



Islands as laboratory of innovation

Carlo Maria Drago

GTI Observatory Coordinator, Greening the Islands

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the Euro–Mediterranean Region**

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European Union

Who we are

Greening the Islands is an innovative organization that supports self-sufficiency and sustainability of islands worldwide.

We match needs and solutions enabling cooperation between local authorities, business, citizens and academia.





GREENING
THE ISLANDS

academy



observatory



conferences

app



What we do



GTI Observatory

A global initiative that aggregates key stakeholders to match island needs and innovative solutions in energy, water, mobility and environmental sectors.

The GTI Observatory facilitates the development of shared strategies between governments and corporates.

The GTI Observatory Context

- **COP 21:** islands recognised as an ideal laboratory for technological innovation against climate change;
- **Greening the Islands in Favignana:** European Commission launched “Clean Energy for EU Islands” initiative to support the energy transition of EU islands from 2020 to 2030.
- **Malta 2017:** political declaration signed to accelerate renewables energy transition in more than 2.700 UE islands;
- Several global institutions such as UN and IRENA have started specific programs for small islands development states (SIDS).



Observatory main activities

1. Selection of islands
2. Plenary and island meetings with members
3. Reports

Topics:

- Environment status of the islands
- Policies & regulations
- Incentive schemes
- Permitting
- Technologies & solutions
- Cost
- Public/private funds (EU funds, World Bank, etc.)
- Recommendations for decarbonisation plans
- Best practices
- Sustainable tourism opportunities



1st GTI Observatory launching event
5^o GTI Int. Conference Minorca May 2018



2^o GTI Observatory Meeting
Rome November 2018

Main steps

FASE 1

1. Agreement with the island government to cooperate in the GTI Observatory;
2. Creation of a local task force/scientific committee for the island;
3. Compilation of the questionnaire (that give also the right to take part to the Global Index);
4. Elaborating the answers to the questionnaire with first ideas of potential solutions/projects;
5. Workshop with local stakeholders hosted by the local government;
6. Minutes/report with the results of the meeting with the identification of priorities and potential projects/initiatives to decarbonise the island;

FASE 2

7. Call for proposals/solutions to the innovation & solution providers, research centres, universities, etc.;
8. Selection of the best proposals by the task force;
9. Event for presentations of the best solutions and discussion;
10. Final report to be utilised for the lobby and to attract investments;
11. Evaluation of the financing opportunities: meeting with potential investors & participation to calls from institutions.



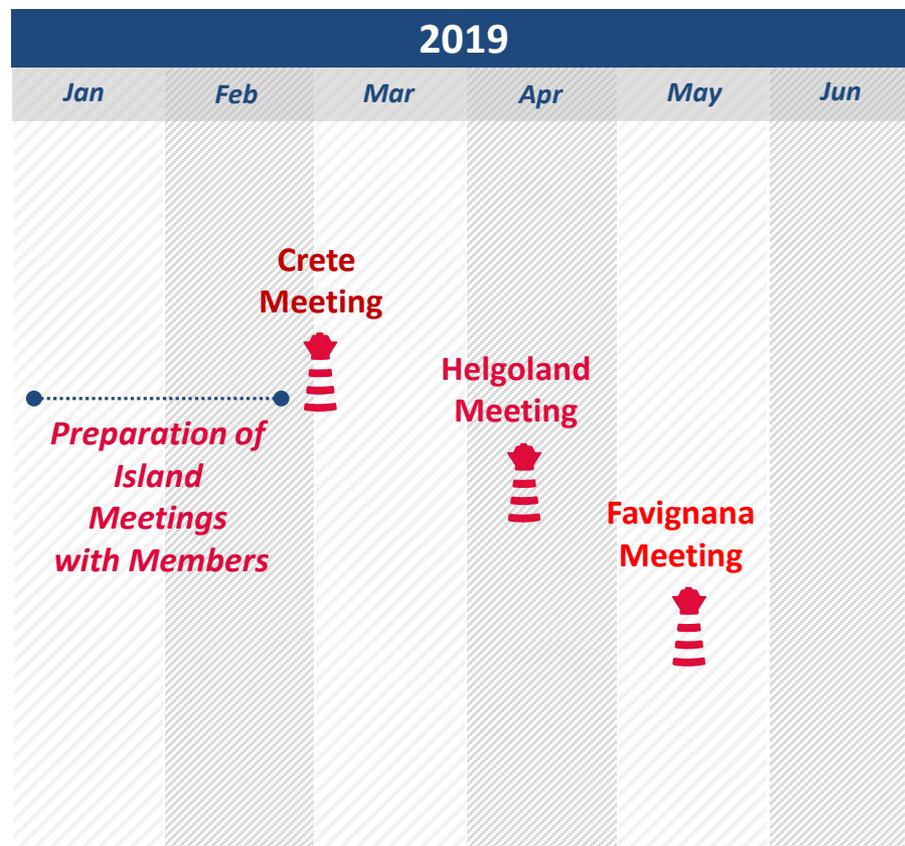
observatory

What we've done

Data collection on the Observatory topics.

Two days meetings in each island of the Observatory, hosted by the Islands' Governments, involving all key local stakeholders, corporate and industry associations members.

The meetings' goal is to run a deep dive into islands status and needs, facilitate the origination of projects also through site visits.





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Crete Meeting

GTI Observatory Crete Island Meeting



Two days meeting in Crete/Greece, hosted by the Island' Government, involving all key local stakeholders, corporate and industry associations members.



The meeting' goal was to run a deep dive into islands status and needs, facilitating the origination of projects also through site visits.





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Helgoland Meeting

GTI Observatory Helgoland Island Meeting



Two days meeting in Helgoland/Germany, hosted by the Island' Government, involving all key local stakeholders, corporate and industry associations



The meeting' goal was to run a deep dive into islands status and needs, facilitating the origination of projects also through site visits.





observatory

Favignana Meeting

GTI Observatory Favignana Island Meeting



Two days meeting in Favignana/Italy, hosted by the Island' Government, involving all key local stakeholders, corporate and industry associations



The meeting' goal was to run a deep dive into islands status and needs, facilitating the origination of projects also through site visits.





Energy & Mobility CRETE priorities

Energy

- **Storage system implementation**, distributed and concentrated, to support the increase of renewables (in the short-term focus on storage projects for wind farms already under permitting)
- **Local energy communities and cooperative model** to be tested in Crete. Analysis of the actual Greek legislation on the topic.
- **Hybridization of the 3 thermal plants with renewables** – analysis of actual Greek regulation
- **Energy efficiency policy and solutions for hotels, buildings and street lights**
- **Social acceptance** of RES in Crete
- **Security of supply** – RES diversification and policy for RES dissemination
- Control grid implementation – **smart grid**

Mobility

- Analysis of **car sharing** and pooling models in Crete. **Pilot in Heraklion.**
- **Electrification of ports and vessels: charging infrastructure and policy** to promote use of electric boats
- Policies to incentive the use of electric cars, **restrictions for polluting vehicles in urban areas.** Create a business model to **encourage private companies to support adoption of electric cars**
- Examine the possibility to develop a **V2G (Vehicle to Grid) pilot.** Proposal for some revisions of the legislation
- Analyze the possibility to create **specific road path for bicycles**
- Policies to encourage the use of renewable energy sources for mobility
- Analyze the possibility of **development of a web-app to support the use of electric vehicles by locals and tourist users** also from Crete to other destinations



Energy & Mobility HELGOLAND priorities

Energy

- Move from gasoil to electric green power for thermal generation:
 - Explore the possibility to build some windmills in Helgoland protecting the landscape and flock of rare birds;
 - buying electric energy produced from RES in the mainland using the already existing underwater electric cable (necessary to solve regulatory problems to pay less for the electricity in order to make the change from oil to electricity neutral in terms of operational costs);
 - decide to pay the full price for the electricity imported from the mainland balancing the extra operational costs with the expected savings coming from pressure pump optimization of the desalination plant.
- Distributed generation
 - investigate from a technical and an economical point of view the possibility to install vertical axis windmills.
- Energy efficiency
 - implement building energy efficiency using, where possible, smart solutions and insulation.
- Promotion of green energy purchase among citizens (local campaign required).
- Special project for Helgoland
 - involve Helgoland in the Geographical Island 2020 tender (or other tenders) with a special project in marine e-mobility;

Mobility

- Seek to migrate the fuel source for vessels visiting the island to be converted to environmentally friendly options supported on the island by the availability of electric power for vessels berthed in the harbor
- When the opportunity arises, replace existing fossil fuel powered vehicles with electric vehicles. Consider the potential to use the island as a live test bed for a small number of autonomous vehicles to transfer visitors or luggage to and from the hotels as part of the “last mile” challenge the industry is facing.
- As part of the distributor generation approach being considered for the future where alternative and distributed energy generation sources will be integrated, ensure that the use of the battery power available in vehicles is considered (V2G).



Energy & Mobility FAVIGNANA priorities

Energy

- To clarify with the Energy Authority the accumulation with the tax deduction for residential installations (the GSE will support the clarification of this important point for the economic convenience of the investments);
- To stimulate regional, national and European incentive schemes for accumulations;
- analysis of the business plan of the investments to value the economic convenience and identify the factors, on which to act to improve the profitability and the critical elements, that could put at risk the functionality of the action;
- Analysis of the potential of renewables on the Egadi, considering centralized and distributed installations (photovoltaic, solar thermal and mini and vertical wind), mapping the restrictions in the various areas of the three islands and evaluating the critical issues and necessary interventions for the stability of the network (storage, etc.);
- Analysis of the possible commercial offer forms;
- Analysis of possible types of purchasing group;
- Applicability of “waste to energy” forms;
- Dialogue with financial institutions to stimulate low-interest loans;
- Dialogue with the competent authorities in order to simplify the access to the incentive;
- To evaluate a possible application of innovative geothermal projects.

Mobility

- To develop electric mobility models (eg car sharing, bike-sharing) that can also involve local charterers and encourage them to the transition;
- To propose innovative solutions for electric public transport (eg electric buses);
- To evaluate the inclusion of an electric or sailing boat for tourists, who want to visit the Egadi Islands;
- To analyze the possibility of extending the current legislative provisions, in order to prohibit / limit the arrival of vehicles from Sicily and to restrict the circulation of polluting vessels at sea throughout the year;
- To incentivize the construction of a network of electrical recharging stations for motorcycles / motor vehicles;
- To develop electric mobility solutions for hotels and touristic accommodation in general;
- Solutions for sailing electric mobility and for small boats;
- Incentives for electric mobility on land and at sea;
- Analysis for the ports electrification.



Greening the Islands

Corfu

CPMR and Greening the Islands

The Conference of Peripheral Maritime Regions (CPMR) and its Islands Commission (IC) have announced a crucial new collaboration with Greening the Islands that will boost co-operation between businesses and island governments to enhance the sustainability of European islands.

Gianni Chianetta, Director of Greening the Islands and
Gilles Simeoni, President of the CPMR Islands Commission (IC) and the Collectivity of Corsica





Greening the Islands

Brussels

A multilateral 'Islands Structured Dialogue' with EU institutions to support islands green development

CPMR Islands Commission and Greening the Islands, held a meeting in Brussels, with the support of the Committee of the Regions to propose closer collaboration as a key step towards promoting low-carbon solutions on European islands.

Representatives from national and regional governments, industry and the European institutions highlighted the need to involve Island governments and the private sector in designing and implementing National Climate and Energy Plans (NCEPs).



Brussels 2019



Observatory

Islands Benefits



Analysis on the status of the island for the areas involved in the study **by specialized professionals**



Identification of **innovative solutions**



Recommendations of actions for the local population and enterprises



Benchmarking with the other selected islands



Finance opportunities: private investors or public funds (EU, World Bank, etc.)



Promotion of the island as a **green destination** for a tourism oriented to sustainability



Observatory

Corporate member benefits



Active lobbying to **support island markets** at global level



Networking with potential **customers** and **partners** from islands



Opportunity of involvement in coalitions for tender and calls (EU, World Bank, etc.)



Corporate **visibility** and **promotion**.



Know how: key information and update on **islands needs/MKTs** to address strategies



Monitor incentives to **access financing** for projects on islands



Observatory

Members

Island members



Crete
(Greece)



Helgoland
(Germany)



CONSELL INSULAR
DE MENORCA

Minorca
(Spain)



Boracay
(Philippines)



Egadi Arcipelago
Municipality of Favignana
(Italy)

Gold members



Industry Association members



Members



Associate members



Research partner





Observatory

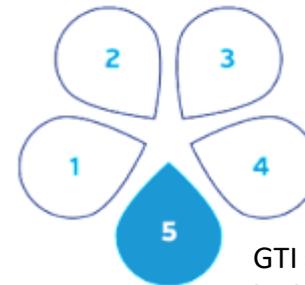
Global Index



Greening the Islands Observatory Global Index

is a new way to measure environmental actions on islands around the world

The index will be produced as part of the GTI Observatory's work to measure the progress that islands around the world are making towards a greener future and how islands are designing and implementing policies for sustainable development.



GTI drop system will highlight and rate the best islands on sustainability

Governments/Municipalities of any island that have made or started actions to reduce CO2 emissions in their territories can apply to the **Greening the Islands Observatory Global Index**.

Companies or other stakeholders involved in those actions need to cooperate.



Energy



Water



Mobility



Waste



Environment



Observatory

Global Index



GTI Observatory Global Index

Promoting sustainable islands as green destination

Topics included in the promotion

Environment

- Promotion of the Island
- Green Itineraries
- Outdoor Sport activities
- Laboratori Tradizioni e Gastronomia

Cultur & Traditions

- Tradicional culinary
- Folk traditions
- Cultural Itineraries
- Historic Itineraries

Local Economy

- Shops selling: local organic food and wine
- Shops selling local craft
- Organic Restaurants
- Eco Hotels



The island promotion as green destination is part of the benefits to the islands that takes part in the GTI Observatory Global Index.



The GTI Academy aims to build capabilities in the islands to support the implementation of the needed decarbonisation actions that will emerge from the Observatory reports.

What does it mean transitioning an island towards a green economy?

How can be approached?

Which are the major challenges to overcome?

Which is the best path towards implementation?

What are the benefits for the islands?

What does it mean to become a green destination?

Target: leaders of island government and institutions, including senior technical staff, utilities, managers of companies.



GTI App

Online Island Community

News | Forums | Networking | Webcast

Online Community

We provide a variety of communication and training tools for the network: live conferences, online discussions, webinars and thematic forums

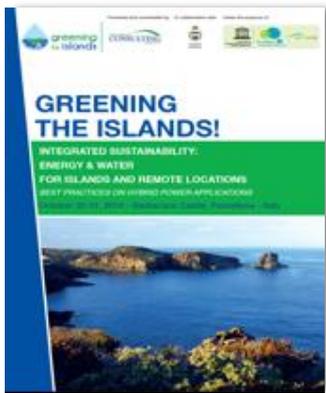


Live Streaming

We connect the conference and the island with a wider audience around the world



Conferences



Pantelleria 2014



Malta 2015



La Maddalena 2016



Canary Islands 2016



Favignana 2017



Menorca 2018



Roma 2018

Since 2014 Greening the Islands has organized nine international and national conferences promoting the **enlarged concept of circular island economies, developing the nexus between energy, water and mobility** and embracing also waste, agriculture, tourism, culture and traditions.



Conferences

awards

Since 2015, Greening the Islands Awards has recognised the best solutions on energy, water and mobility as voted by prestigious jury members as well as community members.

GTI Jury 2018



Emanuele Taibi
Islands Energy Transition Analyst,
The International Renewable Energy
Agency (IRENA)



Georges Kremlis
Honorary Director - Directorate
General for the Environment,
European Commission



Helmut Morsi
Adviser to the Director and
Coordinator for Innovation, European
Commission, DG MOVE-B



Konstantina Toli
Senior Programme Officer,
GWP-Med (Global Water Partnership
– Mediterranean)



Michela Miletto
UN WWAP Deputy Coordinator
UNESCO



Philippe Vangeel
Secretary General, European
Association for Battery, Hybrid and
Fuel Cell Electric Vehicles (AVERE)



Greening the Islands

6th International Conference



GREENING
THE ISLANDS

6th International conference

in association with



CPMR **ISLANDS
COMMISSION**

15th & 16th October 2019 | Palermo (Italy)



GREENING THE ISLANDS

Join us to connect island innovations

info@greeningtheislands.net
www.greeningtheislands.net