

Electrical Engineer

- Join an innovative renewable energy technology leader
- Be part of bringing a new clean energy technology to market
- Work together with a multi-disciplinary team
- Contribute to leading wave energy development with EuropeWave program

Carnegie Technologies Spain (CTS) is the Spanish subsidiary of Australian based Carnegie Clean Energy, a renewable energy technology company focused on developing its world leading patented CETO wave energy technology. The global potential for marine renewable energy is enormous and Carnegie is well positioned to capitalise upon this. Carnegie has recently been awarded a contract to deliver Phase 3 of the €20m [EuropeWave Pre-Commercial Procurement \(PCP\) Programme](#), a competitive programme to advance wave energy. Under this framework, Carnegie is accelerating the development of its CETO technology toward commercialisation with its ACHIEVE programme.

Carnegie is seeking an Electrical Engineer to join the technical team and work closely with other engineers across a broad range of disciplines in executing the technology development plan. Reporting to Carnegie's Chief Technology Officer, this position will be responsible for providing technical expertise and knowhow to the simulation, sizing, specification, procurement, and operation of the electrical and control system used in CETO power take-off and power export systems. This includes the power electronics components such as motor drive, battery, resistor, line modules, electrical connectors, transformers, and dynamic export cable. In-depth knowledge of relevant power transmission engineering principles will be required, alongside a thorough understanding of the associated rotating electrical drivetrains, integration of such components into an overall power generation system and the strategies to control these components.

The Position:

- Deliver electrical engineering expertise for the design and specification of rotating electrical machines, associated power electronics and power transmission components.
- Develop computer models and undertake simulations to evaluate the behaviour and performance of the electrical system stand-alone and integrated with overall system models.
- Undertake design, analysis and development activities of components within the CETO technology where required.
- Manage selected suppliers in relation to the specification and procurement of equipment that meets the performance requirements, schedule and budget.
- Support the management of the control system supplier.
- Represent Carnegie at various European forums and promote the ACHIEVE programme.
- Contribute to written project reports and other deliverables.

- Position primarily based in Bilbao (Spain) with regular travel to visit stakeholders across Europe.

The Candidate will possess the following:

- A positive and collaborative approach to problem solving in a team environment
- A demonstrable capacity to deliver the items listed in 'The Position' section above
- Master of Engineering or higher in Electrical Engineering. B.Eng plus relevant industrial experience will be considered
- 5+ years' experience in electrical engineering in power generation in the 100kW to MW range

The following would be well regarded:

- Experience in wave energy, offshore wind or tidal industry, especially around electrical systems
- Experience in wider electrical generation system design (i.e. grid connection systems)
- Experience with control systems specification and design
- Experience with large scale rotating electrical machines in other industries
- Background in heavy-duty mechanical engineering for rotating equipment

The Company offers:

- The chance to work in a rewarding company and be part of developing and demonstrating a world class and world first renewable energy technology
- Dynamic and enthusiastic team culture
- A remuneration package in line with relevant experience and skills

Applications, including covering letter, CV **in English** and answers to the application questions below, should be forwarded to careers@carnegiece.com in PDF format with "Electrical Engineer" in the subject title. Only shortlisted applicants will be contacted. Confidentiality is assured.

Application Questions

Are you eligible to work in Spain for long periods without a visa?

How many years of experience do you have in a similar role?

What is your expected salary?

Do you have a relevant degree or tertiary qualification?

Have you built something in your spare time? If so, please describe it briefly.