Co-funded by the Intelligent Energy Europe Programme of the European Union

SMILEGOV

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

Agreement No: IEE/12/047/SI2.645923

Deliverable D4.2

Summary of key outcomes of working groups

15/09/2015

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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Introduction

For the promotion of their projects, clusters set up one working group per project. This deliverable summarises the key outcomes of each working group for each different project. It provides information about the key members participating in the groups (cluster members and key experts), the activities and key outcomes, as well as the future work foreseen. The working groups acted as catalysts in the maturation of the projects, providing key insights on how to overcome barriers and ensure progress is sustained also after the official end of SMILEGOV.

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1 Cluster of Denmark

1.1 Project name: Biogas plant

Members of the working group:

Name	Organisation	Position	Role for the project
Michael Kristensen	Samsø Energy Academy	Project manager	Project coordinator
Søren Stensgaard	Samsø Municipality	Technical director	Project coordinator

Description of the group's activities:

The project has been organized in a feasibility study with external members and coordinated between the members of the working group. The project will be finished in November 2015.

Key outcomes:

- Research of the possibilities for biogas production and LGB/CBG production
- Analysis of the technological assumptions for a transition to fossil free transport
- Business models for the biogas plant
- Investment study of the funding of the project
- Strategy for the realization of the project

Future work:

- The Biogas plant project will continue as an INTERREG project in cooperation with The Samsø Ferry Company, the Samsø Municipality and Samsø Energy Academy and partners from Sweden and Norway.
- The project will be co-funded by the Central Region Denmark.

1.2 Project name: District heating without pipes

Members of the working group:

Name	Organisation	Position	Role for the project
Michael Kristensen	Samsø Energy Academy	Project manager	Project coordinator
Søren Stensgaard	Samsø Municipality	Technical director	Project coordinator

Description of the group's activities:

The project has included meetings with the owners of the local district heating plants discussing business models in order to investigate solutions for the further work.

Key outcomes:

- Business models for solutions for standing alone heating pumps delivered by the local district heating plant
- Baseline for a common solution for all 4 local district heating plants on Samsø

Future work:

The project might be continued by the partners in order to investigate the possibility of making one heat supply company

1.3 Project name: EVs

Members of the working group:

Name	Organisation	Position	Role for the project
Stefan Wolfsbrandt	Samsø EV Association	Chairman	Project partner
Søren Stensgaard	Samsø Municipality	Technical director	Project partner

Description of the group's activities:

The project has included preparation of business models for car sharing in cooperation with municipal and private partners. There has been a testing period of the car sharing model.

Key outcomes:

- 1 private car continues for only private use
- The municipality will decide if they will make a public car share project

Future work:

The Samsø EV Association will work on a car share model where the EV´s are based for tourists in the summer holiday period and available for islanders outside this period.

The municipality will work on a municipal/private car sharing model.

2 Cluster of Portugal and Cape Verde

2.1 Energy efficiency on street lighting in Madeira and Porto Santo

Members of the working group:

Name	Organisation	Position	Role for the project
Filipe Oliveira	AREAM	Project manager	Project coordinator
Gorete Soares	AREAM	Technical	Technical studies
Agostinho Figueira	EEM	Director	Project coordinator
Representatives of 11 municipalities	11 Municipalities of Madeira and Porto Santo islands	Mayors, vice-mayors, councillors, directors and technical	Political and management

Description of the group's activities:

The meetings and work sessions were mainly focused to overcome the lack of information about solutions and results, to solve some administrative and legal barriers and to agree on the financing scheme to the operation.

Several meetings were carried out with all municipalities. The general issues and financing scheme was discussed together with all municipalities and the specific details about the operations to implement were discussed individually with each municipality.

Key outcomes:

- Analysis of energy consumption, costs and potential savings.
- Survey of new technologies and design of technical solutions.
- Intermediation between local authorities and regional level to establish better cooperation and overcome barriers.
- Financing scheme based on energy performance contracting.
- Preparation and implementation of pilot actions in all municipalities to test and boost the cooperation.

Future work:

- The operation is expected to cover about 100 000 luminaires until 2020.
- Investment will be carried out in several phases until 2020 in all municipalities, starting with operations that have shorter payback period.
- The operation is waiting for availability of financing instruments supported by European funds.

2.2 Project name: Reversible Hydro Power Plant

Members of the working group:

Name	Organisation	Position	Role for the project
Filipe Oliveira	AREAM	Project manager	Project advisor
Elizabeth Olival	AREAM	Technical	Project advisor and Environmental issues and application for financing
Agostinho Figueira	EEM	Director	Project coordination
Luis Pinheiro	EEM	Project manager	Project coordination
Pedro Ferreira	EEM	Project manager	Project coordination

Description of the group's activities:

The collaboration by AREAM was mainly on overall strategy and integration with sustainable energy action plan of Madeira Island (ISEAP-M) in the scope of Pact of Islands, taking into account the national, regional and local levels. Some parallel activities were also developed by AREAM, namely advisory on the environmental issues and on financing schemes to this project, including the survey of requirements for EU funding.

Key outcomes:

- Integration of the project into the island strategy to increase the use of renewables for electricity and reduce CO2 emissions.
- Environmental assessment study is under evaluation.
- Engineering projects are completed.

- Procurement process is running.
- Cost-benefit analysis and application for funding and cost benefits analysis are being prepared.

Future work:

- The operation is waiting for availability of financing by European funds.
- Procurement is ongoing and next step is the construction.
- Construction and start up the system.
- The project will help increase the wind power capacity in Madeira island.

2.3 Project name: Battery for energy storage in Porto Santo

Members of the working group:

Name	Organisation	Position	Role for the project
Filipe Oliveira	AREAM	Project manager	Project advisor
Agostinho Figueira	EEM	Director	Project coordination

Description of the group's activities:

The collaboration by AREAM was mainly on overall strategy and integration with sustainable energy action plan of Porto Santo Island (ISEAP-PS) in the scope of Pact of Islands, and technology survey. AREAM was supporting EEM on the discussions with potential technology providers and integrators (Siemens and Younicos). AREAM was also providing advisory on the financing schemes to this project, including the survey of requirements for EU funding.

Key outcomes:

- Integration of the project into the island strategy to increase the use of renewables for electricity and reduce CO2 emissions.
- Preliminary studies about dimensioning, energy efficiency impacts and main operational requirements.
- Preliminary analysis on legal requirements for procurement process.

Future work:

- The operation is waiting for availability of financing by European funds.
- Procurement process for assistance, technology integration and software development and construction.
- Construction and start up the system.
- The project will allow to increase the wind PV power capacity in Porto Santo island.

2.4 Project name: Biomass district heating to supply hotels and services

Members of the working group:

Name	Organisation	Position	Role for the project
Filipe Oliveira	AREAM	Project manager	Project advisor

Gorete Soares	AREAM	Technical	Project advisor
Cláudia Henriques	AREAM	Technical	Project advisor
Pedro Martins	Gebioline	Manager	Promoter
Paulo Santos	Gebioline	Manager	Promoter
Primitivo Málaga	Gebioline	Manager	Promoter
José Miguel Saizpardo	Gebioline	Manager	Promoter
Paulo Sarabanda	Magnetic Fields	Consultant	Engineering

Description of the group's activities:

The meetings and work sessions were mainly focused to discuss project design, location and market acceptance. The support to the promoter also included analysis of business plan, general design, engineering projects, information to potential users of biomass heat, assistance on communication with local and regional authorities and financing scheme analysis.

Key outcomes:

- Analysis of heat demand for biomass plant.
- Design of the installation and heat distribution network.
- Agreements with heat users, biomass suppliers and owner of land where heat plant will be installed.
- Agreement from municipality and regional authorities about the project.
- Financing scheme based on energy performance contracts with clients and incentives.

Future work:

- The operation is waiting for availability of financing incentives supported by European funds.
- Next step is the construction and connection to heat users (hotels).
- Project is intended to be replicated in other place and another company is also starting business on biomass in Madeira.

2.5 Project name: Energy efficiency in an Olympic swimming pool

Members of the working group:

Name	Organisation	Position	Role for the project
Filipe Oliveira	AREAM	Project manager	Project advisor and assistance
Orlando Andrade	Regional Government (DRCIE / DRET)	Director of energy services	Energy policy and energy planning
Gonçalo Nuno Araújo	DRPRE	Director	Implementation of the project

Description of the group's activities:

The collaboration by AREAM was mainly on overall strategy and integration with sustainable energy action plan of Madeira and Porto Santo Islands (ISEAP-M, ISEAP-PS) in the scope of Pact

of Islands. AREAM was supporting DRET (formerly DRCIE), that is regional directorate of Regional Government for energy issues. AREAM proposed an action programme called ECO.AP with the purpose of increasing energy efficiency in public services and implement energy performance contracts with ESCO to finance the operations on energy efficiency and renewable energy sources. This ECO.AP programme will include the Olympic swimming pool as well as other sport facilities and public buildings. AREAM also ensured the connection with national structures dealing with ECO.AP national programme (mainland Portugal).

Key outcomes:

- Identification of barriers: technical, administrative and financing.
- Discussion of technologies and solutions (biomass, solar thermal, lighting, heating, dehumidification).
- Preliminary analysis on legal requirements for procurement process related to energy performance contracts.
- Resolution of the Regional Government approving ECO.AP programme.
- Preparation of a contract with AREAM for future assistance to the Regional Government under ECO.AP programme.

Future work:

- The operation is waiting for availability of financing by European funds and contract with AREAM for future assistance on ECO.AP programme.
- Procurement process for energy performance contracts.
- Implementation of energy efficiency and renewable energy operations.

2.6 Project name: Energy efficiency in a hospital

Members of the working group:

Name	Organisation	Position	Role for the project
Filipe Oliveira	AREAM	Project manager	Project advisor and assistance
Orlando Andrade	Regional Government (DRCIE / DRET)	Director of energy services	Energy policy and energy planning

Description of the group's activities:

The collaboration by AREAM was mainly on overall strategy and integration with sustainable energy action plan of Madeira and Porto Santo Islands (ISEAP-M, ISEAP-PS) in the scope of Pact of Islands. AREAM was supporting DRET (formerly DRCIE), that is regional directorate of Regional Government for energy issues. AREAM proposed an action programme called ECO.AP with the purpose of increasing energy efficiency in public services and implement energy performance contracts with ESCO to finance the operations on energy efficiency and renewable energy sources. This ECO.AP programme will include the hospital as well as other public buildings. AREAM also ensured the connection with national structures dealing with ECO.AP national programme (mainland Portugal).

Key outcomes:

- Identification of barriers: technical, administrative and financing.

- Discussion of technologies and solutions (biomass, solar thermal, lighting, heating, cooling, building thermal envelope).
- Preliminary analysis on legal requirements for procurement process related to energy performance contracts.
- Resolution of the Regional Government approving ECO.AP programme.
- Preparation of a contract with AREAM for future assistance to the Regional Government under ECO.AP programme.

Future work:

- The operation is waiting for availability of financing by European funds, the contract with AREAM for future assistance on ECO.AP programme and decision making of new administration board.
- Procurement process for energy performance contracts.
- Implementation of energy efficiency and renewable energy operations.

2.7 Project name: Retrofitting of social housing

Members of the working group:

Name	Organisation	Position	Role for the project
Filipe Oliveira	AREAM	Project manager	Project advisor and assistance on energy
Cláudia Henriques	AREAM	Technical	Urban planning, social issues, awareness and stakeholders
Filomena Sousa	IHM	Administrator	Promoter

Description of the group's activities:

The support to the project was aimed to the implementation of energy efficiency and renewable energy sources in the retrofitting of social housing in Madeira, including thermal passive measures of buildings, solar thermal for hot water and amelioration on mobility, to facilitate the pedestrian circulation and public transports. AREAM was supporting IHM on project design and specifications for call for tender and application for funding.

Project is waiting for funding that is foreseen in EU funds. Recently IHM had a change on the administration board and new approaches have to be carried out. The rules of EU funding and eligible costs constraints might introduce changes on the initial project.

Key outcomes:

- Identification of barriers: technical, administrative and financing.
- Discussion and selection of technologies and solutions (facade thermal insulation, windows and glazing, solar thermal, lighting, rain water storage).
- Willingness of regional and local authorities and other key actors to implement the project.
- Initiation of a procurement procedure to contract AREAM for future assistance to IHM on technical assistance, awareness and support on stakeholder's participation.

Future work:

- The operation is waiting for availability of financing by European funds, the signing of contract with AREAM for future assistance and decision making of new administration board.
- Elaboration and submission of new application for EU funding.
- Procurement process for energy operation (together with other works).
- Implementation of energy efficiency and renewable energy operations.

2.8 Project name: Energy efficiency and renewable energy sources in hotel retrofitting

Members of the working group:

Name	Organisation	Position	Role for the project
Filipe Oliveira	AREAM	Project manager	Project advisor and assistance on energy
Pedro Ventura	Consulgal	Consultant	Financing and economic feasibility
Miguel Serras Pires	Consulgal	Consultant	Engineering

Description of the group's activities:

The support to the project was aimed to the implementation of energy efficiency and renewable energy sources in the retrofitting of a hotel in Madeira, including thermal passive measures of buildings, biomass for hot water and heating, energy and water management and solar PV for local use.

AREAM was providing assistance to the energy technical issues of the project and advisory on sustainable energy solutions.

Project funding was approved but due to administrative delays of regional authorities (caused by change of the Regional Government) the application was suspended and has to be resubmitted to a new incentives programme started recently in 2015.

Key outcomes:

- Identification of barriers: technical, administrative and financing.
- Discussion and selection of technologies and solutions (facade thermal insulation, biomass, windows and glazing, solar thermal, solar PV, lighting, heating, water management).
- Engineering projects are completed (some adjustments may occur due to financing restrictions, which depend on the incentives).
- Application for funding approved in the former incentive programme (will be resubmitted).

Future work:

- The operation is waiting for availability of financing through the incentive programme supported by European funds.
- Reformulation and submission of new application for funding.
- Procurement process for construction works, which includes the energy solutions.
- Implementation of energy efficiency and renewable energy operations.

2.9 Project name: Energy efficiency in a retirement home

Members of the working group:

Name	Organisation	Position	Role for the project
Filipe Oliveira	AREAM	Project manager	Project advisor and assistance on energy
Gorete Soares	AREAM	Technical	Technical analysis and energy study
Cecília Cachucho	Santa Casa da Misericórdia da Calheta	Manager	Promoter
Manuel Sequeira	Santa Casa da Misericórdia da Calheta	Manager	Economic and financing
Armando Ribeiro	Santa Casa da Misericórdia da Calheta	Volunteer advisor	Technical support

Description of the group's activities:

The support to the project was aimed to the implementation of energy efficiency and renewable energy sources in the retrofitting of a retirement home in Madeira, including solar PV and energy efficiency.

AREAM was providing assistance and advisory on sustainable energy solutions, including the site visit, energy measuring with electric analyser and check of energy bills. A report was presented including the analysis for dimensioning a solar PV system. AREAM also provided information about financing options and involved an ESCO to present a commercial offer.

Key outcomes:

- Identification of barriers: technical, administrative and financing.
- Discussion and selection of technologies and solutions (biomass or increase of actual solar thermal, solar PV, lighting, heating).
- Energy study report.
- Commercial offer from an ESCO for PV solar system.

Future work:

- The operation is waiting for availability of financing through the incentive programme supported by European funds.
- Implementation of energy efficiency and renewable energy operations.
- Replication in other retirement homes.

2.10 Project name: Electric buses to the shuttle Madeira airport-Funchal city

Members of the working group:

Name	Organisation	Position	Role for the project

Filipe Oliveira	AREAM	Project manager	Project advisor and assistance on technology survey
Cláudia Henriques	AREAM	Technical	Technology survey
Orlando Andrade	DRET	Director of energy services	Energy and electric mobility planning
Claudio Mantero	HF (bus company)	Planner	Strategic planning
Paulo Pereira	SAM (bus company)	Manager	Promoter
Rui Sá	CaetanoBUS (manufacturer)	Engineering on electric vehicles	Development of technology
José Costa	CaetanoBUS (manufacturer)	Engineering on electric vehicles	Development of technology
Stakeholders	Regional and local organisations	Representatives	Follow-up and replication

Description of the group's activities:

AREAM is supporting the technology survey and discussing with technology providers like CaetanoBUS and Siemens a technical solution for an electric bus in this bus service. CaetanoBUS is ready to offer a test bus for a limited period (3 to 6 months) to operate in the bus line. Conversations were also done with regional authorities for energy and transports (DRET) about this operation, as well with other bus companies that could also use the same bus for testing electric buses. It is necessary to collect information about technical requirements and about buses characteristics to check if adaptations are needed.

AREAM is also working with regional authorities on the financing scheme to support the operation.

Key outcomes:

- Identification of barriers: technical, administrative and financing.
- Discussion with technology providers, users, authorities and stakeholders.
- Agreement for a field test with an electric bus to operate the service.

Future work:

- Test with one CaetanoBUS electric bus to operate the service.
- Application for financing to the acquisition of electric buses.
- Replication in other bus companies.

2.11 Project name: Electric vehicles to the public fleets

Members of the working group:

Name	Organisation	Position	Role for the project
Filipe Oliveira	AREAM	Project manager	Project advisor, technology survey and energy auditing
Gorete Soares	AREAM	Technical	Energy auditing
Cláudia Henriques	AREAM	Technical	Technology survey

Orlando Andrade	DRET	Director of energy services	Energy and electric mobility planning
Ricardo Menezes	SRAPE	Technical	Implementation
Carlos Jesus	ZEEV	Manager	Technology provider

Description of the group's activities:

First this project was meant to consider municipal fleet, however due to restrictions on EU funds made this project not feasible for the near future for most municipalities. However, in the other hand, after the change on the Regional Government, this topic was raised as important also to the regional public fleet. A programme is about to be created in Madeira, called ECO.mob, based on a national initiative to promote sustainable mobility in public fleet. Legislation is being prepared with DRET and SRAPE. Concerning the municipal fleet, Funchal that is the main municipality in Madeira asked AREAM to perform an energy audit to the municipal fleet to study the opportunity to improve energy efficiency and adopt electric vehicles, among other actions.

AREAM also established a connection with a commercial company (ZEEV) that can offer a service similar to energy performance contract for electric vehicles.

Key outcomes:

- Identification of barriers: technical, administrative and financing.
- Discussion on the creation of ECO.mob programme in Madeira to promote sustainable mobility in public services and to introduce electric vehicles in public fleets.
- Starting with an energy audit to Funchal municipal fleet.

Future work:

- Creation of the programme ECO.mob in Madeira, including a financing scheme based in carbon fund and other financing sources.
- Introduction of a scheme similar to Energy Performance Contract for electric vehicles.
- Acquisition of electric vehicles in the scope of ECO.mob.

2.12 Project name: Micro-hydro in water distribution systems

Members of the working group:

Name	Organisation	Position	Role for the project
Filipe Oliveira	AREAM	Project manager	Project advisor, technology survey and energy auditing
Nélia Sousa	IGA / ARM	Project Manager	Promoter

Description of the group's activities:

IGA was merged to ARM that has recently changed administration board. On the other hand there is not yet financing support available and the project is in a waiting stage.

The role of AREAM is to integrate the project in the regional strategy of reducing CO2 emissions based on the Sustainable Energy Action Plan of Madeira Island (ISEAP-M), aiming to increase renewable energy sources.

Key outcomes:

- Identification of barriers: technical, administrative and financing.
- Discussion on the concept of using the water supply infrastructure to produce electricity.

Future work:

- Selection of sites.
- Elaboration of engineering project.
- Application for financing or adoption of energy performance contract with an ESCO.

3 Cluster of Estonia

3.1 Project name: District heating at Lauka and Kõrgessaare areas

Members of the working group:

Name	Organisation	Position	Role for the project
Jaanus Valk	Hiiu Municipality	Chairman of the council	Technical consultancy
Katrin Sarapuu	Hiiu Municipality	Vice-mayor	Financial and support mechanism consultancy
Liili Eller	Hiiu Municipality	Member of the government	Project management
Kristjan Ojasoo	Hiiu Municipality	Economy specialist	Technical consultancy
Kaidi Nõmmerga	Hiiu Municipality	Project manager	Communication and project management
Matti Lüsi		Consultant	Bankability studies, strategy plans
Ülo Kask	Tallinn Technical University / Hiiu municipality	Consultant	District heating technical solutions
Martin Kagadze	Käina sawmill	Entrepreneur	Resource consultancy
Üllar Metsand	OÜ Nõvajõe	Entrepreneur	Resource consultancy
Agu Kohari		Consultant	Specialist on co-operatives
Aira Toss	Hiiumaa Forest owners union	Consultant	Resource consultancy
Ruudi Kasser	Lauka sawmill	Entrepreneur	Resource and technical consultancy
Indrek Heinsoo	AS Eraküte	Entrepreneur	Specialist on district heating solutions

Description of the group's activities:

Working group has had regular meetings, involving also mentors of the national energy cooperatives mentoring programme. Public meetings have been held with stakeholders to specify the problems and agree the next steps in project development process.

Key outcomes:

- Working group has drawn more attention on the sustainable energy usage on local level as the possible income source for local people
- Entrepreneurs belonging to the working group, have expressed their interest to sell on local market, even if they get less income as logistics of the foreign trade are complicated and demand is unstable
- working group evaluated local biomass resource for heating, based on previous studies, business experiences, market trends and reached to understanding that local resource can cover local demand, even if there is significant increase in foreign demand
- bankability and different technical solutions of the district heating systems are analysed in details during the process

Future work:

- Working group will continue regular meetings until the end of the Hiiu municipality energy action plan 2015-2020 development process.
- Bankability analyses and initial task for construction project will be presented in late autumn of 2015.
- Negotiations with stakeholders about financing options will continue
- Compilation of the technical project will start earliest at 2016.

3.2 Project name: Construction of the low-energy social centre building – Kärdla

Members of the working group:

Name	Organisation	Position	Role for the project
Georg Linkov	Hiiu Municipality	Mayor	Financial and support mechanism consultancy. Lobby
Katrin Sarapuu	Hiiu Municipality	Vice-mayor	Financial and support mechanism consultancy
Kalle Komissarov	The Union of Estonian Architects	Architect	Consultant
Targo Kalamees	Tallinn Technical University/ Chair of Building Physics and Energy Efficiency	Head of Chair/Professor	Technical consultancy on preparation of the architectural competition
Kaidi Nõmmerga	Hiiu Municipality	Project manager	Communication and project management

Elle Voolma	Hiiu Municipality/ Social centre	Director	Service/operational consultancy
Kairi Hiis	Hiiu Municipality	Member of the government/ Head of Social department	Service/operational consultancy
Riho Tartu	Hiiu Municipality	Construction specialist	Technical consultancy
Jürgen Vahtra	Hiiu Municipality	Architect-planning specialist	Technical consultancy

Description of the group's activities:

Work group meeting were held for preparation of the architectural competition. Professional jury was evaluating the competition works, considering both architectural and energy saving criteria of the concept

Key outcomes:

- social centre architectural competition was the first of its kind (low-energy building concept) held in the municipality.

Future work:

- the municipality is continuing the work on finding financial solutions for the technical project and construction works.

3.3 Project name: Off-shore wind farm at north-west and north-east of the island Hiiumaa

Members of the working group:

Name	Organisation	Position	Role for the project
Georg Linkov	Hiiu Municipality	Mayor	MLG
Jaanus Valk	Hiiu Municipality	Chairman of the council	MLG
Jaanus Berkmann	Hiiu municipality	Member of the council	MLG
Siim Paist	Investor/ Nelja Energia AS	Development manager	Project management

Description of the group's activities:

Working group activities are concentrated on local benefit issues of the off-shore wind farm project- how local stakeholders can be part of the project and how local community can benefit.

Key outcomes:

- Spatial planning process has reached to the last stage during the SMILEGOV project
- Protocol of co-operation was signed between Hiiu municipality and the Nelja Energia AS energy company. This cooperation enables local people to acquire shares of the

wind park, while the energy company will support local life through foundation annually.

Future work:

- Approval of the spatial plan
- Continuing negotiations with the investor on more detailed co-operation, involving other island municipalities
- Municipality has applied together with other European partners, INTERREG Baltic Sea programme project, about increasing social acceptance of wind energy at the local level through citizen involvement.

3.4 Project name: LED streetlights and smart control systems – Hiiumaa

Members of the working group:

Name	Organisation	Position	Role for the project
Jaanus Valk	Hiiu Municipality	Chairman of the council	Consultancy
Kaidi Nõmmerga	Hiiu Municipality	Project manager	Communication and project management
Liili Eller	Hiiu municipality	Member of the council	Project management
Kristjan Ojasoo	Hiiu Municipality	Economy specialist	Technical consultancy
Riho Tartu	Hiiu Municipality	Construction and land specialist	Technical consultancy

Description of the group's activities:

Working group has had regular meetings in the framework of Hiiu municipality energy action plan 2015-2020

Key outcomes:

- bankability and different technical solutions of street lighting systems are analysed during the Hiiu municipality energy action plan development process

Future work:

- Hiiu municipality energy action plan 2015-2020, including street lighting project will be presented to the municipality council in October 2015
- the municipality is continuing the work on finding financial solutions for the technical project and construction works.

3.5 Project name: Vormsi CHP

Members of the working group:

Name	Organisation	Position	Role for the project
Urmas Pau	Smart Vormsi NPO	Member of the board	Project manager
Tanel Viks	Vormsi Municipality	Mayor	Project management
Ove Koska	Vormsi Municipality	Council member	Technical consultancy
Ivo Sarapuu	Vormsi Municipality	Council member	Resource consultancy

Description of the group's activities:

Working group has had regular meetings, involving also mentors of the national energy cooperatives mentoring programme. Public meetings have been held with stakeholders to specify the problems and agree the next steps in project development process.

Key outcomes:

- The working group drew more attention on the sustainable energy usage on local level as the possible income source for local people
- The working group evaluated local biomass resource for CHP, based on previous studies, business experiences, market trends and reached to understanding that local resource can cover local demand
- The bankability and technical solutions provided by the CHP are analysed in detail during the process

Future work:

- Working group will continue regular meetings until the end of the Vormsi CHP development process.
- Bankability analyses and initial task for construction project will be presented in late autumn of 2015.
- Negotiations with stakeholders about financing options will continue
- Compilation of the technical project will start in January 2016.

4 Cluster of Malta

4.1 Project name: LifeMed Green Roof Project

Members of the working group:

Name	Organisation	Position	Role for the project
Architect Antoine Gatt	University of Malta	Landscape Architect	Project Manager; University of Malta is studying the performance of green roofs in the local context and establishing how these can contribute towards meeting energy and environmental targets.

Ing. Francis Farrugia	Malta Competition and Consumer Affairs Authority	Head of Standardization	MCCAA provides the necessary European and International practices and guidelines to deliver the results that the project seeks.
Dr. Massimo Valagussa	Minoprio Analisi e Certificazioni S.r.l. (MAC)	Technical and Scientific Consultant	Agriculture and Research Laboratory conducting studies on green roof growing media and assisting Maltese partners in the tests being carried out. In addition they are also assisting the MCCAA in the drafting of the Maltese green roof standard.
Dr. Alberto Tosca	Fonazione Minoprio	Researcher	Non-profit research and educational corporation. Their role is research related to plant propagation and survival and identifying species adapted for the green roof. They are also responsible for the construction of the demonstration green roof in Italy and running the tests for insulation and storm water management.

Description of the group's activities:

The University of Malta is carrying out the study with the help of other organisations that are specialized in Green Roof Technology. Experts have contributed to the progress of the project in identifying species that adapt to green roofs, conducting studies on green roof growing media and assist Maltese partners in the tests being carried out.

The group's activities include drafting national guidelines for green roof construction, drafting of national planning policy and presentation to the local planning authority, monitoring the perception of the target audience in relation to the concept of green roofs and assessing the socio-economic impact of the project actions, including networking with other projects.

Key outcomes:

- Promote green roof technology through open days, technology fairs and student based and cultural activities
- Analyse public perception on green roofs – this has been done in the form of a questionnaire and results still need to be analysed.

Future work:

- Demonstrate the green roof for educational and research purposes
- the green roof will be utilised as an open laboratory for further testing and experimentation of various aspect of the technology.
- The location of the green roof at the University of Malta means that students could still use the green roof for research purposes. The biology, agriculture, architecture and engineering faculties could all make use of the site to refine further the green roof technology in Malta and other semi-arid environments.
- Promotion of the green roof through demonstration activities should be continuous for the effectiveness and success of the project.

5 Cluster of Sweden

5.1 Project name: Biogas Öland

Members of the working group:

Name	Organization	Position	Role for the project
Henrik Yngvesson	Municipality of Mörbylånga	Mayor	Politician
Cajsa Lindberg	Municipality of Mörbylånga	Environmental manager	Official, expert
Elvira Laneborg	Municipality of Mörbylånga	Sustainability strategist	Official, expert
Bengt Johansson	Municipality of Mörbylånga	Head of building dep	Official, expert
Marie-Christine Svensson	Municipality of Mörbylånga	Head of planning dep	Official, expert
Niclas Beerman	Municipality of Mörbylånga	Technical manager	Official, expert
Hans Sabelström	Municipality of Mörbylånga	Politician	Politician, expert farming
Stefan Hermansson	Småländska bränslen AB	Entrepreneur	Investor
Per Ålind	KLT, public transport operator	procurement regional buses	Consumer

Description of the group's activities: The group has had regular meetings to bring action to the plans for biogas in Mörbylånga, bringing different expert areas together to find a suitable placement for a filling station for pure biogas within the municipality of Mörbylånga.

Key outcomes:

- agreement between the entrepreneur and the municipality on biogas consumption and biogas distribution decision on physical placement of biogas filling station in Mörbylånga
- decision on biogas for school buses next agreement period (2017-2027)
- initiated discussion on municipal vehicle fleet to partly be run by biogas
- initiated discussion on how to start production of biogas on Öland

Future work:

- continuation of the work for biogas development on Öland
- collaboration between the municipalities of Borgholm and Mörbylånga
- boost to group of farmers
- investigation of suitable placements for a production site
- application for national funding on biogas investments

5.2 Project name: PV Public Buildings Öland

Members of the working group:

Name	Organization	Position	Role for the project
Peter Asteberg	Municipality of Mörbylånga	Project coordinator	purchaser
Elvira Laneborg	Municipality of Mörbylånga	Project coordinator	strategist
Tommy Lindström	Municipality of Borgholm/Regional administrative Board	Regional coordinator energy/climate	regional expert
Magnus Laneborg	Municipality of Kalmar	energy expert	inspirer

Description of the group's activities:

This group of experts shared knowledge and know-how on installations of PVs on official buildings. All meetings happened with the use of teleconference and the exchange of digital material except for one meeting, a study visit around the PVs in Kalmar.

Key outcomes:

- PV set-up on technical building for water supply in Triberga, Municipality of Mörbylånga
- Exchange of knowledge and know-how
- Regional awareness and interest in technologies with solar energy.

Future work:

- have more PV-installations
- make discussion on PV-technology part of every new project on municipal buildings
- develop an extended cooperation between municipalities in the region on PVs.

5.3 Project name: EPC Öland

Members of the working group:

Name	Organization	Position	Role for the project
Tommy Lindström	Municipality of Borgholm/Regional administrative Board	Regional coordinator energy/climate	Regional expert
Magnus Petersson	BEAB, Borgholm	Engineer	Property manager
Bo Tor	BEAB, Borgholm	Chief of properties	Property manager

Description of the group's activities:

The group has focused on five public buildings and how to make them energy efficient with simple means and low investment costs. The groups has also informed politicians and decision makers of the benefits and savings which easily can be made in these buildings. Energy inspections and inventorying of the buildings has been done to collect data for future actions.

Key outcomes:

- Inspections and inventory of five public buildings.
- Knowledge of easy and cost efficient ways of making building more energy efficient.
- Strategy on how and where to start an EPC project.
- A building strategist has been employed in the municipality of Borgholm.

Future work:

- Have the politicians to realize the benefits and savings done by investing in EPC.
- Find fundings to able the EPC project to get launched.
- Work towards a decision in when to start the EPC implementation.

6 Cluster of Spain

6.1 Project name: Wind turbine for seawater desalination in Fuerteventura

Members of the working group:

Name	Organisation	Position	Role for the project
Tanausú Herrera	Fuerteventura Council	Engineer	Project partner
Andrés Rodríguez	Fuerteventura Council	Engineer	Project partner
Celia Bueno	ITC	Head of Section Res Department	Technical Assistance
Baltasar Peñate	ITC	Head of Water Department	Technical Assistance
Miguel A. Rodriguez	TRAGSA	Technical Department Canarias	Technical Assistance
Felipe Sánchez	Agriculture Regional Ministry	Irrigation Area Responsible	Project manager

Description of the group's activities:

The group has been coordinating activities for the development of the project: consulting, administrative and engineering issues. The best location for the windturbine has been defined for the maximum wind use in order to satisfy the energy demand of the desalination system. Several wind manufacturers have been contacted. The beneficiaries of the water use have been contacted for better satisfying their water requirements. This project is being funded by FEADER programme (UE)

Key outcomes:

- Technical project execution
- Call for tender
- Building supervision

Future work:

- Administrative procedures
- tender process
- commission

6.2 Project name: Wind turbine for seawater desalination in Lanzarote

Members of the working group:

Name	Organisation	Position	Role for the project
Domingo Pérez	Consorcio Aguas Lanzarote	Director	Project partner
Baltasar Peñate	ITC	Head of Water Department	Technical Assistance
Fernando Castellano	ITC	Head of Section REs Department	Technical Assistance
Miguel A. Rodriguez	TRAGSA	Technical Department Canarias	Technical Assistance
Felipe Sánchez	Agriculture Regional Ministry	Irrigation Area Responsible	Project manager

Description of the group's activities:

The group has been coordinating activities for the development of the project: consulting, administrative and engineering issues. The best location for the windturbine has been defined for the maximum wind use in order to satisfy the energy demand of the desalination system. Several wind manufacturers have been contacted. This project is being funded by FEADER programme (EU).

Key outcomes:

- Technical project execution
- Call for tender
- Building supervision

Future work:

- Administrative procedures
- tender process
- commission

6.3 Project name: Microgrid in La Graciosa Island

Members of the working group:

Name	Organisation	Position	Role for the project
Daniel Hernández	ITC	Head of Section REs	Technical Assistance

		Department	
Jesús de León Izquier	ITC	Head of Section REs Department	Technical Assistance
Alejandra Martinón	Cabildo Lanzarote	Head of European projects	Political assistance
Elena González	Cabildo Lanzarote	Head of Energy Area	Political assistance
José Manuel Valle	ENDESA Canarias	Director of Institutional Relations	Technical Assistance
Eduardo Mascarell	ENDESA Distribución (DSO)	Innovation Department	Technical Assistance
Jorge Sanchez Cifuentes	ENDESA Energía (Retailer)	Innovation Department	Technical Assistance

Description of the group's activities:

Several meetings have been celebrated to discuss about the microgrid project in La Graciosa. The objectives of the meetings were:

- Discussing technical solutions to implement the micro-grid according the current regulation in Spain and the role of each stakeholder.
- Discussing the scope of the studies developed thanks to the funds obtained by ITC and the Cabildo of Lanzarote from European Commission and Regional Government respectively.
- Searching for other funding opportunities.
- Presentation of the results obtained from the several studies developed
- Specific technical discussions to prepare project proposals once a call opportunity has been identified.

Key outcomes:

- Study for the integration of a storage system in the island for energy management purposes.
- Identification and presentation of a project proposal funded by CDTI (research and innovation program funds from Spanish Government): The working group identified in June 2015 a call from CDTI (https://www.cdti.es/). After some technical meetings a project proposal was presented in august 2015.
- Approval of the aforementioned proposal: The proposal was accepted for funding. The project has a total budget of 1.6 M€, 40% financed by CDTI.

Future work:

- An extended micro-grid simulator will be developed for the specific case of La Graciosa.

- Storage systems for power control will be installed and tested in the island. The objective is to install and operate several storage systems approaches for power balancing integrating on-roof solar PV systems connected to the Low Voltage grid of La Graciosa.

6.4 Project name: Multimegawatt windturbine in Gran Canaria

Members of the working group:

Name	Organisation	Position	Role for the project
Luis Ibarra	Las Palmas Port	President	CEO
Salvador Capella	Las Palmas Port	Director	CEO
Ángel Víctor Torres	SPEGC	Insular Minister of Infraestructures	CEO
Leonardo Marcos	SPEGC	Insular Energy Director	CEO
Gabriel Mejías	ITC	General Director	CEO
Javier Pardilla	ITC	Managing Director	CEO
Gonzalo Piernavieja	ITC	R+D Director	Technical Assistance
Salvador Suárez	ITC	Head of REs Department	Technical Assistance
Fernando Castellano	ITC	Engineer. Head of Section REs	Technical Assistance
Mónica Mesa	SPEGC	Lawyer	Legal Assistance

Description of the group's activities:

The test platform in Arinaga Harbour has two different positions (A and B) for multi-megawatt wind turbines, and the project is being implemented in phases since the year 2012, as follows:

PHASE I: Measuring tower (Implemented)

PHASE II.a : Installation of the first prototype at the "Position A" in Arinaga Quay. The G11X-5MW offshore wind turbine prototype supplied by Spanish manufacturer GAMESA (R&D currently being carried out)

PHASE II .b: Installation of a new prototype at the "Position A" in Arinaga Quay. the AD 8-180 of 8 MW offshore wind turbine prototype supplied by ADWEN (joint venture of Areva and Gamesa for offshore production). Project installation in 2016.

PHASE III: Power evacuation line and electrical conduit to the grid connection point (implemented)

PHASE IV: Installation of a wind turbine at "Position B" in Arinaga Quay with a maximum height of 184 meters and a maximum capacity of 8.5 MW (available and pending implementation)

With the goal of advancing in the PHASE IV of the project by installing a wind turbine in "Position B", an information dossier which summarizes the characteristics and basic conditions

of the aforementioned test platform has been drawn up and sent to the main turbine manufactures to ask for an Expression of interest in September 2014.

PHASE II.b: Installation of the **AD 8-180** of 8 MW.

- The main components of the onshore prototype of Adwen's 8MW offshore turbine are currently under production at Bremerhaven.
- The turbine will be commissioned in 2016.
- The original schedule was to install the prototype by the end of 2015, launch pre-series production in 2016 and undergo certification in 2017 before starting series production in 2018.
- Manufacturer expects to achieve certification in 2017 and series production in 2018.
- Agreement signed today with Fraunhofer IWES to test the turbine's drivetrain at IWES's new Dynalab. The tests, starting in December, will include mechanical testing on the integral chain of drive train components.
- The turbine has been selected for three French projects totalling nearly 1.5GW: St-Brieuc, Le Tréport and Yeu & Noirmoutier.

Key outcomes:

- Contract with ADWEN for the new project in position A (February 2015)
- Modification of the project and concession with Las Palmas Port Authority
- New Environmental Authorization
- Electrical infrastructure project and budget.
- Promotion of the “position B” to install a new prototype
- Promotion of the “Test Site”. Looking for funding at Regional and National level

Future work:

- Collaboration with ADWEN in the installation of the prototype y position A
- Construction of new Electrical infrastructure that allows increasing the installation of wind power in the harbour.
- Contract with new manufacturer for the “position B”.
- Promotion of the “Test Site”. Looking for funding and projects at Regional and National level.

6.5 Project name: Strategies for EV promotion with alternative energies in the Canaries

Members of the working group:

Name	Organisation	Position	Role for the project
Javier García-Carballo	Regional Ministry of Economy, Industry, Trade and Knowledge	Head of Service, Area of Energy	Promoter
Salvador Suárez	ITC	Head of RES Department	Technical studies, and elaboration of the Regional Strategic Planning for the deployment of electric

			mobility in the Canary Islands
Mercedes Díaz	ITC	Head of Department	Organization of awareness activities (meetings and workshops with local stakeholders)

Description of the group's activities:

The Regional Government of the Canaries came to an agreement with the Canary Islands Institute of Technology (ITC) in order to develop a Plan for the Implementation of EV in the Archipelago. ITC has been coordinating the whole strategy, acting as technical assistant of the decision makers, promoting multilateral meetings and workshops among stakeholders for the validation of the Plan and driving the awareness rising campaign through the media and the creation of a web platform. ITC is also working with regional authorities for the identification of the best financing scheme to support the actions.

Key outcomes:

- Identification of technical, administrative and financing barriers: DAFO analysis
- Development of the "Plan for the implementation of EV with alternative energies"
- Web site for maximum awareness
- New charging points installed in the islands

Future work:

- Identification of financing scheme to support the proposed actions
- Organisation of training courses and identification of different ways to increase social awareness
- Political agreement on incentive measures to be approved: taxes, legislation etc.

7 Cluster of CPMR

7.1 Project name: Biomass Project – Isle of Man

Members of the working group:

Name	Organisation	Position	Role for the project
Ken Milne	Isle of Man Gov't	Responsible for the offshore renewables project	Project coordinator
Kristian Cowin	Isle of Man Gov't	Project Manager, Biomass project	Project coordinator
Bernard Warden	IoM Government	Manager, Dept of Environment	Member of WG
Richard Bujko	Manx Electric utility	Business Development & Strategy Manager	Member of WG

Richard Cuthbert	IoM Government	Energy Officer	Member of WG
Muriel Garland	Zero Waste Man	Manager	Member of WG
Cat Turner	Isle of Man Friends of the Earth	Head of Office	Member of WG
George Fincher	The Manx Energy Advice Centre	Manager	Member of WG
Diana Mompoloki	Council of the Isles of Scilly	Energy Manager	Member of WG
Luisa Hillard	Isle of Wight	Councilor	Member of WG

Description of the group's activities:

The group dealt with the challenges of the two projects identified for further analysis and development on the Isle of Man. External members of the group included local NGOs, the utility and a number of government departments The discussions were organized with external members and coordinated between the members of the working group leaders.

Key outcomes:

- Research to improve the quality of the fuel
- Analysis of the barriers impeding the implementation of the biomass utilisation project and recommendations to overcome them
- Business models development for the penetration of biomass utilisation in small scale installations
- Analysis of Investment requirements and proposal of financing tools

Future work: Strong commitment of all members of the WG to continue working together for:

- Continued improvement of the quality of the fuel
- Improvement of the price competitiveness of the biomass fuel price compared to competitive fuels such as gas, through economies of scale
- Development of one of more innovative financing tools such as cooperatives or crowd funding schemes
- Organisation of public awareness campaigns to demonstrate the benefits of local biomass utilisation in small installations

Agreement to organise a teleconference with the CPMR every three months to report progress on the above

7.2 Offshore renewables project (marine & wind energy)

Members of the working group:

Name	Organisation	Position	Role for the project
Ken Milne	Isle of Man Gov't	Responsible for the offshore renewables project	Project coordinator
Kristian Cowin	Isle of Man Gov't	Project Manager,	Project coordinator

		Biomass project	
Bernard Warden	IoM Government	Manager, Dept of Environment	Member of WG
Richard Bujko	Manx Electric utility	Business Development & Strategy Manager	Member of WG
Richard Cuthbert	IoM Government	Energy Officer	Member of WG
Muriel Garland	Zero Waste Man	Manager	Member of WG
Cat Turner	Isle of Man Friends of the Earth	Head of Office	Member of WG
George Fincher	The Manx Energy Advice Centre	Manager	Member of WG
Diana Mompoloki	Council of the Isles of Scilly	Energy Manager	Member of WG
Luisa Hillard	Isle of Wight	Councilor	Member of WG

Key outcomes:

- Research on the feasibility and economic viability of wave energy schemes
- Analysis of the barriers of gaining access to export markets for renewables such as the UK electricity market
- Advice to improve understanding of the business models required for the successful implementation of pre-market technologies such as wave and other marine energy technologies

Future work:

- Continued efforts to advance intergovernmental negotiations with the UK government and regulator in order to resolve the market access issues that are a pre-condition for the development of the large scale offshore wind power project off the coast of the island
- Continued consultations with the members of the WG with the view to ensure adequate measures for minimal environmental impact of the project to the marine environment.

Agreement to organise a teleconference with the CPMR every three months to report progress on the above.

8 Cluster of Greece

8.1 Project name: Desalination with RES

Members of the working group:

Name	Organisation	Position	Role for the project
Kostas Komninos	DAFNI	Energy expert	Project manager

Ilias Eftymiopoulos	DAFNI	Energy expert	Project manager
Nikos Mainas	Municipal Company for the Water and Waste Water Management in Santorini	Director	Monitor of Local projects
Vasilios Theonas	Independent consultant	Environmentalist	Environmental Licensing

Description of the group's activities:

The work held two meetings in the premises of DAFNI in Athens in September and November 2014 in order to discuss the progress of DAFNI's meetings with the Regulatory Authority for Energy and potential investors. The DAFNI personnel was also in frequent contact with the members of the working group through phone and emails keeping them posted on the activities undertaken. The members were also contacted for consultation upon specific issues related to their role

Key outcomes:

- Data collection regarding operational characteristics of existing typical desalination plans
- Description of the updated environmental licencing process of desalination plants
- Preparation of a list of potential stakeholders interested to the project
- Preparation of a policy recommendation to be communicated to the Regulatory Authority for Energy

Future work:

- The members of the working group taking into account that have been in contact before SMILEFOV will remain in contact and through frequent communication and ad-hoc collaborations on specific issues they will continue promoting the project.
- The working group has already discussed the possibility to launch the first projects on desalination with RES in the island of Santorini were both Mr. Mainas and Mr. Theonas are involved. The DAFNI personnel would wish to replicate these first applications to more islands of the network.

8.2 Project name: Geothermal district heating Lesvos

Members of the working group:

Name	Organisation	Position	Role for the project
Kostas Komninos	DAFNI	Energy expert	Project manager
Despoina Makri	Municipality of Lesvos	Engineer	Data monitoring
Ioannis Matsinos	University of the Aegean	Professor	Know-how of the existing installations
Michalis Vrachopoulos	University of Chalkida	Geothermal energy expert	Technical consultant

Description of the group's activities:

The working group did not hold any plenary meeting since the members are all based in distant locations and was mainly relying on bilateral meetings between the DAFNI personnel and the rest of the group. The members are representing key organisations for the future progress of the project since the municipality is the owner of the geothermal drill while the institutions were members of the pilot project consortium and have strong institutional interest on geothermal energy. The members of the working group mainly assisted the project development in the data collection process and also providing contacts at local and regional level from different sectors.

Key outcomes:

- Data collection regarding the history of the project and the different implications
- List of key stakeholders related to the project
- Technical and economic data regarding the pilot project installation and operation
- Technical consultation regarding geothermal district heating

Future work:

- The members of the working group remain in contact and support the elaboration of the project with their own efforts and contacts
- The academic members have expressed their will to capitalise on the project in terms of further academic and research work in the framework of thesis from students and future project proposals for the further exploitation of the geothermal field

8.3 Project name: Street lighting saving in 5 islands

Members of the working group:

Name	Organisation	Position	Role for the project
Frangiskos Topalis	Technical University of Athens	Professor	Technical consultant
Lambros Doulos	Technical University of Athens	Researcher	Technical consultant
Kostas Komninos	DAFNI	Energy expert	Project manager
Ilias Eftymiopoulos	DAFNI	Energy expert	Project manager

Description of the group's activities:

The working group has held several meetings during SMILEGOV life to discuss technical details of the projects, investigate the state of the market and the willingness of investors to finance the project through EPC schemes. The meetings were also focused on the definition of the special characteristics of the projects being realised on islands of different sizes, mix of luminaires, seasonal loads, number of settlements etc. The group also contributed in reaching out to the right organisations related to the promotion of EPC but also build on their European experience on similar projects.

Key outcomes:

- Mapping of the relevant market; list of contacts (importers, producers, ESCOs etc.)
- Analysis of the state of the technology and possible synergies with the smart grid applications to be deployed on the islands of interest.

- Good practices of EPC for street lighting projects
- Mapping of the EU directives and protocols and their potential progress the next years

Future work:

- Joint organisation of workshops in the islands to present the projects and invite interested parties to contribute to the discussion
- Planning for a joint capacity building specifically for EPC in street lighting and for the efficient preparation of tender documents with the adequate specifications
- Widespread the project idea to more islands of the DAFNI network
- Scientific assistance by NTUA to DAFNI in the preparation of the tender documents

8.4 Project name: EVs in 5 islands

Members of the working group:

Name	Organisation	Position	Role for the project
Alex Papalexopoulos	ECCO	Energy expert	Technical consultant
Alexis Chatzimpiros	DAFNI	Energy expert	Project manager
Evangellos Dialynas	National Technical University of Athens	Professor	Technical consultant
Dimitris Micharikopoulos	Fortisis	Energy expert	Technical consultant

Description of the group's activities:

The working group did not hold any plenary meeting since the members are all based in distant locations and was mainly relying on bilateral meetings between the DAFNI personnel and the rest of the group. The role of the working groups was mainly bridging DAFNI and the local authorities with the EV and charging stations market and technology. The members of the group provided technical advice to DAFNI in several occasions.

Key outcomes:

- Contribution in the short report presenting the state of the art of the technology
- Contribution in the report on the methodology that should be followed for the effective planning of e-mobiity in an island

Future work:

- DAFNI building on the good collaboration with the working group will maintain the technical consulting relationship with the members
- The group has already expressed interest to support the realisation of the EV tour to the islands

8.5 Project name: Wind park in Andros island

Members of the working group:

Name	Organisation	Position	Role for the project

Kostas Komninos	DAFNI	Energy expert	Project manager
Ilias Eftymiopoulos	DAFNI	Energy expert	Project manager
Kostas Vourekas	Independent consultant	Architect	Landscape architecture
Eleni Mougiakou	Independent consultant	Agricultural engineer	Environment impact

Description of the group's activities:

The group met a few times mainly to assess the progress of the study for the assessment of the environmental and landscape impacts of the wind park.

Key outcomes:

- Development of a replicable methodology to assess landscape impact from wind turbines in Greek islands of complex terrain.

Future work:

There is no specific future work foreseen for the working group since most of the work for the elaboration of the park is already there.

9 Cluster of ESIN

9.1 Project name: Street lighting on Keistiö

Members of the working group:

Name	Organisation	Position	Role for the project
Janne Gröning	Local community of Iniö	Inhabitant of Keistiö, Member of the Board	Local contact person
Jan-Erik Karlsson	Local community of Nagu	Inhabitant of Nagu, Member of the Board	Advisor
Alf-Peter Heino	Municipality of Pargas	Energy Advisor	Advisor
Tove Mattsson	Local community of Iniö	Inhabitant of Iniö, Chairman	Member
Mikael Lindholm	Municipality of Vårdö	Councellor of Vårdö	Advisor
Christian Pleijel	ESIN	Vice President	Project Manager

Description of the group's activities:

- **First meeting** on September, 4, 2013 in Mariehamn: making a SWOT analysis and drawing conclusions from this (see *Workshop Report*).

- **Second meeting** on January, 21-22, 2014 on Nagu: a Six Thinking hats workshop including energy calculations, see "fishbone structure" in the *Workshop Report*.
- **Third meeting** on April 9-11, 2014 realised as a study travel to Samsø, learning about the social and technical aspects of the change towards sustainability, biogas, EV's, and financing, see *Travel Report from Samsø*.
- **Fourth meeting** on May, 8, 2015 on Iniö with the whole local community board: energy discussions, islands that are role models (Samsø, Tiree, Terschelling, Tilos?), the ecological footprint of Iniö, the ISEAP, planning for a Future Search conference later 2015, see *Minutes from meeting*.

Key outcomes:

- **First outcome**: the street lighting on Keistiö was changed to LED lamps, September 2013
- **Second outcome**: the knowledge level of the group in energy matters was significantly raised through the study visit on Samsø.
- **Third outcome**: the wind turbine was erected and connected to the local grid, producing energy for the street LED lighting, September 2014
- **Fourth outcome**: the local community board decided to develop an integrated island strategy, May 2015.

Future work:

A Future Search conference/workshop aiming at developing an island integrated strategy is planned for spring 2016. ESIN will manage the meeting through its vice president (the project manager of SMILEGOV) and support the process after that.

9.2 Project name: Biogas plant on Nagu

Members of the working group:

Name	Organisation	Position	Role for the project
Jan-Erik Karlsson	Local community of Nagu	Inhabitant of Nagu, Member of the Board	Local contact person
Petra Palmroos	Municipality of Pargas, local office of Nagu	Official	Administrator
Johan Broos	Local community of Nagu	Chairman	Ruler
Mikael Holmberg	Municipality of Pargas	Chairman	Ruler
Alf-Peter Heino	Municipality of Pargas	Energy Advisor	Advisor
Janne Gröning	Local community of Iniö	Inhabitant of Keistiö, Member of the Board	Advisor
Mikael Lindholm	Municipality of	Councellor of Vårdö	Advisor

	Vårdö		
Christian Pleijel	ESIN	Vice President	Project Manager

Description of the group's activities:

- **First meeting** on September, 4, 2013 in Mariehamn: making a SWOT analysis and drawing conclusions from this (see *Workshop Report*).
- **Second meeting** on January, 21-22, 2014 on Nagu: a Six Thinking hats workshop including energy calculations, see "fishbone structure" in the *Workshop Report*.
- **Third meeting** on April 9-11, 2014 realised as a study travel to Samsø, learning about the social and technical aspects of the change towards sustainability, biogas, EV's, and financing, see *Travel Report from Samsø*.

Key outcomes:

- **First outcome**: the biogas plant idea came up in September, 2013
- **Second outcome**: practical, technical and financial knowledge of biogas plants in practice through the study visit to Samsø, April 2014
- **Third outcome**: a proposal including technical and financial aspects was submitted to the local community board of Nagu and proposed to the municipality of Pargas, spring 2015.

Future work:

Political lobbying for the project, autumn of 2015/spring 2016. Outline of a PPP-funding solution where the church, the municipality and a private entrepreneur (farmer) finances the project in a partnership, spring 2016.

10 Cluster of Scotland

Each community led Island energy project SIF registered with SMILEGOV had **already** been initiated by a local working group, typically comprising island volunteers, sometimes working alongside one or more staff of a local Development Trust or similar charitable NGO. Professional support services including technical expertise for feasibility studies, financial analysis, legal advice and project management are available through the CARES programme, which provides Government Grants and Loans to such groups.

SIF's consultant partner in SMILEGOV, Community Energy Scotland (CES) may be credited for development of Scotland's successful model for community led energy projects. CES has extensive specialist experience of supporting, guiding and advising community energy groups through protracted complexities of each project, (though some groups procure specialist help from other providers). Typically, local groups of volunteers form a Company during the process of developing a viable project.

For present purposes, the SIF Board presents itself as the core 'Working Group' concerned with promotion of ISEAPs for SIF's Scottish cluster of SMILEGOV islands, pending appointment of a dedicated SIF staff member, early next year. (They will be expected to develop broader MLG representation in the group, to include local and central government representatives, energy specialists, academic and others. After SMILEGOV, as during the project, SIF intends and hopes

that CES will augment the capacity of our organisation's unpaid volunteer Directors to make a positive strategic difference).

Members of the Scottish Island Federation Board and a CES representative tbc thus constitute the nominal core Scottish Islands Sustainable Energy Working Group:

Name	Organisation	Position	Role for the project
Camille Dressler	SIF/ Small Isles Community Council	Chair SIF/ Member	Project Management
Sandy Brunton	SIF/ Mull and Iona Community Trust	SIF Board Member/ MICT Chair	Project Management
Frank Corcoran	SIF/ Cumbrae Initiative Community Company	Board Member	Project Management
Alastair Fleming	Luing Community Trust	Board Member	Project Management
Felix Wight	Community Energy Scotland		Expert

Description of the group's activities:

As 'Cluster Leader' The Scottish Islands Federation Board invited and has overseen the involvement of SIF members in SMILEGOV as a principle activity of the organisation since July 2013. The Board has managed project finances, and met regularly with the in house consultant Project Officer (generally by telephone or Skype), to support, review and plan progress.

On the advice of CES, The SIF Board has also initiated and overseen a separately funded project directly inspired and stimulated by SMILEGOV, to commission Energy Audits for each of 8 Islands within our cluster, alongside SMILEGOV workshops and other related activities and events.

SIF Board members are actively involved with ESIN, Eco-islands, LEADER, The Development Trusts Association Scotland, the Scottish Rural Parliament and other networks.

Key outcomes:

- Through SMILEGOV, and working alongside CES and through extensive contacts, SIF has gained a unique overview and appreciation of energy issues on Scottish Islands.
- Building on this insight and experience, SIF has successfully negotiated 50% core funding for a 3 year programme of activity agreed with the Scottish Government, to pursue work with island communities on energy and other issues. (Formal ratification is pending as at November 2015)
- Through SMILEGOV SIF has raised the profile of sustainable energy amongst our cluster of participating island communities and for key MLG agencies, in Scotland and beyond. eg The recent Eco-islands summit in Okinawa invited a SIF Nominee to deliver a presentation.
- Through SMILEGOV, SIF has achieved valuable networking between cluster members, with constructive exchange of ideas and information between islands. (eg Fundraising ideas from Mull adopted by Bute)
- SIF's response to a recently closed UK Government consultation on Feed in Tariffs was very much informed by wider knowledge and experience gained through SMILEGOV.

Future work:

- SIF Board is currently exploring possibilities for funding to match the Scottish Government's anticipated 50% award and considering remit of worker(s) to be appointed, as well as practicalities of engaging student interns/ placements.
- SIF is keen to refine methodology for island communities to produce their own energy audits and is also promoting development of ISEAPs, to follow on from Audits, to support business cases for island energy projects.
- SIF recognises benefits of wider networking with islands elsewhere (though ESIN et al), negotiating opportunities for Scotland to host ESIN AGM and Eco Islands summit in 2017.
- SIF is committed to supporting island communities to express their needs, and challenges and to working with Governments, Local Authorities and other agencies to address them.
- SIF Directors are keen to establish a wider group of interested stakeholders to act as a strategic advisory group for island energy issues in Scotland, involving some of the individuals who have been involved in SMILEGOV alongside others.

Local Working Groups

It is beyond the capacity of SIF to report details of the many names and varied roles of all members of all local working groups still less, details of all their activities or future plans. We can only report the help and support we have delivered to each organisation.

Contacts for local working groups:

Name	Organisation	Position	Role for the project
Bill Calderwood	Arran Community Energy	Trustee	Leader - Wind
Boyd Alexander	Bute Community Power	Development Officer	Project Development - PV
Reeni Kennedy Boyle	Fyne Futures, Bute	Manager	Biodiesel
Frank Corcoran	Cumbrae Initiative Community Company	Chair	Local Champion - Wind
Fergus Waters	Gigha Heritage Trust	CEO	Management Wind
Andy Oliver	Gigha Heritage Trust	Turbine Monitor	Development Wind
Shiona Ruhemann	Iona Community Council	Iona Community Council Rep.	Local Champion - Renewables
Sebastian Tombs	Lismore Community Trust	Chair	Project not going ahead
Alastair Fleming	Luing Community Trust	Director	No projects planned
Moray Finch	Mull and Iona Community Trust	General Manager	ACCESS Partner
Nigel Burgess	Green Energy Mull	Director	Hydro completed
Stewart Connor	Canna Community Development Trust	Renewable Energy Manager	Project Development

Description of the group's activities:

SIF chair has been in regular contact with the members of the group to review progress.

Group has met at the SIF AGMs.

Key outcomes:

Solutions have been identified for bankable projects, either technical or financial. When bankable projects have hit a wall owing to UK legislation changes, such as the recent changes to legislation on Feed in Tariff which has severely affected the viability of some of the renewable projects, SIF has gathered the views of the group and made representation to the appropriate bodies and through Members of Parliament and Members of the Scottish parliament.

Future work:

As part of the SIF work which will be funded by the Scottish government, there will be:

- A review of identified measures towards building comprehensive ISEAPs
- Work towards making island transport more sustainable in connection with renewable energy projects (installing charging points, looking into setting up EV vehicle buying cooperatives)
- Initiation of cooperation with universities and other academic bodies
- A yearly review of the energy audits done
- Visits of SMILEGOV project members (return visit to Estonia; visit from the Brittany islands (AIP) to Gigha, Mull or Eigg)