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SMILEGOV

**Enhancing effective implementation of sustainable energy action
plans in European islands through reinforcement of smart
multilevel governance**

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**Manual for Sustainable Energy Projects
Implementation**

Cluster of CPMR

10/09/2015

Part. N°		Partner's name	Short name
CO1		Network of Sustainable Aegean Islands - Greece	DAFNI
CB2		Conference of Peripheral & Maritime Regions	CPMR
CB3		Region Gotland – Sweden	GOTLAND
CB4		Ölands Municipal Association - Sweden	ÖLAND
CB5		Hiiu Municipality - Estonia	HIIUMAA
CB6		Saare County Government – Saaremaa - Estonia	SAAREMAA
CB7		European Small Islands Federation	ESIN
CB8		Samsø Energy Academy - Denmark	SE
CB9		Canary Islands Institute of Technology - Spain	ITC
CB10		Regional Agency for Energy and Environment of the Autonomous Region of Madeira - Portugal	AREAM
CB11		Cyprus Energy Agency	CEA
CB12		Local Councils Association – Malta	LCA
CB13		Scottish Islands Federation	SIF

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Content

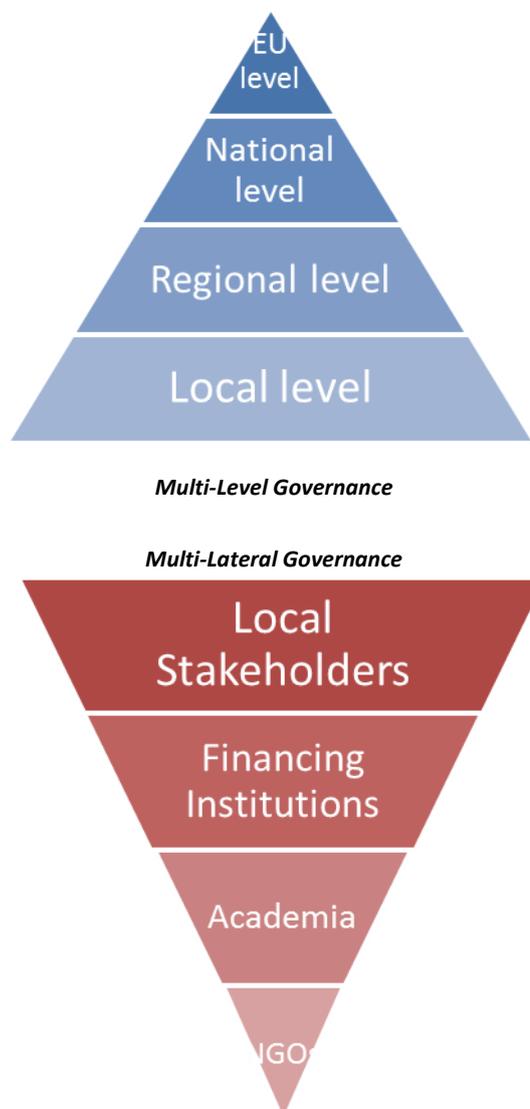
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1 Introduction

Multi-level-governance can be explained as the effective interaction between different political levels for an improved coordination and coherence between the local, regional, national and European policy level. Also there must be good relations and speaking terms within each level, for example between different expert areas within a municipality, for processes to run smoothly. This we call Multi-Lateral-Governance.

In short a good cooperation is vital for success of projects. Understanding & addressing MLG, both multi-level and multi-lateral, is a key concept for SMILEGOV.



The Isle of Man is a British Crown Dependency in the Irish Sea that has a significant degree of autonomy when it comes to deciding and developing renewable energies and energy efficiency.

There are two projects discussed in this deliverable, both from the Isle of Man, the member of the CPMR's Anglophone cluster.

2 Outline of the Projects and Barriers

The two projects discussed herein are as follows:

2.1 Biomass utilisation – Isle of Man

In November 2010 an objective assessment of renewable energy options for the Isle of Man was published. The top four options for the Island were; domestic, small, medium and large biomass applications.

The Isle of Man Government's Department of Environment, Food and Agriculture (DEFA) owns a coniferous plantation estate circa 2800 hectares with standing biomass in excess of 500,000 tonnes. DEFA has been producing wood chip fuel for its own purposes since 2010. In August 2010 DEFA proposed to the Council of Ministers a policy commitment of procuring biomass heating systems within the public sector where the lifetime costs are equal to or less than alternative fossil fuel systems. The net result of this has been the development of a cluster of biomass heating installations at sheltered housing schemes, schools and the Department's Headquarters.

Current aggregate demand is 1000 tonnes per year which is still a sub-commercial amount but which started from a zero basis. Policy has been in place for four years in which time four sites in addition to the Department Headquarters have been commissioned. Further installations are planned.

The quality of the fuel produced by the Sawmill initially failed to meet the specification in terms of woodchip size and this caused problems with the initial commissioning and subsequent operation of the biomass boiler at the Sawmill/DEFA Head Quarters, and also the initial commissioning and subsequent boiler operation of the biomass boiler at Reayrt y Chrink. The solution was to implement an accredited quality management system which gives comfort and confidence to current and potential customers.

Problems - Challenges

Problem with delivery arrangements – involve stakeholders from outset to find most pragmatic option. Blown delivery now used.

Auger specification – designed to complement fuel grade rather than undersized to avoid problems.

Woodchip stores – Design of first customers store was below ground, had dead spots and uninsulated without ventilation. This led to condensation build up which effected fuel quality resulting in boiler lockout.



Tree disease - Phytophthora Ramorum infection of Larch trees which make up 20% of the forestry estate threat to supply chain. All clear felled to manage spread of disease – Mixed species forest would create resilience.

Policy based on assumptions of future energy prices slight variations in which can drastically affect lifetime costings. These have been challenged by those who would prefer to opt for natural gas which, in their opinion, is a more sustainable fuel.

Levels of Government involved

- DEFA Government Office (executive) drafting Policy,
- Political level for approving policy,

What SMILEGOV will do for your project:

- Regular contacts with all actors involved in a step-by-step basis until a common understanding of the project is reached
- Examination of financing tools available and recommendations
- Stakeholders analysis
- Propose ways for overcoming barriers

2.2 Tidal & Offshore wind energy project – Isle of Man

The Isle of Man has ownership of its territorial seas, and the seabed beneath those seas, up to the 12 nautical mile limit or the median line where the distance between the UK and Isle of Man baselines is less than 24 nautical miles. As such the Island has responsibility for marine spatial planning and zoning over approximately 4,000 km² of the Irish Sea which is greater than 87% of the Island's territory. Within this area, the Isle of Man Government has an opportunity to produce offshore energy for export from wind and marine renewable resources.

We propose to progress development subject to such development receiving the appropriate consents and planning for offshore wind and marine renewable power for export to the UK. Due to the cost of installation all the renewable energy produced would be exported to the UK in the short to medium term.

Marine renewable technology is now at a stage of development that is suitable for deployment at large scale. Recently it was announced that consent had been awarded for a 398MW development, known as MeyGen project, using Atlantis Resources Ltd turbines in the Pentland Firth.

Several barriers were identified:

- Access to renewable incentives in the UK for exported energy.
- Economies of scale to make the tidal projects economically viable.
- Suitability of technology for deployment (immature tidal technologies).
- Availability of adequate generation to justify an export cable.
- Existing constraints in the marine environment e.g. fisheries, shipping, environmental groups etc.



- Public consultation/engagement.

Levels of Government involved

- International level: interaction with UK Government and Regulatory (Department of Energy & Climate Change, OFGEM and National Grid).
- Isle of Man Government level: Departments of Economic Development, Environment, Infrastructure and Treasury.
- Local level: marine renewable developers and key stakeholders.

What SMILEGOV was expected to do for the project:

- Contacts with actors involved in a step-by-step basis until a common understanding of the project is reached
- Examination of financing tools available
- Stakeholders analysis
- Propose ways for overcoming barriers

3 Barrier A. Funding

The overall challenge in every project is the financing – whether it is a public investment (national, regional or municipal) or a private investment by local investors or/and external investors or a combination thereof.

From a local perspective it is important to investigate business models and financing mechanisms that allow local stakeholders to join the projects in order to support local economical development and ownership.

3.1 Examples from good practices

The Isle of Man has rather limited experience in good financing practices involving multiple levels of government and/or stakeholders including investors.

Both projects examined are government-driven.

The biomass project will also be in its largest part government - financed when the technical problems encountered are resolved. During meetings with government services and a number of stakeholders and NGOs involved in the consultation with the government, financing models involving the local communities were proposed and discussed.

The offshore project, still in its initial phases, will be privately funded. A large Danish developer has been selected as the main investor for the offshore wind development.

This is however, preconditioned on the successful negotiation between the IoM government and the UK government and regulator (OFGEM) granting access of IoM offshore power to the UK electricity market and more specifically to the contracts for differences, a financial tool that guarantees



investors the financial security and stability required for such a large scale investment (>2 billion £ per site).

3.2 The role of Supranational Multilevel Governance

The major MLG challenge was not within the island government levels, but at an intergovernmental level between the IoM and UK governments.

3.3 Step-by-step methodology to overcome the barrier

In order to find the best model there is some generic elements to focus on:

- Make sure that all local stakeholders are included in the early stage of planning of the project
- Prepare a timetable for negotiations with the UK government
- Investigate different options allowing access to the UK power market

4 Barrier B Legal Framework

As discussed above, the major barrier for more participative and innovative business models is the lack of an appropriate legal framework.

4.1 Examples from good practices

A limited model for financing schemes exists only in the Credit Union legislation allowing for small green business loans with 0% interest rate. The legal framework, however, for crowd funding, PPPs and/or other schemes, such as cooperatives & ESCOs does not exist at the moment. This was identified as the major barrier in allowing and broadening the financing schemes on the island.

4.2 The role of Multilevel Governance

N/A

4.3 Step-by-step methodology to overcome the barrier

- Expand existing legal framework to facilitate more innovative and participative investment models such as crowd funding, PPPs, cooperatives and ESCOs.
- Make sure that all local stakeholders are consulted and included in the early stage of the design of the new legislation.
- Prepare a timetable for the development, approval and implementation of the new legislation.