



## Join the 4th Greening the Islands conference on Ischia and engage with our online community

**Join the 4th Greening the Islands International Conference - Energy, Water and Mobility for Circular Island Economies – which will take place on Ischia (Naples) on 28-30 September 2017.**

This year Greening the Islands will be an “online event” thanks to live streaming and the e-tools of GreeningTheIslands.net. From Ischia, key island actors will illustrate their best solutions and engage with a global community of experts to discuss how to make islands even more attractive and environmentally resilient. This novel format will transform the event into a three-day “documentary” on the green economy and demonstrates Greening the Islands’ ability not only to bring together participants in Ischia but also to connect its global GreeningTheIslands.net community.

Greening the Islands will this year revolve around an **enlarged concept of circular island economies, embracing energy, water, waste, mobility, agriculture, tourism, culture and traditions.**

To keep pace with innovation, Greening the Islands will give an update on the very latest solutions: leading examples of how to face the most critical issues of the over 500,000 islands in the world, improve the quality of life of islanders and build resilience to climate change and migration.

Once again the community of innovation providers, island administrations, institutions and investors will meet for this unique annual appointment to demonstrate that a brighter future is possible for islands and not only.

In 2016 Greening the Islands introduced national conferences to better focus on domestic issues. On 28 September participants will attend the **Italian Greening the Islands conference**, which will be translated into English. The Italian session will concentrate on the recently approved decree granting incentives to renewables on islands through reduced diesel consumption, that will be the first feed-in-tariff scheme applied to islands, and on the result of a study to introduce simple, specific authorisation procedures for green projects on islands.

The conference will end with a site visit: participants will move by boat to the International School for Advanced Studies on Scientific Research on Sustainability for Islands on Procida and enjoy a visit to a stunning medieval village overlooking the sea and a delicious seafood lunch at the island’s ancient port.

**More info about the event at [www.greeningtheislands.net](http://www.greeningtheislands.net)**



# GREENING THE ISLANDS.NET AWARDS

## Applications open for 3rd Greening the Islands Awards

### Have you got a great story to tell about enhancing island life through innovative and integrated green solutions?

If you are an island administration or business partner involved in an innovative project that is helping in the transition to a more sustainable future and reduce carbon impacts, the **Greening the Islands Awards** is a unique opportunity to gain recognition for your work and share your initiative with similar communities internationally.

The winners of the 3rd edition of the awards will be voted by prestigious jury members as well as members of the GreeningTheIslands.net community. Award recipients will be announced at a gala dinner on September 29 as part of the upcoming Greening the Islands conference, to be held in Ischia (Naples).

All the islands of the world are allowed to participate as long as they have worked on projects related to the following topics:

- Renewable energy and energy efficiency
- Sustainable mobility/transportation
- Water
- Waste
- Public awareness campaigns

The three winners of the 2nd edition of the Greening The Islands Awards, were announced in December at the event on the Canary Islands:

- Ta'u, one of the islands of American Samoa with just 600 inhabitants, won the award in the **Energy** category. The "**Ta'u island microgrid**" project, which involves Tesla and was implemented within just one year from start to finish, will meet 100% of Ta'u's energy demand.
- The award in the **Water** sector went to Malta's "**Water Conservation and Awareness Centre**". The facility will be an interactive museum to help inform residents and tourists about the importance of water resources and, given the lack of water on the island, smart management both in domestic and agricultural uses.
- In the **Mobility** category, the award was given to the "**Replacement of police motorbikes**" project, an initiative by the Italian town of Rapallo, in Liguria, which is replacing its local police motorbikes model Zero S motorbikes by US producer **Zero Motorcycles**.

Participation in the awards is free and the deadline is **July 18th, 2017**. You can apply for an award on the [Greening the Islands website](#).



Credit: Cabeólica

## Cape Verde shows the way, raising ambition and targeting 100% renewables by 2020

**Cape Verde's transition to renewables is proving so successful that the African state has decided to raise its ambition and target 100% renewables by 2020.**

The government of Cape Verde, a group of islands with over 500,000 inhabitants set in the Atlantic Ocean off the coast of west Africa, originally decided to transition to renewable energy in 2010, when it set a goal for the sector to produce 50% of electricity by 2020.

Wind power development has been led by Cabeólica, set up by the government in 2010. During 2011 and 2012 the company started up four wind farms with combined generating capacity of 25.5 MW on four of Cabo Verde's nine inhabited islands: Santiago, São Vicente, Sal (pictured) and Boa Vista. This allowed around a quarter of the country's power to come from wind power.

The government has now revised its renewable goals, targeting 50% by the end of 2018 and reaching 100% by 2020. This will eliminate the need to import expensive fuel oil except for back-up generation. The \$90m development costs were provided by the European Investment Bank and African Development Bank.

"Cape Verde wants to serve as a laboratory," Energy Minister Anildo Costa told CNN last year. "We'll invest in technological innovations so we can learn over time, and fully adopt those technologies once they become profitable for the country.

"Given the share of renewable energy in our network, and our intensive experience of these technologies, we should be able to share this experience beyond our borders."

Cape Verde is being innovative in the way it integrates desalination into its energy strategy. Desalination plants consume 15% of electricity production in the country and more capacity is likely to be needed as tourism grows and the government seeks to provide universal piped water supplies.

To compensate for variations in wind power production, it plans to shut desalination plants when wind speeds are low and maximise their use when wind power production is plentiful, effectively using water reserves as a form of energy storage.



## Artificial islands in North Sea could be “hubs” for sustainable EU electricity system

### Some utilities are starting to think about a new role for artificial islands in future energy scenarios to connect giant wind farms to several countries

The role of islands as part of future sustainable energy systems may take on new significance based on plans being studied by northern European grid operators. Their idea is to create artificial islands in the North Sea to use as “hubs” connecting offshore wind farms to several countries, thus facilitating the integration of renewables into international markets.

The idea took another small step towards becoming reality after Dutch, German and Danish grid operators signed an agreement to study the feasibility of “power link islands” to serve as a large connection point for thousands of offshore wind turbines that could be built over coming years. They imagine connecting capacity of 70,000 MW to 100,000 MW by 2035.

“Building one or more artificial islands in the middle of the North Sea sounds like a science fiction project,” said Torben Glar Nielsen, CTO of Denmark’s Energinet. “But it could actually be a very efficient and affordable way for the North Sea countries to meet the future demand for more renewable electricity.”

According to the partners, a North Sea Wind power hub at a location like Dogger Bank would have advantages:

- Shallow waters and optimal wind conditions
- Creation of near-shore connections and reduced costs for offshore locations
- Transmission of wind energy via direct-current connections to all countries bordering the North Sea, with transmission cables simultaneously functioning as interconnectors between national energy markets

The partners say they will also consider the impact on marine flora and fauna, in close contact with nature and environmental organizations. A first “quick-scan” of the impact on flora and fauna on the Dogger Bank shows both opportunities as potential risks for animals and biodiversity, they said.



## Hawaii turns on Tesla battery system to integrate solar into peak evening demand for power

**Hawaiian island of Kaua'i, which has reached 97% penetration of renewables in daylight hours, will use Tesla battery system to extend solar into peak evening consumption.**

Hawaii has moved closer to its goal of getting 100% of its electricity from renewables by 2045 with a photo-voltaic installation that includes a battery system to extend the provision of solar energy after sunset.

The installation is part of Hawaii's response to the difficulty of integrating increasing amounts of intermittent renewable power. The cooperative that runs the power system on Kaua'i Island said the plant was the first time a utility had contracted a system of this scale that stores and will deliver solar energy into the night for its 33,000 customers.

The Tesla system feeds up to 13 MW of power into the island's grid to meet peak demand in the evening hours thanks to a 52 MWh Tesla Powerpack lithium-ion battery storage system. The solution is critical for increasing penetration of renewables since the grid cannot take more daytime solar power (it's already at 97% during daylight hours).

"By using solar energy stored in the battery after the sun goes down, we will reduce our use of imported fuels and our greenhouse gas emissions significantly," said Chief Executive Officer David Bissell at a blessing ceremony. He estimated the project would displace the use of 1.6 million gallons (6 million litres) of diesel a year and take Kaua'i Island to more than 40% renewable generation.

The project makes financial sense too. Under the terms of the 20-year contract, the cooperative will pay Tesla 13.9 cents per kilowatt-hour, less than the current cost of oil.