuali Abilitate Miste) that let distributed and storage resources participate without owning transmission-connected assets. DSOs (the local distributors) govern grid connection, metering and physical access at the concession level.

Interface point	What the role must manage
Connection & metering agreements (DSOs)	Negotiate and manage connection capacity, metering configuration and technical conditions for each concession, including any BESS or on-site generation.
Dispatching cost allocation (Terna)	Understand and forecast uplift/dispatching charges that Terna allocates to consumption and generation, since these sit outside the commodity price but inside total energy cost.
BSP / UVAM qualification	Evaluate qualifying concession load, generation or BESS assets as Balancing Service Providers (directly or via an aggregator) to monetise flexibility on the MSD – a precursor capability to any future direct market participation.
TIDE-driven market redesign	Track how TIDE reshapes BSP eligibility and MSD product design, since this changes the addressable revenue for storage and demand-side flexibility over the plan horizon.

2.4 GME – Gestore dei Mercati Energetici

GME operates Italy's organised electricity markets: the day-ahead market (MGP, zonal-priced since January 2025), the intraday market (MI, integrated with the EU single intraday coupling), and the forward market (MTE, bilateral registration via the PCE platform), alongside environmental markets (Guarantees of Origin, energy-efficiency certificates). Physical scheduling is always reconciled through Terna. Market admission requires an identification code for each generation/consumption unit and is typically obtained through a Balance Responsible Party (BRP) relationship with Terna; a company can trade directly as a BRP or through a delegated BRP/BSP, so acting as BRP itself is not a prerequisite for market participation – it is a strategic choice about disintermediation, not a technical gate.

Interface point	What the role must manage
Market admission & identification codes	Understand GME's admission process and the technical/IT requirements (platform connectivity, guarantees/collateral) that direct participation would require.
BRP relationship management	Decide, concession by concession, whether balancing responsibility sits with the incumbent supplier/trader or is managed directly – the pivot point for the medium-term direct-access assessment the JD calls for.
MACSE capacity market (storage)	Where BESS is deployed, evaluate MACSE capacity-payment auctions (multi-year, zonal, currently supporting deliveries through 2030) as a bankable revenue layer beneath merchant day-ahead/intraday arbitrage and MSD income.
Guarantees of Origin / environmental markets	Use GME's GO market to substantiate renewable-content claims embedded in PPAs or green tariffs offered as part of tender bids.

3. Commercial Capability Framework

Regulatory command is the operating envelope; commercial capability is what generates value inside it. The JD's commercial responsibilities decompose into five linked capability areas.

3.1 Energy procurement strategy and framework agreements

A repeatable strategy for sourcing volume across the concession portfolio, including a defined process for scouting and negotiating with utilities, independent energy traders and suppliers, and for structuring framework (master) supply agreements that allow tranche-based purchasing over time rather than a single point-in-time award – reducing timing risk while preserving competitive tension across suppliers at each tranche.

3.2 Procurement/pricing structures

The ability to specify, compare and negotiate the full range of structures relevant to concession supply: fixed-price contracts (full or partial volume), index-linked contracts referencing PUN/zonal or hub prices (with or without collars/caps), hybrid fixed/floating tranching, and both physical and virtual (financial) Power Purchase Agreements. Within PPAs, this includes distinguishing pay-as-produced from shaped/baseload profiles and the associated pricing and shape-risk premia –

each structure trades off price certainty against exposure to market movements differently, and the right mix depends on the concession's risk tolerance and the PEF assumptions it must support.

3.3 BESS and renewables integration for cost optimization

The commercial evaluation of on-site or contracted battery storage and renewable generation as levers to reduce delivered energy cost: peak-shaving and price-arbitrage value from storage, firming of variable renewable output to reduce imbalance exposure, co-located PPA-plus-storage structures, and layered revenue stacking across MACSE capacity payments, day-ahead/intraday arbitrage and MSD/UVAM participation (Section 2.3–2.4). This capability determines whether a concession should own, co-locate, or contract BESS/renewable capacity, and at what size.

3.4 Forecasting, scenario analysis and financial-model support

The analytical backbone that connects procurement decisions to the business case: energy price and volume forecasting, scenario and sensitivity analysis (base/upside/downside price paths, index exposure, system-charge trajectories) feeding the PEF, and translation of those scenarios into the assumptions used for OPS tariff definition during tender preparation. As the role matures, this extends to portfolio-level forecasting across all concessions rather than one at a time.

3.5 Integrated portfolio management and market-access roadmap

The end-state capability: managing procurement, BESS, renewables and forecasting as a single optimized portfolio across concessions rather than independent contracts, and periodically reassessing whether direct participation in GME/the electricity markets (Section 2.4) would outperform continuing to transact through intermediated supply – including the organizational build (trading desk resources, risk/credit management, IT connectivity, BRP arrangements) that direct access would require.

4. Responsibility-to-Capability Mapping

The table below maps each responsibility in the job description to the specific regulatory and commercial capabilities from Sections 2–3 that it draws on.

JD Responsibility	Regulatory capability	Commercial capability
Define Energy Procurement strategy per concession	System-charge and dispatching cost treatment (ARERA, CSEA, Terna)	Procurement strategy & framework agreements (3.1)
Analyze/optimize energy costs for tender offers and OPS tariff	ARERA tariff/charge resolutions; CSEA energivori benefits	Forecasting & financial-model support (3.4)
Scout and negotiate with utilities, suppliers, traders; framework agreements	–	Procurement strategy & framework agreements (3.1)
Manage interfaces with CSEA, ARERA, DSOs/Terna, market stakeholders	All of Section 2	–
Assess procurement structures: fixed-price, indexed, PPAs	TIDE / dispatching cost design (Terna)	Procurement/pricing structures (3.2)
Evaluate BESS and renewable integration for cost optimization	MSD/UVAM, MACSE (Terna, GME)	BESS & renewables integration (3.3)
Support Financial Models/PEFs with price scenarios, forecasts, sensitivities	System-charge trajectories (CSEA, ARERA)	Forecasting & scenario analysis (3.4)
Develop forecasting, cost optimization and portfolio-management capabilities	–	Integrated portfolio management (3.5)
Assess direct access to electricity markets/GME, medium term	GME admission, BRP relationship (2.4)	Market-access roadmap (3.5)

5. Capability Build-Out Roadmap

The JD explicitly frames this as a progression, not a fixed-scope role. The roadmap below sequences capability build-out accordingly; timing should be adjusted once the current concession pipeline and tender calendar are known.

Phase 1 – Foundational procurement and cost optimization

Establish the procurement strategy and supplier/trader panel; build the fixed vs. indexed vs. PPA comparison framework; stand up CSEA energivori qualification for eligible concessions; deliver first price-scenario inputs to PEF/OPS tariff models.

Phase 2 – BESS, renewables and framework agreements

Negotiate framework supply agreements; run BESS/renewables cost-optimization business cases per concession, including MACSE and MSD/UVAM revenue assessment; formalise Terna/DSO connection and BSP-qualification processes.

Phase 3 – Integrated portfolio management

Consolidate forecasting and procurement across all concessions into a single portfolio view; actively manage cross-concession hedging and supplier concentration risk.

Phase 4 – Direct market access assessment

Formally evaluate direct GME participation and BRP status against continuing intermediated supply, including the organizational, IT/connectivity, credit-risk and staffing requirements direct access would entail, and bring a recommendation to the business.

6. Profile Alignment

The requested profile maps cleanly onto the capability set above; the table highlights where each background brings a head start.

Profile element (from JD)	Capability area it primarily supports
Engineering / Economics / Energy Management degree	Quantitative basis for forecasting, scenario analysis and cost-optimization modelling (3.4)
Experience in utilities, energy traders, ESCOs, renewable/BESS developers, or large energy consumers	Direct exposure to procurement negotiation (3.1-3.2), BESS/renewables structuring (3.3), or buy-side cost management
Understanding of the Italian electricity market and ARERA regulation	Regulatory framework, Sections 2.1-2.4
Experience with PPAs, BESS, forecasting, portfolio optimization	Sections 3.2-3.5 directly

Appendix – Glossary

Term	Meaning
ARERA	Autorità di Regolazione per Energia Reti e Ambiente – Italian regulator for energy, networks and environment.
ASOS / ARIM	Components of the general system charges (oneri di sistema) applied to Italian electricity bills, administered via CSEA.
BRP	Balance Responsible Party – the entity financially responsible for a metering point's imbalances toward Terna.
BSP	Balancing Service Provider – an entity qualified to offer flexibility (generation, load or storage) into Terna's MSD.
CSEA	Cassa per i Servizi Energetici e Ambientali – manages system charges, incentive funds and the energy-intensive user (energivori) register.
DSO	Distribution System Operator – local electricity distributor managing connections and metering.
GME	Gestore dei Mercati Energetici – operator of Italy's organised energy markets (MGP, MI, MTE and environmental markets).
MACSE	Mercato della Capacità di Stoccaggio Elettrico – Italy's capacity market mechanism for battery storage.
MGP / MI / MTE	Mercato del Giorno Prima (day-ahead), Mercato Infragiornaliero (intraday), Mercato a Termine dell'Energia (forward).
MSD	Mercato dei Servizi di Dispacciamento – Terna's ancillary services / balancing market.
OPS tariff	The tariff definition used within the concession's tender/operating framework, as referenced in the job description.

Term	Meaning
PEF	Piano Economico Finanziario – the financial model underpinning a concession's tender and operating plan.
PPA	Power Purchase Agreement – physical or virtual (financial) contract for energy and/or renewable attributes.
TIDE	Testo Integrato del Dispacciamento Elettrico – ARERA's ongoing reform of the dispatching framework.
UVAM	Unità Virtuali Abilitate Miste – Terna's scheme enabling aggregated distributed resources to participate in the MSD.

Sources

Regulatory and market descriptions above were verified against: ARERA ([arera.it](https://www.arera.it)) –

- ARERA, "Structure and role" – [arera.it/about-the-authority/structure-and-role](https://www.arera.it/about-the-authority/structure-and-role)
- Terna, "The role of Terna" – terna.it/en/electric-system/terna-role
- GME, Italian Electricity Market FAQs (Jan 2025) – [mercatoelettrico.org](https://www.mercatoelettrico.org)
- Terna / RSE, TIDE – Testo Integrato del Dispacciamento Elettrico (June 2024) – [rse-web.it](https://www.rse-web.it)
- Timera Energy, "Italian BESS & MACSE state of play" – [timera-energy.com](https://www.timera-energy.com)
- CSEA – [csea.it](https://www.csea.it) (institutional role, system charges and energivori register)