INNOBLUEGROWTH TRANSNATIONAL CAPITALIZATION EVENT

“NEW TRENDS FOR THE YACHTING SECTOR IN THE MED AREA”
ADDRESSING ENVIRONMENTAL, SOCIAL AND ECONOMIC SUSTAINABILITY

11-12TH OCTOBER 2017, MARSEILLE
“Sustainable” Marina

Ms Liana Florou
School of Naval Architecture and Marine Engineering
National Technical University of Athens
Greece
GENERALLY SPEAKING:

- Who are the future users of the ideal Marina???

- Next 20 years, yacht & cruise industry is expected to be an extremely positive market, with MED area remaining the 1st world destination for yacht pleasure!!!

- Determine from the early stages of construction, the main parking spots: for mega yachts (above 75mtrs), for cruise/passenger ships, for super yachts (20-60mtrs) and for sailing/catamaran and light category boats.
Facilities.

- Environmental planning,
- Spacious Parking areas,
- Access ramps for disabled people,
- High standard of Security (CCTV, watch tower, cameras, drones) – PRIVACY,
- Stores and business offices,
- Single and 3-phase electricity,
- Fuel supply, grey and black water disposal
- Power supply, WiFi & 24hrs yacht assistance, and..............
- *Mini golf electrical-cars for crew to move easily around the marina*,
- *Heliport for VIP passengers (with special attention to the location of the wind turbines ashore, so as landing/take off to be safe).*
Innovation: new and sustainable methods of operation and use of technology to reduce energy consumption, water and waste.

a) Use of hotel(s) and other tourist providers with a sustainability certification system like Travelife or Green Key.

→ Same can be done for Ports and Marinas

b) Energy consumption is measured, sources are indicated, and measures are adopted to minimize overall consumption, and encourage the use of renewable energy.

→ Linked to Blue Energy, Yachting
NTUA – The Sustainable Marina

- Solar panels with high technology chips, in buildings located in the marina.

- Desalination Units due to high demand of yachts for fresh water (various human activities onboard & washing down) & for Drinking water.

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The Ideal Marina can be energy independent:

**Energy production**

**Reduction of energy consumption**
REsonant Wave Energy Converter 3 REWEC3

Credit: Wavenergy.it, Italy

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The generated electricity is only ~20% of the energy of the incident waves, although U-type devices absorb 75% of its energy.
REsonant Wave Energy Converter 3 REWEC3 U-type (cont’d)

REWEC3 – Ongoing projects

Marina di Cicerone, Formia, Italy

Harbour of Salerno, Italy

Credit: Wavenergy.it, Italy

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The Elemed project: Cold Ironing

- A term initially used by U.S. Navy, refers to connecting a ship to a shore-side power supply in port with the ship's machinery shut-down (main & auxiliary engines).
- Cold ironing does away with the need of burning fossil fuel on board ships at port
- The shore sourced power serves the ship’s cargo handling machinery and hoteling requirements.
- Immediate relief from pollution by shipboard emissions and noise
The Elemed project

Two state of the art technologies

Cold Ironing

Electrification reduces emissions in port

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The Elemed project (cont’d)

Two state of the art technologies

Electric Bunkering

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The ELEMED project (https://www.elemedproject.eu/)

The Port Authority of Kyllini
Ports and marinas as energy hubs

- Constructions of hybrid electric driven shuttle ferries (for short sea transportation: battery based + back up energy unit).
- Selective-collective co-operation of energy storage units deployed in port (and in ships interested).
- Interim solution of supplying islanded networks with electric energy based on environmentally friendly fuel (e.g., LNG): applicable to islands where the LNG network has not been deployed yet.
- Emergency supply of inland grids (e.g., in black-out situations of National Grids in Force Majeur cases).
START DREAMING.......
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Thank you for your attention

VISIT

https://blue-growth.interreg-med.eu/

@InnoBlueGrowth

innobluergrowth@gmail.com

Marseille, France 11th October, 2017