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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 Denmark**

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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

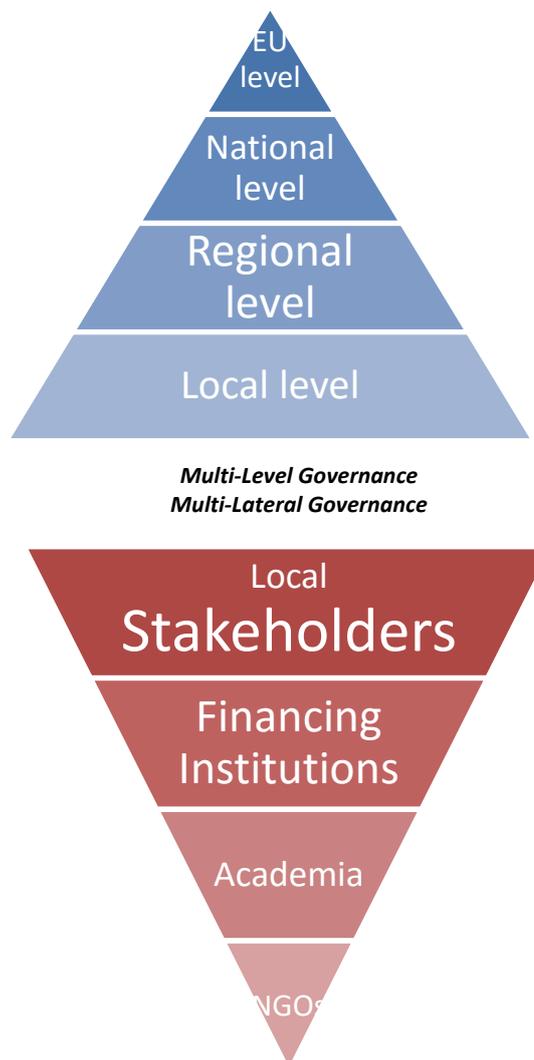
1	Intro .....	4
2	Outline of the Projects and Barriers .....	5
2.1	Biogas production – Samsø .....	5
2.2	District heating without pipes – Samsø .....	5
2.3	Electricity for transport – Samsø .....	6
3	Barrier A. Funding .....	6
3.1	Examples from good practices .....	6
3.2	The role of Multilevel Governance .....	6
3.3	Step-by-step methodology to overcome the barrier .....	7
4	Barrier B. Local planning act .....	7
4.1	Examples from good practices .....	7
4.2	The role of Multilevel Governance .....	7
4.3	Step-by-step methodology to overcome the barrier .....	8
5	Barrier C. Local ownership .....	8
5.1	Examples from good practices .....	8
5.2	The role of Multilevel Governance .....	8
5.3	Step-by-step methodology to overcome the barrier .....	8
6	Summary table .....	9



## 1 Intro

This manual is supposed to work as support on how to approach different barriers within a good Multi-Level Governance (MLG) project. 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 good relations must be in place within each level, for example between different activity areas within a municipality, for processes to run smoothly. This we call Multi-Lateral Governance.

In short, good cooperation is vital for success of projects. Both multi-level and multi-lateral governance is a key concept for SMILEGOV and for this manual.



The examples of projects included in this manual are the ones concerning the Danish Cluster. The manual points on known barriers and suggests a number of different solutions that can be used to overcome them. This manual does not provide all the answers and tools needed but it presents a context on why MLG is crucial together with good examples, and how the MLG work could be organized in order to overcome barriers.

## 2 Outline of the Projects and Barriers

The projects we have been working with are the following three:

### 2.1 Biogas production – Samsø

On Samsø the municipality has built a new ferry that can run on marine diesel and LNG gas. Tho this end it is now under investigation how a locally-owned biogas plant can be established to produce LNG gas for the ferry.

The project is currently in the planning phase (feasibility studies). On Samsø calculations are being conducted concerning the amount of biomass and cooperation is now in place between the Samsø Energy Academy, the municipality and local stakeholders/investors to explore different business models and funding schemes.

The production of LNG gas locally will require the building of a new biogas plant with private ownership (by local investors) which means financing might be a challenge.

Furthermore the establishment of the biogas plant will require a local planning act with public hearings etc. and will depend on municipal and maybe also national approvals concerning the environmental impact of the biogas plant construction etc.

### 2.2 District heating without pipes – Samsø

On Samsø there are four district heating systems organised in different forms of ownership showing that specific practical possibilities of each project lead to different solutions and different ownership models specific to each renewable energy installation. There are three technically almost identical straw based district heating systems. One is owned by a regional utility through a cooperative, NRGi, the second is owned by a local commercial operator and the third is owned and financed locally by the consumers themselves. The fourth is also owned by NRGi and based on solar heating and woodchips.

Now it is investigated how to establish unconnected heating supply by individual heating pumps from the local district heating plant that is situated outside the range of the existing pipe system to consumers.

First of all the challenge will be to set up business models for the local district heating plants and the individual consumers and to secure financing for the installation of the heating pump. Second, cooperation between the different local and external owners and the Municipality must be established, involving:

- The local level concerning local owners and consumers
- The municipal level concerning the need of a municipal guarantee is a joint heating cooperation is to be funded
- The regional level concerning the cooperatively owned regional utility, NRGi

## 2.3 Electricity for transport – Samsø

On Samsø there is a positive production of renewable electricity – almost 60% of yearly production is exported. Therefore it is now investigated how to develop an infrastructure concerning charging for all kinds of electrical vehicles and organize car-sharing in cooperation with the local association of EV-owners, the national postal service, the municipality and private stakeholders e.g. tourists and holiday home rentals. So one of the goals in the project is how EV's can be shared by tourists in the holiday season (almost 110.000 guests yearly) and by the locals outside the holiday season.

The project is in the planning phase, which entails establishing the car-sharing concept expanding infrastructure, with chargers to be installed at the ferry ports etc. Feasibility studies and business models investigating how to organize public-private ownership/partnership are also being undertaken

The car-sharing project requires coordination with the charger infrastructure and cooperation between many private partners and citizens-possible participants in a car-sharing model together with the municipality. Hence organization and financing are the main challenges to overcome. The involved levels of governance are:

- The local level with the Evs association, the holiday home rentals and individuals who will participate in the business model and together will organize and implement the project.
- The municipal level concerning planning and establishing the chargers together with private stakeholders – Samsø Energy Academy has also established a charger.

## 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. 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 economic development and ownership.

### 3.1 Examples from good practices

In Denmark we have a long tradition with cooperatives and also Private Public Partnerships as an alternative to private ownership.

On Samsø there are good examples concerning different types of ownership of wind turbines and local district heating plants. Concerning wind turbines there is a mix of ownership with cooperatives, municipal and private ownership in the same project – and concerning the local heating district plants there are also different ownership schemes – including a cooperative, a private ownership and ownership by a regional energy company owned by consumers.

### 3.2 The role of Multilevel Governance

Concerning funding at the local level it is important that the business model foresees different ways of funding at the beginning of the planning phase and that all local stakeholders are invited to



contribute at that stage of the project. It is also important to focus on the duration of the project period by defining its length (short, middle or long term).

### 3.3 Step-by-step methodology to overcome the barrier

In order to find the best financing model that embodies a local perspective there are some basic elements to consider:

- Make sure that all local stakeholders and the local authority are included in the early stage of planning of the project
- Prepare the project with a feasibility study
- Investigate different financing alternatives
- Prepare a good procurement process for municipal projects

## 4 Barrier B. Local planning act

The establishment of a biogas plant will require a local planning act with public hearings etc and will depend on municipal and maybe also national approvals concerning the environmental impact of the plant etc.

Therefore it is very important to coordinate the project with the municipal master plan and also issue a local planning act if this is necessary.

Furthermore a good planning process might secure the result of a public hearing that is required according to the Danish planning act.

### 4.1 Examples from good practices

The shift from an authority approach to a business approach makes the permit process more straightforward. An authority is offering a service to review legislation relevant to the project. Any level of governance included in this chain of reviewing should have common instructions or work flow, for example to look at the process from a LEAN perspective.

A good start for cooperation is to use and develop existing networks and if there are no networks it is about time to start them. The initiator should be on a high level of governance to ensure good participation but the first step should be taken by local authorities demonstrating the economic and social consequences of poor coordination. The regular meetings before starting the project was a key factor for the El Hierro project on the Canary Islands.

### 4.2 The role of Multilevel Governance

MLG ensures cooperation between:

- The municipal ferry and private investors and shareholders (municipal level);
- the national authorities for the possibility of issuing a planning act to assess the environmental impact of the plant (national level);



- local investors and local stakeholders (the farmers providing biomass, the waste management company) for the establishment of the ownership of the biogas plant (local level).

### 4.3 Step-by-step methodology to overcome the barrier

As mentioned it is crucial to have a good planning process together with the local planning authority but also the citizens and stakeholders in the local community.

- Participatory planning is a way of involving the locals so they feel well informed about the process and not only the project.
- It is important that the approach is holistic and inclusive in order to inform about the overall goals or visions of the municipality for the island's sustainable development as expressed in the ISEAP.

## 5 Barrier C. Local ownership

From a strategic perspective the focus on local ownership is very important in order to create added value and local economic development and jobs. Therefore the starting point will be to create a win-win scenario and secure not only local involvement but also ownership. This approach is crucial for increased acceptance of projects.

### 5.1 Examples from good practices

On Gotland the region decided that all public bus transportation should be supplied with biogas – so they created a need for local production of biogas and this was combined with the local dairy producing dry milk. Then they asked the locals to build a biogas plant to create local production. So the regional authority was the initiator and creator of a market for locally produced biogas.

### 5.2 The role of Multilevel Governance

MLG ensured the early and effective participation of the local population, which entailed not simply informing them about the project but also involving them in the ownership of the plant. This proved crucial for the increased acceptance and sustainability of the project.

### 5.3 Step-by-step methodology to overcome the barrier

- Helped the involved parts to see the overall approach and the win-win scenario for the local producer of biogas and the local dairy
- Involve local people in the ownership scheme

## 6 Summary table

Barrier	Examples	Role of MLG	Key steps of the methodology
A. Funding	Different types of ownership	Involvement of stakeholders on a local and municipal level	Make sure the process includes involvement on local level in the early stage of planning the project
B. Local planning act	Permit process	Cooperation in the planning and permit process between different authorities and the local level	Participatory planning
C. Local ownership	Local production of biogas	Regional and/or municipal authorities can be the initiator for creating local development	As an initiator the public authority can help the involved parts to see the overall approach and future benefits