



SMART
ENERGY
LAB

SEL Human Resources - Outsourcing

RFP

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1. Introduction

1.1. Smart Energy Lab (SEL)

Smart Energy Lab (SEL) is an entity that brings together science, technology, and industry in the energy sector, with industrial associates such as EDP Comercial and Accenture, and academic associates Instituto Superior Técnico, Universidade de Coimbra, Faculdade de Ciências da Universidade de Lisboa, INESC ID and INESC TEC. Through a collaborative model, SEL accelerates the development, implementation, and adoption of solutions to address the challenges of the energy transition.

Using innovation processes that include validation through market testing and pilots, SEL stands out by seeking competitive advantages that ensure market success, ranging from technological adaptation to cost reduction. Its main goal is to deliver products and services that promote the business of energy transition products offered by market players and their role in helping clients achieve carbon neutrality.

SEL's product portfolio includes solutions for electric mobility charging systems, home energy management, and electrification of energy consumption, supported by a technology platform developed internally.

1.2. SEL Team and Organization

SEL is organized into six specialized business units: Mobility, Energy Management, Future Assets, Technology, Asset Valuation and Corporate Management.

Each business unit is focused on a distinct area of operations and integrates strong management skills with advanced technical, analytical, and market expertise, focusing from product development, brand, and business development to strategic management in three main areas of expertise:

- Electric Mobility: Enabling electric vehicle adoption with scalable charging infrastructure solutions.
- Energy Management: Integrating renewable energy systems such as PV, batteries, and EV chargers for optimal performance.
- Electrification: Replacing fossil fuels with clean, sustainable energy sources through scalable business solutions.

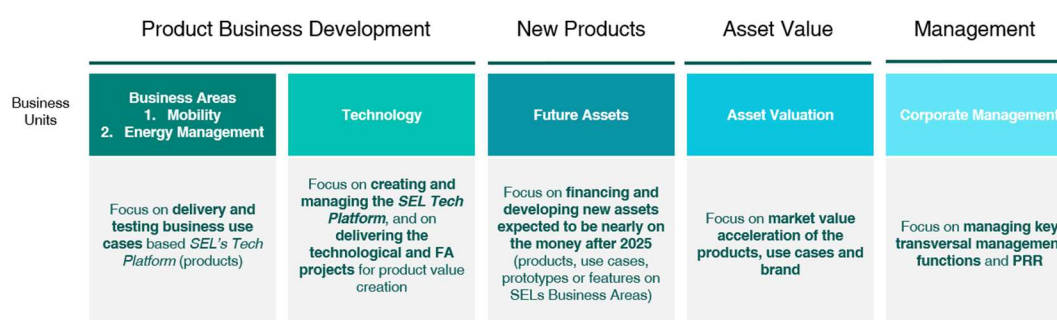


Figure 1: SEL's business units

SEL team is highly qualified, including roles such as engineers, analysts, designers, developers, and business strategists. This multidisciplinary team works collaboratively to deliver innovative solutions that accelerate development, with 12% PhDs, 71% MSc, 12% BSc and 4% 12th grade.



Our team full of capabilities

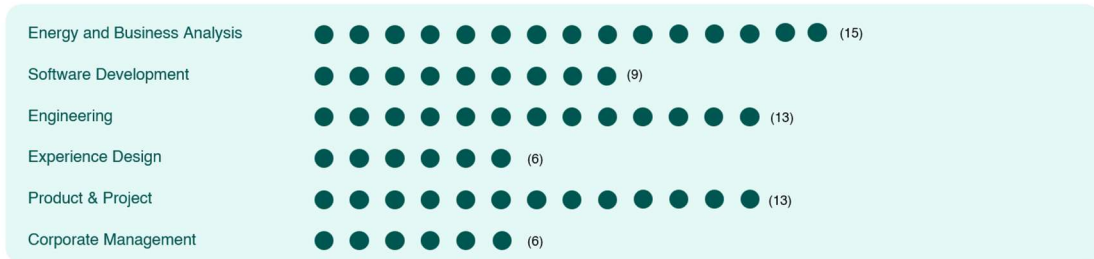


Figure 2: Overview of SEL's team and capabilities

Our multidisciplinary team is capable to execute all the development process from beginning to end, going through problem validation, prototype, MVP and final product.

Every person in SEL is evaluated twice per year in the mid-year and year end performance review process in three main areas: Mindset, Execution, Leadership with a total of 22 criteria.

SEL adopts a tiered structure that categorizes roles into five seniority levels: Junior, Professional, Senior, Specialist and Principal - Each level reflects an increasing degree of responsibility, autonomy, technical expertise, leadership, and business impact:

- Junior - roles focused on learning and applying technical knowledge under guidance.
- Professional - roles that act on projects independently, manage processes, mentors' juniors, and start to influence decision-making processes within their technical domain.
- Senior - roles that take action in complex projects and that coordinate and apply technical streams through high technical knowledge of the subject.
- Defines and implements the technical stream of the initiative, through technical knowledge of the subject and, manage projects or processes and can coordinate people.
- Specialist - roles that propose and implement the strategy to deliver the initiative that is leading, through planning, coordination and supervision activities, managing people.
- Principal - roles that define the strategy, policies goals, outcomes with autonomy and command, facing complex problems that require wide technical knowledge and advanced management skills.

2. Project overview

The purpose of this RFP is to **select a qualified partner to accelerate the development and deployment of innovative solutions within our strategic focus areas** by integrating into SEL's projects in outsourcing through **subcontracting up to 5 human** resources in the areas of **software development, electrical engineering and firmware development**.

With this integration, this project aims to **accelerate SEL's delivery process, maximizing speed and quality**.

With the growth of our organization, SEL is on a critical phase of its development roadmap, where maintaining delivery speed and quality in the development is essential. While our team has successfully

brought a set of developments to its current stage, workload is high as we expand features, integrate new technologies, and respond to market demands in our products.

To address this, **SEL aims to accelerate our development capacity by onboarding specialized professionals who will complement the existing team.** These resources will ensure continuity of delivery while providing the technical expertise needed to sustain and enhance progress.

3. Deliverables

The selected partner will be responsible for delivering the following main outputs:

1. **Identification and selection of suitable profiles**, including:
 - a) **Analysis of the requirements and profile description** defined in Annex I.
 - b) **Identification and submission of a set of CVs** that adequately meet the profiles required.
2. **Provision of dedicated human resources, ensuring:**
 - a) **Allocation of the selected profiles to work on a full-time basis at SEL.**
 - b) **Continuous availability of the resource for a period of three (3) months.**
3. **Performance monitoring and reporting, including:**
 - a) **Preparation of monthly reports with feedback from HR**
 - b) **Identification of improvement opportunities based on the evolution and performance of the resources during their engagement with SEL.**
4. **Resource replacement management, covering:**
 - a) **Replacement of any human resource that does not meet the expected performance levels**
 - b) **Replacement of resources that demonstrate difficulties in integrating with SEL's team, culture, or working practices**

4. Evaluation Criteria

Proposals will be assessed based on the following criteria and corresponding weights:

- **Total price** for the execution of all services included in the contract (50%), with the detail of on the price per RH per month to hire
- **Technical expertise and relevance of proposed profiles** (50%), subdivided into:
 - Relevant experience of the bidder in similar projects (15%), including company's background, track record in the energy sector, and evidence from comparable projects initiatives.
 - Qualifications, certification, and technical skills of the proposed professionals (30%), based on CVs and profile descriptions, with emphasis on adequacy to the project requirements, minimum professional experience of three (3) years, and proven experience with relevant technologies and methodologies.
 - Qualifications, certifications, and technical skills of the proposed project manager (5%), assessing leadership experience, technical competence, and suitable

Evaluation jury:

For the evaluation of the present RFP, the proposal evaluation committee is composed of:

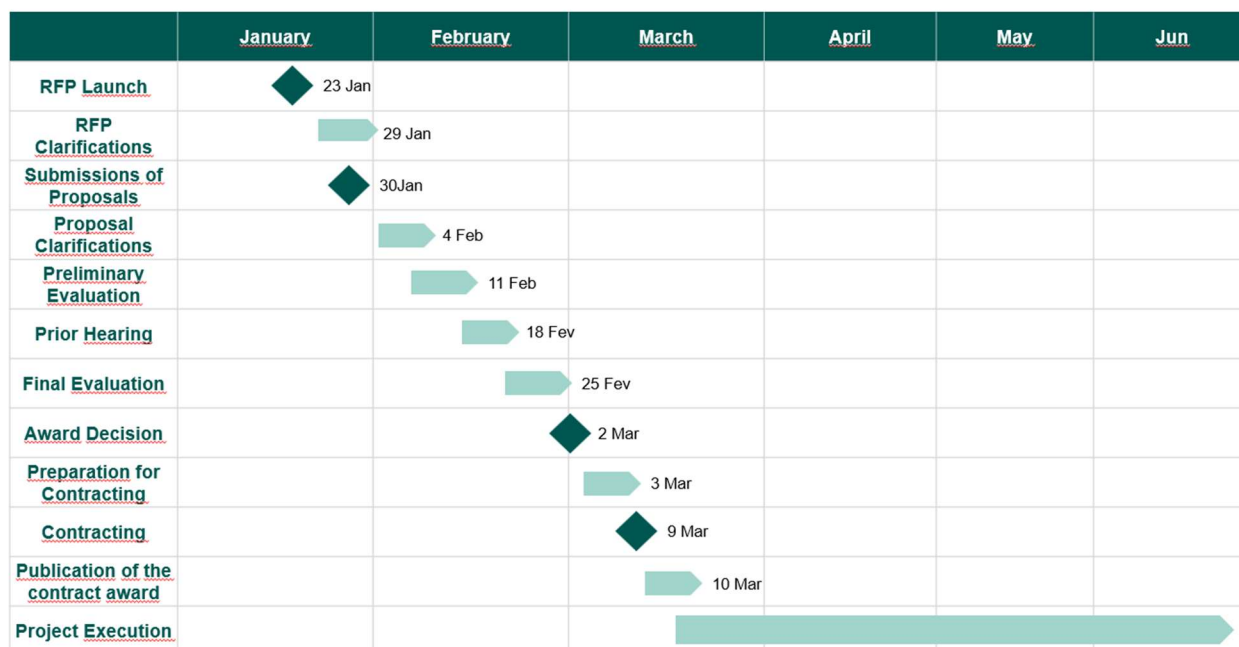
João Wang: Business Unit Manager Corporate Management, Pedro Almeida: Business Unit Manager, Diogo Brito: Lead of Engineering, Oluwapelumi Egunjobi: Lead of Software

5. RFP and Project timeline

The timeline below presents the **main phases of the project**, which include:

- **RFP launch:** issuance of the invitation to submit proposals.
- **RFP clarifications:** requests for clarification and correction of errors or omissions in the RFP documents, submitted formally to procurement@smartenergylab.com, followed by responses from SEL.
- **Submission of proposals.**
- **Proposal clarifications:** requests for clarification and/or correction of formal irregularities in the proposals, submitted formally to procurement@smartenergylab.com, followed by responses from SEL.
- **Preliminary evaluation:** preliminary report on the analysis and evaluation of the proposals (if more than one proposal is submitted)
- **Prior hearing:** written hearing of the tenderers (if more than one proposal is submitted).
- **Final evaluation:** final report on the analysis and evaluation of the proposals and of the tender's comments submitted during the prior hearing (if more than one proposal is submitted);
- **Award decision.**
- **Preparation for contracting** submission of qualification documents by the successful tenderer.
- **Contracting.**
- **Publication of the contract award.**
- **Project execution.**

The **working format** – on site or remote – will be defined according to the **phase and specific needs of the project** and must be **agreed in advance with SEL**.



6. Base price

The total price indicated in the awarded proposal must include price components associated with the human resources to be subcontracted under the scope of the project.

The proposal shall present a detailed pricing structure, including:

1. **Daily rates per proposed profile type (e.g. software development, electrical engineering, firmware development);**
2. **Estimated total cost per profile, based on full-time allocation for a three and a half (3,5) month period.**
3. **Total aggregated price for the execution of all services included in the contract, corresponding to the subcontracting of five (5) human resources.**

Accordingly, the final price components shall clearly reflect the breakdown of costs per profile and the total cost of the engagement.

The total price indicated in the proposal must not exceed €105,000.00 (one hundred thousand euros), plus VAT at the legally applicable rate on the date of payment.

Abnormally Low Price

The total price proposed for the services included in the contract shall be considered abnormally low if it is significantly below (-40%) the expected price of 105 000€ for the scope and duration of the services.

If a proposed price is deemed abnormally low, SEL may request the tenderer to provide, within a reasonable timeframe, clarifications regarding the relevant components of its proposal.

Proposals presenting an abnormally low price for which no adequate or sufficient justification is provided shall be excluded.

7. Proposal

Proposal documents

Under penalty of exclusion, the proposal must include the following document:

- a) A document describing the company's background and relevant experience in the technological and commercial sectors, preferably in projects of a similar nature
- b) Curriculum Vitae of the key team members, including academic background, relevant professional experience for the project, number of years of relevant experience, and duly justified certification, where applicable.
- c) A document detailing the total price for the execution of all services included in the contract. The total price must not exceed €105,000.00 (one hundred thousand euros), plus VAT at the legally applicable rate. Proposals exceeding this amount shall be excluded.

For commercial, industrial, or other confidentiality reasons, tenders when submitting their proposal, request that certain documents or information contained therein be treated as confidential, in accordance with applicable law, with the purpose of restricting or limiting access strictly to what is necessary.

Submission Instructions

Proposals must be sent by **30/01/2026** to: procurement@smartenergylab.com.

The following subject line should be used: [RFP] – SEL Human Resources – Outsourcing_*ApplicantCompanyName*

8. Other topics

The proposal must be submitted in English

SEL will provide the necessary human resources from its teams to support the supplier in carrying out the planned work.

9. Annexes

Required Professional Profiles and Job Descriptions

Software Developer

Job Title:

Software Developer

Key Responsibilities:

- Collaborate on development, and deployment of web applications across both front-end and back-end domains.
- Build responsive, user-friendly interfaces using modern frameworks (Vue.js, React), ensuring cross-platform compatibility.
- Develop server-side logic, RESTful APIs, and microservices using Python web frameworks like Django and FastAPI
- Design and manage PostgreSQL databases, write optimized SQL queries, and maintain data integrity.
- Ensure code quality through thorough testing (unit, integration, end-to-end), code reviews, and documentation.
- Optimize performance across the stack and proactively monitor troubleshoot issues in production environments.
- Contribute to agile development processes, sprint planning, and cross-functional collaboration.

Required Qualifications

- Minimum Bachelor's degree in Computer Science, Software Engineering, or related field
- Strong analytical and problem-solving skills with attention to detail

Required Experience

- Minimum 3 years of hands-on experience with Python
- Minimum 3 years of hands-on experience with Vue.js (or React)
- Proven experience developing RESTful APIs and integrating them with front-end applications

Technical Skills

- Solid understanding of RESTful API design and integration principles.
- Familiarity with message brokers (RabbitMQ, Redis).
- Experience with Kafka or MQTT (plus)
- Familiarity with Grafana (plus)

- Experience with microservices architecture and containerized environments.

Language Requirement

- Fluency in English (written and spoken) required

Electrical Engineer**Job Title:**

Electrical Engineer

Key Responsibilities:

- Design, develop, and implement electrical systems and hardware for energy or IoT-based projects
- Conduct on-site installations, commissioning, and system integration activities
- Perform electrical panel design, wiring, and troubleshooting for low and medium-voltage systems
- Collaborate with firmware and software teams to ensure seamless hardware-software integration
- Execute site surveys, testing, and validation of system performance
- Support the development and deployment of energy management or monitoring systems
- Ensure compliance with relevant electrical codes, standards, and safety practices.
- Document technical designs, installation procedures, and test reports.

Required Qualifications

- Minimum Bachelor's degree in Electrical Engineering, or related field
- Strong analytical and problem-solving skills with attention to detail

Required Experience

- Minimum 3 years of relevant experience in electrical systems, energy systems, or industrial installations
- Familiarity with energy management systems, IoT architecture, and fields communications protocols (Modbus, MQTT).
- Experience with site surveys, systems commission, and field troubleshooting.

Technical Skills

- Proficiency in electrical schematics, wiring diagrams, and panel design tools
- Working knowledge of power distribution, hardware integration, and on-site commissioning
- Basic understanding of firmware, embedded systems, or microcontroller-based hardware (a plus).

- Familiarity with IoT hardware integration and communication networks
- Understanding of standards and regulations

Language Requirement

- Fluency in English (written and spoken) required

Firmware Engineer**Job Title:**

Firmware Engineer

Key Responsibilities:

- Develop and optimize high-level firmware applications for compute modules.
- Design application software to support complex embedded systems using Linux OS environments.
- Collaborate with hardware engineers, software developers, and project managers.
- Create and maintain system-level architecture documentation and software specifications.
- Troubleshoot and debug firmware applications to ensure seamless hardware–software integration.

Required Qualifications

- Minimum Bachelor's degree in Electrical and Computer Engineering, or related field
- Strong analytical and problem-solving skills with attention to detail

Required Experience

- Minimum 3 years of hands-on experience in firmware development or a related embedded-systems role.
- Experience developing high-level firmware applications for embedded or IoT systems.
- Experience in integrating firmware with cloud services.
- Experience collaborating in cross-functional engineering environments.
- Familiarity with energy management systems, IoT architecture, and fields communications protocols (Modbus, MQTT).

Technical Skills

- Working Proficiency with Linux-based environments and compute modules (e.g., CM4).
- Programming experience in C++, Rust, Python, or Shell.
- Hands-on experience with ESP32 development.
- Familiarity with wireless communication protocols: Wi-Fi, Bluetooth.

- Knowledge of communication interfaces: UART, SPI, I2C, MQTT.
- Understanding of system-level embedded hardware–software design.
- Knowledge of WebSockets and PlatformIO-based firmware bootstrapping.
- Nice-to-have: Modbus and OCPP (EV charging protocol).
- Strong debugging and troubleshooting skills in embedded systems

Language Requirement

- Fluency in English (written and spoken) required