Aegean Energy & Environment Agency
The Agency was established in 2008 as a non-profit organisation to support islands and local authorities on sustainable development.

The Agency's strategic target is to increase the islands' capacity on renewable energy, energy efficiency, wastes & water management, rational use of local resources, preservation of cultural heritage and landscape. Furthermore, AECEA is acting as the technical and political advisor of islands in their participation in European projects and networks (Pact of Islands, Smart Islands Initiative etc.) AECEA is also an active member of the European organization FEDARENE.
Scientific and Technical Consultant

• Establishment of Ios-Aegean Energy Agency, NPO, founded in 2008
• 2016: Change of name “Aegean Energy and Environment Agency”

Activities

• **Cooperation**: brings together interested parties, i.e. island authorities, private sector, financial institutions, civil society

• **Project maturation**: focus on making innovative projects that are of interest to local authorities bankable

• **Local energy planning**: has delivered over 20 SEAPs for local island authorities (Covenant of Mayors, Pact of Islands)

• **Advocacy**: FEDARENE Vice-Presidency for Smart and Sustainable Islands
Main fields of activity

- Traditionally energy – still backbone of smart infrastructure management
- 2016: change in name → Aegean Energy and Environment Agency to underscore the need for an integrated approach to islands’ development
Holistic Approach and Platform for the deep renovation of the Med residential built Environment
Overcoming market barriers and promote deep renovation of buildings
HAPPEN is a project funded by the European Union’s Horizon 2020 research and innovation programme. HAPPEN is run by a consortium of 13 partners from 7 countries: Spain, France, Italy, Croatia, Slovenia, Greece and Cyprus.

Call: EE-11-2016-2017 “Overcoming market barriers and promoting deep renovation of buildings” – Project main outputs: HAPPEN ICT Platform; MedZEB Protocol; Voluntary Certification Scheme; MedZEB Coordination Group;

Duration: 2018-2020 | Overall budget: 2.1m EUR | AEGEA budget: 140k EUR | Partners: 13

AEGEA role: support the preparation of two thematic pilots (Lefkes, Paros island; Polyvotis, Nysiros island) for the deep retrofitting of buildings using the HAPPEN methodology.

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 785072
It aims to stimulate the deep retrofitting market and to contribute to reducing the energy consumption of buildings in the Mediterranean area.

This area is characterised by specific types of climate and buildings, as well as peculiar socioeconomic conditions, which makes it necessary to adopt a tailored approach for the deep renovation of buildings.

In light of this, HAPPEN intends to adapt the European-wide concept of nZEB (nearly Zero Energy Building) to the Mediterranean context, proposing the MedZEB approach.
The ambitious challenge of HAPPEN is to **boost the high potential market of buildings retrofitting**, while raising the awareness of stakeholders about the issue of energy efficiency.

On this purpose, the project will:

- **bring together and engage with inhabitants, owners, building professionals and policy makers in 10 pilot sites**;
- **develop optimal packages of solutions** for the deep retrofit of buildings (including financial solutions) and test them in the pilot sites;
- **produce an ICT platform** aimed to facilitate the match between demand and offer of renovation actions, as well as to **share knowledge and training materials** produced within the project.
WE’LL MAKE IT HAPPEN! – EXPECTED OUTCOMES

• Developing a **virtual platform** matching demand and offer in the Med area;
• **Empowering and integrating key actors** of the retrofitting value chain;
• Proposing **standardized cost-optimal packages of solutions**;
• Developing and testing **new financial solutions**;
• Suggesting **new regulatory approaches** for the Med area;
• **Raising trust** in the retrofitting market through a shared guarantee protocol.
1st Pilot - Lefkes Paros - Hostel
1st Pilot - Lefkes Paros - Hostel

- Orientation: SE
- Constr. Year: Mids 70
- Surface: 995 sqm.
- Rooms: 15
- Envelope: Non insulated
- Heating: Oil boiler
- Function: Mainly during the summer
2nd Pilot – Polyvotis Nysiros- Hostel
2nd Pilot – Polyvotis Nysiros- Hostel

- Orientation: North
- Constr. Year: Two stages 70 - 80
- Surface: 1050 sqm.
- Rooms: 120
- Envelope: Non insulated
- Heating: Oil boiler
- Function: All year long
STEPPING Project
Supporting The EPC Public Procurement IN Going-beyond
Main objective: to adapt the application of EPC investment schemes for public building in Mediterranean Area:

- Prepare 8 investment plans in MED AREA
- Launch 4 investment plans in 4 countries
- Deliver MED guidelines for EPC in public buildings for wider dissemination

Call: Priority Axis 2: Fostering low-carbon strategies and energy efficiency in specific MED territories; cities, islands and remote Areas | 2.1 : To raise capacity for better management of energy in public buildings at transnational level

Duration: 2016-2019 | Overall budget: 1,95 m EUR | AEGEA budget: 238k EUR | Partners: 9

AEGEA role: select 10 municipalities, conduct energy audits in identified buildings, specify interventions, conduct energy audits, prepare the ESCO market, develop investment plans, issue tender documents.
The Energy Performance Contract (EPC) is a contractual arrangement between the beneficiary and the provider of an energy efficiency improvement measures, verified and monitored during the whole contract, where investments in that measure are paid for in relation to a contractually agreed level of energy efficiency improvement or other agreed energy performance criterion, such as financial savings.
The EPC: key features

1. We are speaking about PERFORMANCE and not construction works, The latter are the way we achieve the goal of the contract and not the way around
2. The SAVINGS repays in total or partially the investments
3. There is the need to VERIFY and MONITOR the performance
4. EPC has a long term DURATION
“One-stop-shop” approach

Energy Efficiency

Selection of buildings
Technical assessment
Legal assistance
Financial assessment
Financing
Verify performance
“One-stop-shop” approach

Technical Assistance offered by the project as One Stop Shop

Selection of buildings
Technical assessment
Legal assistance
Financial assessment
Financing
Verify performance
Energy Efficiency

Interreg Mediterranean STEPPING
About

- About 90 Municipalities involved
- More than 100 buildings analyzed
- Common Training format designed
- Common investment plan and tools developed
- Tender procedure guide developed
## 4 Municipalities
11 Public Buildings

<table>
<thead>
<tr>
<th>Mun./lity</th>
<th>Building Name</th>
<th>Inv. HVAC (k€)</th>
<th>Inv. Building (k€)</th>
<th>Projected Inv. RES (k€)</th>
<th>Total (k€)</th>
<th>Total after taxes and charges</th>
<th>Savings (MWh)</th>
<th>Savings (%)</th>
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Thank you!