

# Sustainable Islands of Europe

## What is SMILEGOV?

SMILEGOV is about enhancing the collaboration between the different levels of governance in order to facilitate the implementation of **Islands Sustainable Energy Action Plans**.

SMILEGOV is an opportunity to Islands to overcome multilevel governance barriers to help them reach the **EU 20-20-20 objectives** and tackle climate change.

Co-financed by the European Union, under the **Intelligent Energy Europe** programme, SMILEGOV targets three main objectives:

- identify and **remove obstacles** in the implementation of the operational programmes aimed at promotion and investment in the field of sustainable development.
- **Bring EU islands to work together** - share areas of expertise and experiences, and to develop additional skills through capacity building workshops and an e-learning platform available to project participants. It is an opportunity for islands to gain more skills and useful contacts for the new framework programme Horizon 2020 and the mid-term review of the operational programmes in 2016-2017.
- Extend the great family of European islands that have signed the **Pact of Islands** and work together towards the objectives of Europe 2020.

## The SMILEGOV Targets

200 trained persons in the local capacity building activities on energy planning and project development

50 new signatories to the Pact of Islands

50 bankable projects taken significant steps forward towards implementation

Improved institutional co-operation

15 draft sustainable energy action plans developed by level 2 islands that receive training

530 ktoe/year reduction of greenhouse gas emissions

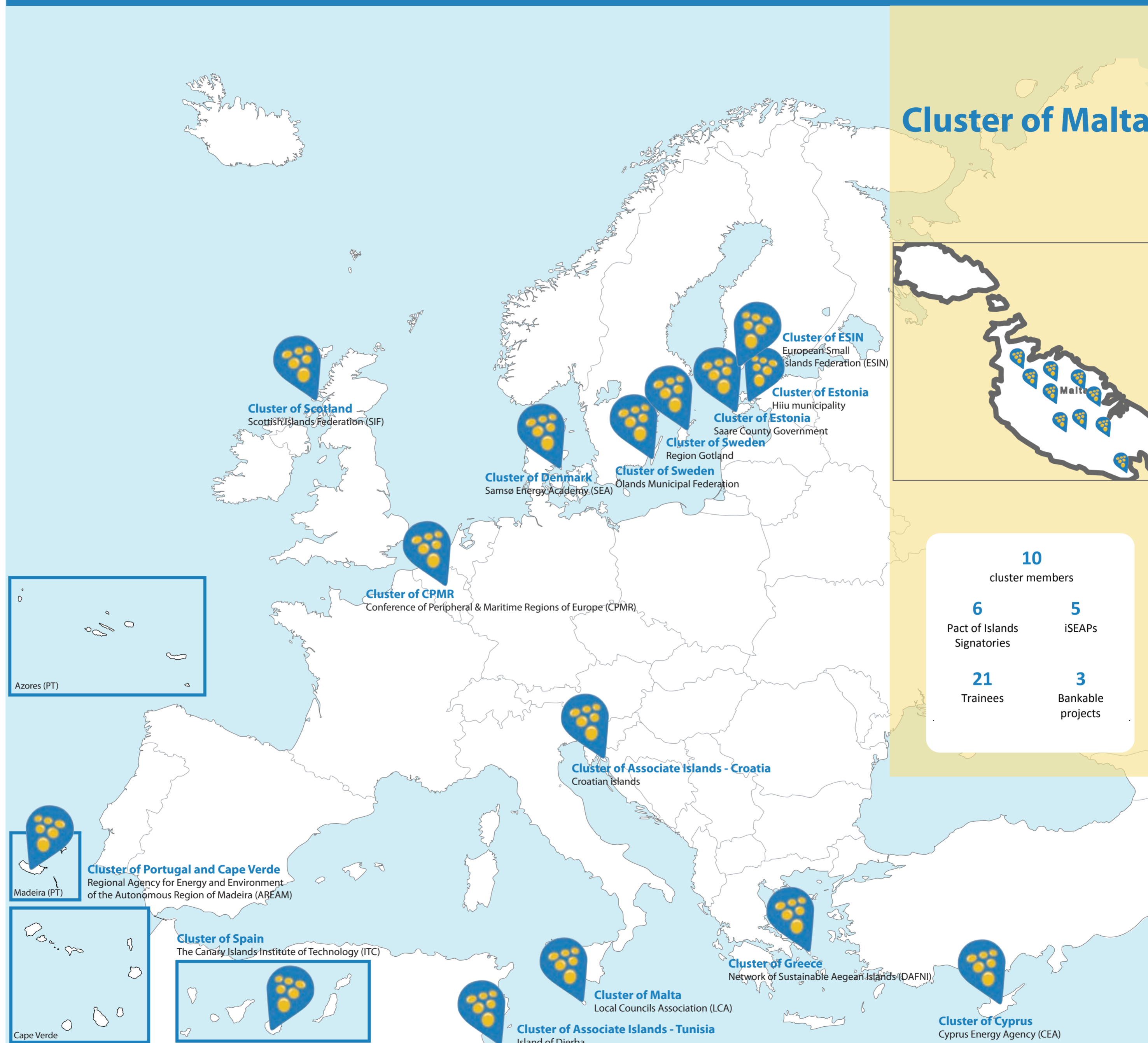
Guidelines on good interaction between stakeholders on penetration of innovative technologies

Permanent working groups for facilitation of projects implementation

## What SMILEGOV offers to its members?

SMILEGOV brings together all the assets for smart multilevel governance in EU islands engaged to reach EU2020 objectives, it offers to its cluster members opportunities to:

- Strengthen islands local capacity
- Improve multilevel cooperation within and between European islands through the SMILEGOV geographical clusters
- Overcome barriers and facilitate the implementation of islands sustainable energy action plans
- Support islands structures and enable them to develop their own planning and energy projects
- Get inspiration, assistance and expertise from advanced islands.
- Exchange of knowledge at local and regional level
- Learning from the experts: Capacity building workshops
- Energy academy 2020: free on-line courses and available for unlimited time
- Strategic Guidelines for overcoming existing barriers



## Cluster of Malta



<b>10</b>	cluster members
<b>6</b>	Pact of Islands Signatories
<b>5</b>	iSEAPs
<b>21</b>	Trainees
<b>3</b>	Bankable projects

## EUROPEAN SUSTAINABLE ISLANDS MAP



ENHANCING EFFECTIVE IMPLEMENTATION OF SUSTAINABLE ENERGY ACTION PLANS IN EUROPEAN ISLANDS THROUGH REINFORCEMENT OF SMART MULTILEVEL GOVERNANCE

- PACT OF ISLANDS
- BANKABLE PROJECTS
- ISLANDS CLUSTERS
- CAPACITY BUILDING
- INNOVATIVE SUSTAINABLE TECHNOLOGIES
- SMART MULTILEVEL GOVERNANCE

## PARTNERS



## CONTACT

Want to learn more on SMILEGOV? Any questions on how to get involved? Please send us an email [info@smilegov.eu](mailto:info@smilegov.eu) or contact us by phone: 0032 2 612 17 00 [www.sustainableislands.eu](http://www.sustainableislands.eu)  
SMILEGOV Brussels office – Rond Point Schuman 14, 1040 Brussels, Belgium ([www.sustainableislands.eu](http://www.sustainableislands.eu))



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Islands are the buttons of the Sustainable European coat

## The SMILEGOV Clusters

### Cluster of Greece

Regions

- Region of North Aegean
- Region of South Aegean

Municipalities

- Aegina – Argo-Saronic
- Amorgos – Cyclades
- Antiparos – Cyclades
- Andros – Cyclades
- Chania – Crete
- Festos – Crete
- Ios – Cyclades
- Ikaria – East Aegean
- Kea – Cyclades
- Kythnos – Cyclades
- Leipsoi – Dodecanese
- Lemnos – North-east Aegean
- Lesvos – North-east Aegean
- Skyros – North Sporades
- Milos – Cyclades
- Minoa Pediados – Crete
- Mykonos – Cyclades
- Naxos and S. Cyclades – Cyclades
- Platanias – Crete
- Rethymnon – Crete
- Rhodes – Dodecanese
- Samothrace – North Aegean
- Santorini – Cyclades
- Sifnos – Cyclades
- Sikinos – Cyclades
- Syros – Cyclades

### Cluster of ESIN

- Ischia – Italy
- Bere Island – Ireland
- Cape Clerie Island – Ireland
- Aran islands – Ireland
- Arrain Mohr – Ireland
- Dursey – Ireland
- Heir – Ireland
- Inishmor – Ireland
- Insitheer – Ireland
- Inishmaan – Ireland
- Long island – Ireland
- Sherkin – Ireland
- Whiddy – Ireland
- Simskåla – Åland
- Asterholma – Åland
- Sottunga – Åland
- Keistjö – Finland
- Nagu – Finland
- Visingö – Sweden
- Ruhnu – Saaremaa
- Vinön – Sweden
- Hven – Sweden

**Cluster leader**  
**ESIN – European Small Islands Federation**  
 E.esin.secretariat@gmail.com  
 T. +45-62 51 39 93  
 Rudkoebing, Denmark

### Cluster of Denmark

- Samsø Energiakademi –Samsø
- Bornholm region/kommune – Bornholm
- Læsø Kommune –Læsø
- Ærø Kommune –Ærø
- Sammenslutningen af Danske Småøer

### Cluster of Sweden

- Sturkö – Blekinge County
- Aspö – Blekinge County
- Hasslö – Blekinge County
- Oland – Kalmar county
- Gotland – Gotland county

**Cluster leader**  
**SEA – Samsø Energy Academy**  
 E.info@energiakademiet.dk  
 T. +45 8792 1011  
 Samsø, Denmark

### Cluster of Associated islands

1 Djerba – Tunisia  
 2 Krk – Croatia

### DAFNI – Network of Sustainable Aegean Islands

E.info@dafni.net.gr  
 T. +30 2108848055  
 Athens, Greece

### Cluster of Estonia

Counties

- Hiiu county
- Saare county

Municipalities

- Emmaste – Hiiumaa
- Kaarma – Saaremaa
- Käina – Hiiuama
- Käräla – Saaremaa
- Kihelkonna – Saaremaa
- Kuimisaare – Saaremaa
- Laijala – Saaremaa
- Leisi – Saaremaa
- Lümanda – Saaremaa
- Muhu – Saaremaa
- Mustjala – Saaremaa
- Mustaõde – Saaremaa
- Pihla – Saaremaa
- Põide – Saaremaa
- Pühalepa – Hiiuama
- Ruhnu – Saaremaa
- Sahme – Saaremaa
- Torgu – Saaremaa
- Väljala – Saaremaa
- Vormsi – Lääne
- Hiiu – Hiiuama

**Cluster leader**  
**Hiiu Municipality**  
 E.valitsus@hiivald.ee  
 T. (+372) 4636082  
 Hiiuama, Estonia

**Saare County Government**  
 E.info@saare.maavalitsus.ee  
 T. (+372) 452 0501  
 Saaremaa, Estonia

### Cluster of Malta

Local Councils

- Tarxien – Malta
- Pembroke – Malta
- Mellieha – Malta
- Birzebugga – Malta
- Paola – Malta
- Naxxar – Malta
- Swieqi – Malta
- Kalkara – Malta
- Zebbug – Malta
- Ta' Xbiex – Malta

**Cluster leader**  
**LCA–Local Councils' Association**  
 E.ca@lca.org.mt  
 T. +356 25968000  
 Marsa, Malta

### Cluster of Portugal and Cape Verde

1 DRGIE – Direcção Regional do Comércio, Indústria e Energia – Madeira, Porto Santo

2 Funchal – Madeira

3 Santa Cruz – Madeira

4 Machico – Madeira

5 Santana – Madeira

6 São Vicente – Madeira

7 Porto Moniz – Madeira

8 Calheta – Madeira

9 Ponta do Sol – Madeira

10 Ribeira Brava – Madeira

11 Câmara de Lobos – Madeira

12 Porto Santo – Porto Santo

13 EEM – Empresa de Electricidade da Madeira, S.A. – Madeira, Porto Santo

14 DREn – Direcção Regional da Energia – Açores

15 DGE – Direcção Geral de Energia – Cape Verde

16 CEA – Centro de Energia e Ambiente – Cape Verde

17 DECM – Departamento de Engenharia e Ciências do Mar of Cape Verde University – Cape Verde

**Cluster leader**  
**AREAM – Regional Agency for Energy and Environment of Autonomous Region of Madeira**  
 E.contacto15@aream.pt  
 T. +351 291723300  
 Madeira, Portugal

### Cluster of Scotland

1 Isle of Bute – Argyll

2 Isle of Mull – Argyll

3 Small Isles (Canna, Eigg, Rum, Muck) – Highland

4 Isle of Arran – North Ayrshire

5 Isle of Cumbrae – North Ayrshire

6 Isle of Gigha – Argyll

7 Isle of Iona – Argyll

8 Isle of Lismore – Argyll

9 Isle of Luing – Argyll

10 Isle of Skye – Highland

**Cluster leader**  
**SIF–Scottish Islands Federation**  
 E.contact@scottish-islands-federation.co.uk  
 Isle of Eigg, UK

### Cluster of Spain

Directorate General

- DG of Industry and Energy of the Canary Islands Regional Government – Canary Islands
- DG of Industry and Energy of the Balearics Islands Regional Government – Balearic Islands

Cabildos

- Gran Canaria – Canary Islands
- Lanzarote – Canary Islands
- La Palma – Canary Islands
- La Gomera – Canary Islands
- La Palma – Canary Islands
- Fuerteventura – Canary Islands
- El Hierro – Canary Islands
- Tenerife – Canary Islands

Municipalities

- FECAM (Federation of Canary Islands Municipalities) - Island's Municipalities
- ITC – Technology Institute of the Canary Islands (ITC) - Canary Islands

**Cluster leader**  
**ITC – Technology Institute of the Canary Islands**  
 E.admindeerr@itccanarias.org  
 T. +34 928 37 99 00  
 Canary Islands, Spain

### Cluster of CPMR

- Conseil Régional de la Martinique – France
- Conseil Régional de la Réunion – France
- Ministère des Ressources Marines, des Mines et de la Recherche de la Polynésie Française – Polynésie Française, France
- State of Alderney – Channel islands
- Isle of Wight – UK
- Isle of Man – UK
- Isles of Scilly – UK

**Cluster leader**  
**CPMR – Conference of Peripheral Maritime Regions of Europe**  
 E.info@smilegov.eu  
 T. +32 2 612 17 00  
 Brussels, Belgium

### Cluster of Cyprus

Municipalities

- Lefkosia – Cyprus
- Strovolos – Cyprus
- Larnaca – Cyprus
- Aradippou – Cyprus
- Latsia – Cyprus
- Lakatomia – Cyprus
- Ayios Athanasios – Cyprus
- Engomi – Cyprus
- Yeri – Cyprus
- Polis Chrysochous – Cyprus
- Derymeia – Cyprus
- Athienou – Cyprus
- Ayia Napa – Cyprus
- Community Councils
- Psimolofou – Cyprus
- Platres – Cyprus
- Lythrodontas – Cyprus
- Mazotos – Cyprus
- Anthoupoli – Cyprus
- Armou – Cyprus
- Episkopi Lemesos – Cyprus
- Ormidelia – Cyprus

**Cluster leader**  
**CEA – Cyprus Energy Agency**  
 E.info@cea.org.cy  
 T. +357-22667716  
 Nicosia, Cyprus

## The SMILEGOV Bankable Sustainable Energy Projects

### Sustainable mobility

Location	Title	Description	Barriers to overcome	Involved levels of governance
Cluster of Greece Lesvos, Lemnos, Milos, Santorini, Kythnos	Promotion of Electrical Vehicles	The project consists of the creation of electric mobility opportunities in five (5) islands of the Aegean Sea. It has two components; the first is the installation of charging stations by the Distribution Network Operator (HEDNO) while the second is the triggering of the end-use demand. Non-technical issues regarding regulatory framework and creation of the market shall be resolved.	<ul style="list-style-type: none"> <li>The regulatory framework for charging stations is under development. The approach proposed by the Regulatory Authority of Energy may be dysfunctional.</li> <li>The characteristics of the charging stations' installation areas are still unclear.</li> <li>The market is obviously not there.</li> </ul>	<ul style="list-style-type: none"> <li>National Regulatory Authority for Energy – Policy Maker</li> <li>Distribution Network Operator – Owner of the grid</li> <li>DAFNI – Project promoter</li> <li>Municipalities – Owners of the space</li> </ul>
Cluster of Denmark Samsø	Electricity for transport	Samsø has a positive production of renewable electricity. Infrastructure concerning charging for and organization of car sharing is investigated. The sustainable transport project is a cooperation between the local association of EV-owners, the national postal service, the municipality and private stakeholders. There are planned feasibility studies and business models investigating how to organize public-private ownership/partnership.	<ul style="list-style-type: none"> <li>Coordination with the charger infrastructure</li> <li>Cooperation of many private partners and citizens/possible participants in a car sharing model together with the municipality</li> <li>Organizational and financing barriers</li> </ul>	<ul style="list-style-type: none"> <li>Association of EV-owners – Participate in the business model, Project promoter</li> <li>Municipality – Planning and establishing the chargers</li> <li>Samsø Energy Academy – Project promoter</li> </ul>

### Energy efficiency

Location	Title	Description	Barriers to overcome	Involved levels of governance
Cluster of Cyprus Multiple local authorities	Efficient Street Lighting	This project concerns the replacement of approximately 63,000 existing lighting fixtures (HPS) at the street lighting network of Cyprus with new higher energy efficiency fixtures. The project covers the district of 20 local authorities already committed to overcome the EU energy objectives since 2020. The project is expected to experiment for the first time in Cyprus, the green public procurement for the selection of an Energy Service Company (ESCO).	<ul style="list-style-type: none"> <li>The lack of finance as a result of the general Cyprus financial crisis</li> <li>The strict public procurement rules</li> <li>The ownership of the street lighting fixtures</li> <li>The police requirements regarding the level of luminance in streets</li> <li>The absence of previous experience on Energy Performance Contracting</li> </ul>	<ul style="list-style-type: none"> <li>Ministry of Energy, Commerce, Industry and Tourism – Policy maker</li> <li>Ministry of Interior – Financing</li> <li>Treasury of Cyprus – Public procurements</li> <li>Cyprus Police – Policy control</li> <li>Electricity Authority of Cyprus – Energy producer</li> <li>Cyprus Distribution System Operator – Grid operator</li> </ul>
Cluster of Malta Malta's Faculty for the Built Environment	LifeMedGreenRoof	The LifeMedGreenRoof project will construct two demonstration green roofs as case-studies demonstrating the benefits of green roofs for meeting energy and biodiversity targets. The project aims to determine the climatic conditions, the types of plants that could be grown, weight loads and drainage requirements. The project will also demonstrate that green roof technology is safe, reduces energy consumption and reduces the risk of flooding.	<ul style="list-style-type: none"> <li>Effective participation by the target groups</li> <li>Public perception of the concept</li> </ul>	<ul style="list-style-type: none"> <li>European Union – Funding (Life+)</li> <li>Maltese state – Co-financing</li> <li>Malta Competition and Consumer Affairs Authority – Policy maker</li> <li>University of Malta – Project coordinator</li> <li>Fondazione Minoprio (Italy) – Training consultant</li> <li>MAC Minoprio Analisi e Certificazioni S.r.l. (Italy) – Scientific consultant</li> </ul>

### Renewable energy production

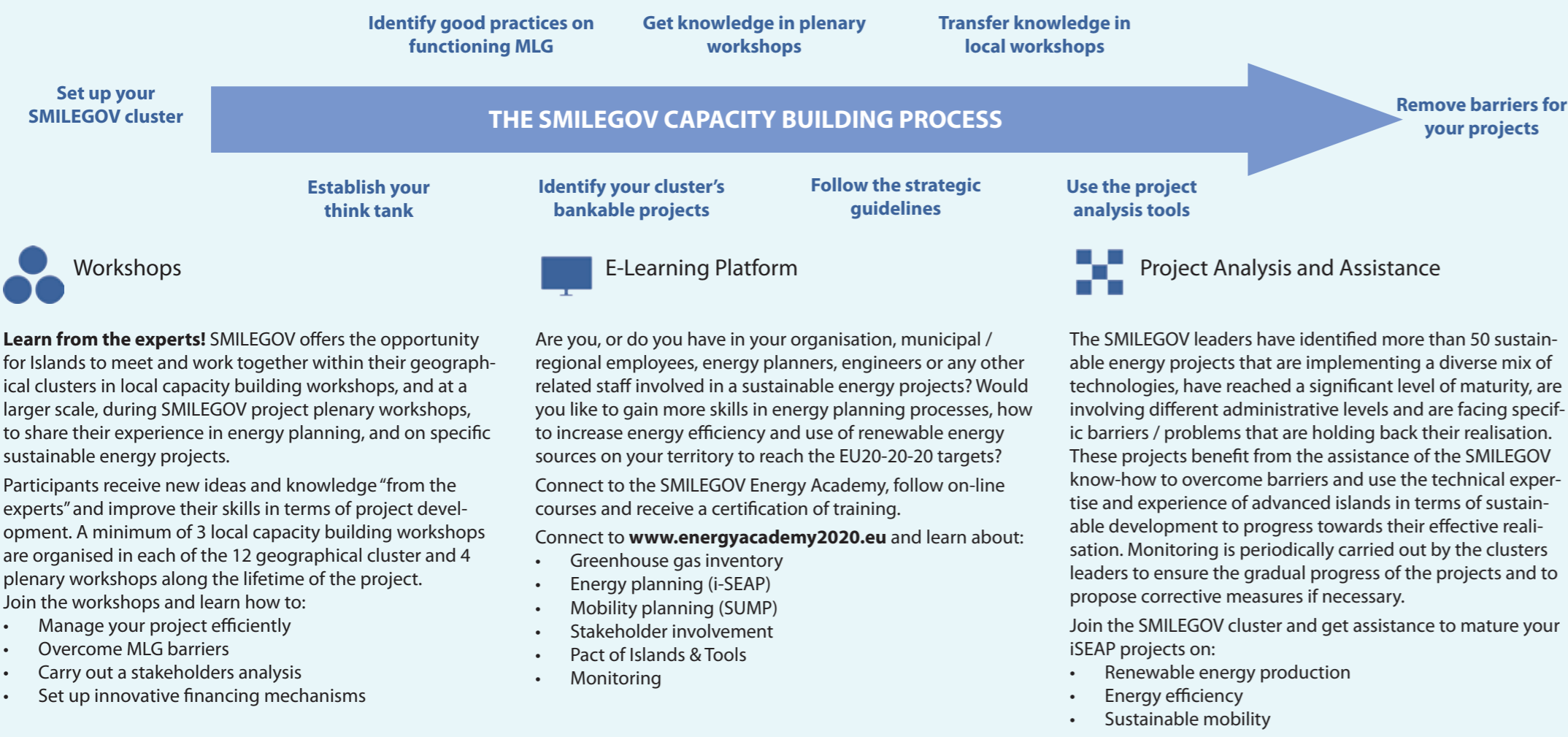
Location	Title	Description	Barriers to overcome	Involved levels of governance
Cluster of CPMR Isle of Man	Biomass heating applications	The Isle of Man's Department of Environment, Food and Agriculture (DEFA) owns a coniferous plantation estate with excess amounts of standing biomass. Since 2010 DEFA has been producing wood chip fuel and covers the heating demand of several public buildings. A review of the policy aims at investing in several new biomass heating installations in the commercial and residential sectors.	<ul style="list-style-type: none"> <li>The quality of the fuel produced resolution.</li> <li>The consumers' preference for gas. The use of price incentives to promote biomass is considered.</li> <li>The delivery arrangements. The involvement of stakeholders from outset can help.</li> <li>Tree disease which can be a serious threat to supply chain</li> </ul>	<ul style="list-style-type: none"> <li>DEFA Officer Level – Drafting Policy</li> <li>Political level (Council of Ministers) – Approving policy</li> <li>Project development team – Overcome barriers and implement</li> </ul>
Cluster of Sweden Gotland	Biogas production and distribution infrastructures	Establishment of additional biogas production unit along with extensive infrastructure of gas pipelines to exploit the significant biomass potential on Gotland. The biogas network will connect the different future biogas plants to smooth out the production; will transfer gas to the main consumer, the city of Visby and will enable the installation of additional filling stations for vehicles.	<ul style="list-style-type: none"> <li>The formation of a market that will use the new biogas infrastructures. For the biogas producers a growing market of biogas users is vital for further investments.</li> <li>The state policy for cleaner transportation needs to be outspoken and established for long period.</li> <li>Other types of fuels make the market unsure to invest in.</li> </ul>	<ul style="list-style-type: none"> <li>Region Gotland – Regional planning and vision making</li> <li>Arla (Diary products producer) – End user of raw biogas for production facility</li> <li>Swedish state – Overall planning for future fuels</li> </ul>
Cluster of Estonia Hiiumaa	Off-shore wind farm	The installation of up to 200 wind generators with total capacity of 700 – 1100 MW is planned at the shallows of the Apollo and Vinkov in the Baltic Sea. The annual energy production of the wind farm is estimated around 3000 GWh. The wind farm will be interconnected to the mainland through a submarine electric cable which will be built in parallel with the wind farm.	<ul style="list-style-type: none"> <li>Strong opposition by some local interest groups.</li> <li>Local uncertainty about environmental impact on landscape and bird wild life.</li> <li>High initial investment.</li> <li>Lack of co-financing resource in the local community for participating in the project.</li> </ul>	<ul style="list-style-type: none"> <li>Investor – Leader of the project</li> <li>Local level – Planning process and involving local capital</li> <li>NGOs – Lobbying, Know-how sharing</li> <li>Estonian state – Supervisor</li> </ul>
Cluster of ESIN Nagu, Finland	Biogas plant	Developing a biogas plant in Nagu which will substitute oil imports used in tractors and heating. The primary source is planned to be fish remains, offal, compost and garbage at hand. Reeds could also be harvested to supplement the anaerobic digestion, while crops could be grown on land that is unsuitable for other purposes.	<ul style="list-style-type: none"> <li>Nagu municipality was merged into Pargas town two years ago and Pargas is about to be merged with Kimito. The state of Finland cannot force municipalities to merge, but offers special subsidies to municipalities who do. Waiting for a merger – and for subsidies - holds up investments for a while.</li> </ul>	<ul style="list-style-type: none"> <li>Nagu local community – Project promoter</li> <li>Pargas town/local authority – Project owner</li> <li>Pargas and Kimito municipalities on the brink of a merger – Supporter / Financing</li> <li>Finnish state – Subsidies / Financing</li> </ul>
Cluster of Spain Fuerteventura	Desalination with wind	Gran Tarajal is a village in the south of Fuerteventura where rainfall scarcity represents a handicap for the development of its main economic activity, which is agriculture. The project consists of providing the needed water for irrigation through a desalination plant connected to a wind turbine. It will include technical and economic feasibility studies, paperwork and approvals.	<ul style="list-style-type: none"> <li>The high environmental protection around Gran Tarajal which complicates the installation of any infrastructure in this area.</li> <li>The incertitude about the recently changed Spanish energy regulation and the new rebtributions for electricity generation coming from renewables.</li> <li>The difficulty to reach an agreement among different users of the water generated regarding future management, operation and maintenance of the whole system.</li> </ul>	<ul style="list-style-type: none"> <li>Insular Water Consortium (Cabildo de Fuerteventura) – Owner of part of the installation / Promoter</li> <li>Las Palmas Ports – Owner of possible wind turbine site</li> <li>The Regional Government – Responsible of authorizations and execution</li> <li>The Farmers Associations – Water management</li> </ul>
Cluster of Portugal and Cape Verde Madeira	Reversible Hydro Power Plant	The project aims to the installation of a reversible hydro power plant, including water storage and water pumping to accumulate excess wind energy during the night. The hydro power plant capacity is 30 MW and the pump station is 17,7 MW. The water storage capacity is 1,021.000 m3 in the upper dam and 70.540 m3 in the pumping station reservoir.	<ul style="list-style-type: none"> <li>Financing sources</li> <li>Project complexity in terms of engineering and environmental integration</li> <li>Complexity to plan safe storage solutions in limited territory and rough relief</li> <li>Project location and environmental issues</li> <li>Integration with existing facilities</li> <li>Lack of experience with similar projects</li> </ul>	<ul style="list-style-type: none"> <li>National Laboratory of Civil Engineering – Approval of dam project</li> <li>Regional Government – Authorizations on environment and energy production</li> <li>Municipalities – Authorizations of the construction</li> <li>Regional public utility (IEM) – Promoter</li> <li>Energy agency (AREAM) – Studies and grant application</li> </ul>
Cluster of UK-Scotland Garmory, Isle of Mull, Argyll	Garmory Hydro Scheme	Garmory Hydro is a new community owned and operated run of river scheme using a 400kw vertical shaft, 4 input pelton type turbine, expected to generate over 1100Mwh p.a. Mull and Iona Community Trust (MICT) has raised over £450,000 of investment for the £1,240,000 project. Coming on stream in 2015, net profits will be distributed as grants to local organisations.	<ul style="list-style-type: none"> <li>The main barrier is the financing of the project. The land is leased but capital was required for construction. Grants would negate Feed in Tariff payments, which make the scheme viable. Banks were unwilling to lend whole amount without security. A new company (Green Energy Mull - GEM) was formed, operating as an IPS to raise at least 30% of required investment and negotiate loans with 2 niche banks.</li> </ul>	<ul style="list-style-type: none"> <li>Scottish Government – Supportive policies</li> <li>Mull and Iona Community Trust – Project promoter</li> <li>Community Energy Scotland – Project supporter</li> <li>Green Energy Mull – Project owner</li> </ul>

## The SMILEGOV Capacity Building

Capacity building is a key investment for future successful and sustainable projects. SMILEGOV is all about a capacity building process that can lead EU Islands' sustainable energy strategies towards successful and effective implementation. Starting with the creation of geographical clusters, local think tanks to support the process are established, priority areas to

build capacity are defined and good practices are identified. Islands advanced in the field of multilevel governance and project implementation offer their expertise through plenary workshops and train the trainers, the SMILEGOV clusters leaders, who can convey knowledge and new skills in energy planning and implementation of sustainable energy projects

to all key stakeholders during local capacity building activities. Powerful tools for project assistance and expertise are delivered to the cluster members, through the follow-up of bankable projects, identification of innovative technologies and publication of strategic guidelines.



**When is your local workshop? Ask your local SMILEGOV contact point and get involved!**

**Get Involved! Free registration & on-line courses available for unlimited time**

**Ask your local SMILEGOV cluster contact point for project development assistance!**