

## Electrical Engineer

- Join an innovative renewable energy technology leader
- Work together with a multi-disciplinary team
- Contribute to leading wave energy development with EuropeWave program

CETO Wave Energy Ireland (CWEI) is the Irish 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 CWEI is well positioned to capitalise upon this. CWEI has recently been selected for the €20m [EuropeWave Pre-Commercial Procurement \(PCP\) Programme](#), a competitive programme to advance wave energy. EuropeWave PCP's objective is to accelerate the development of cost-effective wave energy converter systems that can survive in the harsh ocean environment.

CWEI is seeking an Electrical Engineer to join the technical team and work closely with other engineers across a broad range of disciplines to deliver our ACHIEVE project under the EuropeWave programme. Reporting to the 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 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 and integration of such components into an overall power generation system.

### 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 for components within the CETO technology
- Represent CWEI at various European forums and promote the ACHIEVE project
- 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 offshore wind or tidal industry, especially around electrical systems
- Experience in wider electrical generation system design (i.e. control systems / SCADA, grid connection systems)
- 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](mailto: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?

How many years 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.