PRESS RELEASE

The installation of ISWEC (Inertial Sea Wave Energy Converter) off the coast of Pantelleria has been completed.

The device developed by Eni, the Politecnico di Torino and Wave for Energy, will convert energy from sea waves to directly supply the island with renewable electricity

Pantelleria, 07 March 2023

Eni announces that it has completed the installation of the world's first **ISWEC (Inertial Sea Wave Energy Converter)** device connected to the electricity grid of an island. It is located about 800 metres off the coast of the island of Pantelleria and can reach 260 kilowatts of peak power generation converted from wave energy. This experimental campaign, conducted under real operating conditions, will lead to useful results for developing the second-generation device currently under study.

ISWEC was developed by Eni in collaboration with the Politecnico di Torino and Wave for Energy s.r.l. (a spinoff of the university). It is an innovative technology in the field of offshore renewable energy solutions, converting wave motion into electricity which then supplies energy to offshore infrastructure, small off-grid islands and coastal communities. ISWEC design can be optimized with reference to the metocean conditions of the site where it is installed by means of a genetic algorithm that leverages on the significant computing power of Eni's Green Data Centre (GDC) based in Ferrera Erbognone.

The machine consists of a steel hull measuring 8 x 15m which houses the energy conversion system, consisting of two gyroscopic units, each more than 2m in diameter. The device is held in place in a 35m deep seabed by a special mooring system that responds to weather and sea conditions, consisting of three mooring lines and a swivel (a rotating joint). The electricity produced is transmitted ashore via an underwater electric cable.

Wave power is one of the main types of renewable energy and is currently untapped. Suffice it to consider that 70% of the Earth's surface is covered by water (97% of which is made up of seas and oceans). The power that could be generated from sea waves is estimated at around 2 terawatts globally, for a total of 18,000 terawatt-hours a year, almost the same as the entire planet's demand for electricity.

Energy from sea waves is also more predictable, constant and of higher energy density than that of the sun and wind, as it is available both during the day and at night. A further advantage of this technology is the considerable reduction of its impact on the landscape, since the device stands only 1 meter above sea water. Moreover, ISWEC can be integrated

COMMUNICATIONS AND MEDIA RELATIONS
POLITECNICO DI TORINO
Dept. Head: Elena Foglia Franke. Silvia Brannetti, David Trangoni
tel. +39 011 0906286 - relazioni.media@polito.it

perfectly with other offshore renewable energy production systems, such as wind power generators, both because it enhances the value of connection systems and because it can be integrated with other facilities in the same sea area, thereby maximising the conversion of available energy.

The ISWEC technology is part of Eni's decarbonization plan and was mentioned by the EU Commission in its strategy on offshore renewable energy as a key example of sea wave energy conversion. The installation of the ISWEC in Pantelleria is the first step towards the decarbonization of the island, in line with the energy transition agenda.

Eni corporate contacts:

Press office: Tel. +39 0252031875 – +39 0659822030
Freephone for shareholders (from Italy): 800940924
Freephone for shareholders (from abroad): + 80011223456
Switchboard: +39.0659821

ufficio.stampa@eni.com
segreteriasocietaria.azionisti@eni.com
investor.relations@eni.com

Website: www.eni.com

Segui @eni