PANEL 2050

Project Manual

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PROJECT REPORT

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Content

1. Glossary

Agents of Change

Agents of change are considered the actors who are contributing to the transition process in terms of developing the niches. (Seyfang, G., & Haxeltine, A. 2012)

Advocacy

The act or process of supporting a cause or proposal with a long term view. (Tolotto M, Silina M. 2015)

Carbon Conversation

Carbon Conversations is a 6-session course developed by Cambridge Carbon Footprint, and now operated by Climate Outreach and Information Network. During six 2-hour sessions the facilitators lead the course participants through the Carbon Conversations handbook. Carbon Conversations is “small support groups, whose goal is to achieve major, personal carbon reduction”. (Aiken, G., 2012; Randall, R., 2009)

Civil Society

An arena that encompasses the collective activities by which associations of people develop and assert shared values, identities and interests, without direct recourse to market transitions or the authority of the state in the first instance (Hargreaves, T., Haxeltine, A., Longhurst, N., & Seyfang, G. 2011)

Co-evolution

There are outlined three approaches for shaping co-evolution: incrementalism (dealing with ills through mutual adaptation) as a bottom-up approach; comprehensive planning as a top-down approach; and transition management as a combined bottom-up and top down approach of goal-oriented modulation. (Kemp, R., Loorbach, D., & Rotmans, J. 2007)

Community

In energy transition perspective could be seen as either a collective whole, as the aggregate of a collection of individuals, or as a particular collection, small-scale or area. (Taylor Aiken, G. 2015).

Decision-making process

The series of steps, which results in the adoption of a law, or a formal act. These steps are clearly established by the law, which can also recognize the participatory rights of interested people (Tolotto M, Silina M. 2015)

Energy transition

A shift from a system dominated fossil-based) energy towards a system using a majority of renewable energy sources, also maximizing the opportunities available from increased energy efficiency and better management of energy demand (Urban Innovative Action 2015).

Grassroots

Referring to initiatives undertaken by committed activists within civil society arenas, they highlight a number of important ways in which grassroots innovations differ from the more mainstream, market-based innovations that, to date, have been the mainstay of both empirical research and theoretical development in innovation studies. (Hargreaves, T., Hielscher, S., Seyfang, G., & Smith, A. 2013)

Harder Energy Technology

Initiatives such as nuclear power, carbon capture and storage, large dams and barrages, offshore wind, and other 'titan technologies' (Smith, A. 2012) See Softer Energy Initiatives

Niches

Niches are protected spaces where projects can develop away from the normal selection pressures of mainstream systems, offering supportive networks to allow experimental new systems to take shape, such as business incubators, subsidized technologies, or ecovillages. (Geels and Schot 2007)

Niche Growth

In the process of the niche development the key player is the Key Knowledge-dissemination process that provide the possibility for the knowledge-base interpretations of the growth. Studies describe the process of the grassroots-based innovations development for the niche growth and 5 core stages, in particularly: Stage 1. The spread of knowledge leads to new projects emerging in novel contexts.; Stage 2. The diffusion of currency projects in a particular country has led to the emergence of national networking organizations; Stage 3. knowledge being produced meaning that facilitating networking and learning between projects; aggregating knowledge; providing resources to assist with the establishing of new projects; Stage 4. This then feeds the further circulation of knowledge through both popular and specialist media channels, including some specific forms of knowledge infrastructure for gathering and disseminating this information; Stage 5. At the final stage of the cycle, new models emerge, inspired by an existing currency but adapting or hybridizing into a new type of system. (Seyfang, G., & Longhurst, N. 2013).

Niches and Social Innovation

In recognition that systems exhibit 'lock-in' and 'path- dependency', a growing body of research seeks to understand the dynamics and governance of system-wide transformations and social change for sustainability. Historical studies of socio-technical systems transformations have revealed that accumulations of projects in experimental 'niches' have triggered widespread systems-change when those dominant systems have been under tension (Geels and Schot 2007)

Soft and Hard Energy paths

Environmental activism in civil society has a long history of challenging the orthodox views of energy policy and business elites; as indicated in long-running debates about "soft" and"hard" energy paths. (Smith, A. 2012)

Softer Energy Initiatives

(mainly, though not exclusively, decentralized and conservation-oriented) originating in an environmentalist milieu are now beginning to gain mainstream interest and respectability. (Smith, A. 2012). See Harder Energy Technology

Social Practice Theory SPT.

SPT focuses on transitions in practices as entities (idealized and abstract forms that are historically and collectively formed) and as performances (the grounded enactment of practices conducted as and amid everyday contingencies). Predominant focus on the doing of the practices that make up normal everyday life. And ddresses previously noted concerns with MLP in an explicit manner. Practice theory argues that practice is social, as it is a 'type' of behaving and understanding that appears at different locales and at different points of time and is carried out by different body/minds. Practice theory as a version of cultural theorizing, distinguishing it from norm (homo sociologicus) or purpose oriented (homo economicus) theories of action and from other cultural variants, including those that are, in his terms, grounded in mentalism (locating the social in the human mind); teetotalism (the social operating on the level of signs and symbolic structures) or inter-subjectivism (the social being located in interactions). (Hargreaves, T., Haxeltine, A., Longhurst, N., & Seyfang, G. 2011; Reckwitz, 2002, p. 250).

Socio-technical Change

Nature of socio-technical change is accounted for in large part by the embedding of existing technologies in broader technical systems, in production practices and routines, consumption patterns, engineering and management belief systems, and cultural values-much more than it is by engineering imagination (Kemp, R., Schot, J., & Hoogma, R. 1998).

Sustainable Development

Sustainable development was defined in the World Commission on Environment and Development's 1987 Brundtland report ´Our Common Future` as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'. In 2001, the EU adopted a strategy in favour of sustainable development. This was revised in 2006 providing 'a long-term vision for sustainability in which economic growth, social cohesion and environmental protection go hand in hand and are mutually supporting'. The European Commission's review of the strategy in 2009 highlighted the persistence of some unsustainable trends and the need for greater efforts in their regard. However, it also noted the EU's progress in mainstreaming sustainable development in many of its policies (including trade and development) and pointed to the lead it has taken in regard to climate change and promoting a low-carbon economy.

Stakeholder

Whose interests are affected by the issue and whose activities affect the issue; Groups that possess/control information, resources and expertise needed for strategy formulation and implementation. Stakeholders are those participation/involvement is needed for successful implementation. (Bertoldi, P., Cayuela, D. B., Monni, S., & de Raveschoot, R. P. 2010).

Technological Regime

The whole complex of scientific knowledge, engineering practices, production process technologies, product characteristics, skills and procedures, and institutions and infrastructures that make up the totality of a technology". A technological regime is thus the technology-specific context of a technology which pre structures the kind of problem-solving activities that engineers are likely to do, a structure that both enables and constrains certain changes. (Kemp, R., Schot, J., & Hoogma, R. 1998).

Transition Management

A multilevel model of governance which shapes processes of co-evolution using visions, transition experiments and cycles of learning and adaptation. Transition management helps societies to transform themselves in a gradual, reflexive way through guided processes of variation and selection, the outcomes of which are stepping stones for further change. It shows that societies can break free from existing practices and technologies, by engaging in co-evolutionary steering. (Kemp, R., Loorbach, D., & Rotmans, J. 2007)

Transition

A set of connected changes, which reinforce each other but take place in several different areas, such as technology, the economy, institutions, behavior, culture, ecology and belief systems. A transition can be seen as a spiral that reinforces itself; there is multiple causality and co-evolution caused by independent developments”. (Smith, A., Fressoli, M., & Thomas, H. 2014; Rotmans et al., 2001, p. 2)

2. Introduction

Some years ago I was asked as an energy expert to help to build up the first energy agency in Estonia. It didn't take long to realize that my technical background wont be enough to solve the problems laying ahead of local energy sector. These problems represent the diverse mix of technical, economical, environmental and social issues that are interconnected with each other and embedded into the wider development of the region. For improving the sustainability of the energy sector the combined effort on all of these areas is needed.

The work on improving the sustainability can not happen in isolation. It has to be synchronized with the Energy and Climate Policy of European Union and also with what is happening in neighboring countries. Energy transition in Estonian and other CEE countries is guided by European legislation but also has to involve the local aspects of the transition. The needs of local communities can differ and so does also their potential to support the transition process. To address these needs and to unlock this potential the PANEL2050 project has been developed.

CEE countries are sharing many similar problems. Cooperation between these communities can help to face these challenges better. PANEL2050 has been built on CEE cooperation and involves exclusively countries from this region. This requires extra effort to overcome the lack of capacity many development organizations in CEE countries are facing compared with their colleques in Western Europe. Nevertheless I believe that this approach is the right one and improving our capacity to initiate and drive the development projects in our region is inevitable. PANEL2050 is allowing us to improve our capacity using the support from European Union.

Marek Muiste,

PANEL 2050 coordinator

December 2016

3. Executive summary

PANEL 2050 project / CEESEN Network

Join the low-carbon community in Central and Eastern Europe!

Every community in Europe will be a low-carbon community by 2050. European energy strategy aims to cut its emissions substantially – by 80-95% compared to 1990 levels and effectively turning Europe into a highly energy efficient low-carbon economy. This will boost the economy, create jobs and strengthen Europe's competitiveness. For the EU to reach this ambition, public authorities at national and especially at local level have to develop locally adapted energy policies and plans with strong involvement from local stakeholders, including private energy industry and civil society actors focusing on both renewable energy production as well as on energy efficiency. In CEE the growth of sustainable energy generation is lagging behind EU average. This means these communities have to increase their current efforts to attain the EU ambition.

The main goal of the PANEL 2050 project is to support CEE communities on transforming into low-carbon economy with the help of local forerunners. Central and Eastern Europe Sustainable Energy Network (CEESEN) will be created to unite different energy actors in the region. CEESEN aims to become the new energy player on the EU energy market. CEESEN is designed to face the challenges of sustainable development in CEE and post-soviet countries. With the support of the project partners and wider involvement of CEESEN network the organizations and individuals can start to design the sustainable future for their community.

We are identifying and supporting the local forerunners of sustainable development. We are creating local stakeholder networks that are developing a shared and broadly supported vision for low-carbon communities in 2050. We are implementing the local sustainable energy visions and promote the concept to other local stakeholders. We are developing shared local sustainable energy strategies. We are improving capacity of local forerunners and stakeholder networks. We are communicating with other local communities, regional, national and EU public authorities in order to strengthen and replicate the concept of local stakeholder networks.

CEESEN consist today: Tartu Regional Energy Agency (Estonia), University of Tartu (Estonia), University of Life Sciences (Estonia), Vidzeme Planning Region (Latvia), IAERPA (Lithuania), Mazowia Energy Agency (Poland), AgEnDa (Czech), ConPlusUltra (Austria), Local Energy Agency Spodnje Podravje (Slovenia), WWF Hungary Local Energy Agency of Bucharest (Romania), WWF Bulgaria Balkan Development Solutions (FYROM) and 40 organisations in CEE countries.

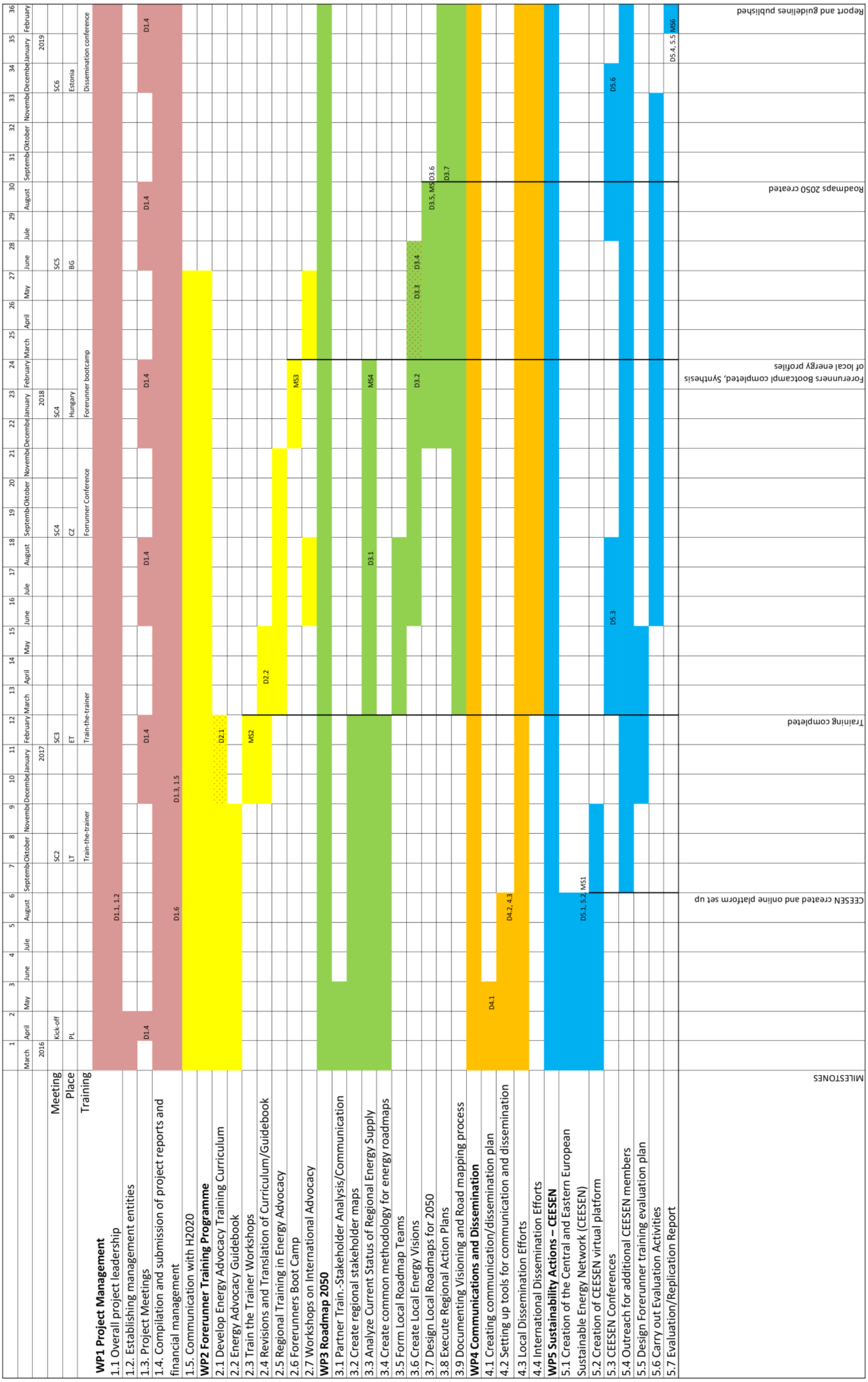
4. Factsheet

Project Number	696173
Project Acronym	PANEL 2050
Project title	Partnership for New Energy Leadership 2050
Starting date	1.03.2016
Duration in months	36
Call (part) identifier	H2020-EE-2015-3-MarketUptake
Topic	EE-09-2015 Empowering stakeholders to assist public authorities in the definition and implementation of sustainable energy policies and measures
Fixed EC Keywords	Policy development
Free keywords	stakeholder involvement, public engagement, sustainable energy, energy roadmap 2050
Budget, EUR	1790500
Focus region	Central and Eastern Europe
Coordinator	Tartu Regional Energy Agency
Coordinator country	Estonia
Webpage	ceesen.org/panel2050
Number of partners	13
Number of countries	10
Number of public international events	2
Number of project meetings	6
Outcomes	
Indicators: CEESEN members	1600
Indicators: Roadmaps	10
Indicators: Regional Action Plans	100
Indicators: Local Energy Visions	10
Indicators: Forerunners empowered	117
Indicators: people informed	112000
Indicators: people influenced (trained)	3670
Indicators: public officers influenced (trained)	650
Indicators: public officers involved into policy	260

5. Budget

Nr	Partner	A. Personnel cost	B. Subcontracting	D. Other direct cost		E. Indirect cost	TOATAL
				Project team	Stakeholders		
1	TREA	148500	0	23000	9000	45125	225625
2	AgEnDa	62400	0	16000	10000	22100	110500
3	BDS	80000	0	16000	10000	26500	132500
4	CPU	149600	0	16000	0	41400	207000
5	IAERPA	62400	0	16000	10000	22100	110500
6	AEEPM	79200	0	16000	10000	26300	131500
7	LEA SP	79200	0	16000	10000	26300	131500
8	MAE	80000	10000	16000	10000	26500	142500
9	EMU	81300	0	16000	10000	26825	134125
10	UTARTU	59400	0	16000	0	18850	94250
11	VPR	79200	0	16000	10000	26300	131500
12	WWF BG	65600	10000	16000	10000	22900	124500
13	WWF Hu	65600	0	16000	10000	22900	114500
	Total	**1092400**	**20000**	**215000**	**109000**	**354100**	**1790500**

6. Schedule


Meeting
Place
Training
WP1 Project Management
1.1 Overall project leadership
1.2. Establishing management entities
1.3. Project Meetings
1.4. Compilation and submission of project reports and financial management
1.5. Communication with H2020
WP2 Forerunner Training Programme
2.1 Develop Energy Advocacy Training Curriculum
2.2 Energy Advocacy Guidebook
2.3 Train the Trainer Workshops
2.4 Revisions and Translation of Curriculum/Guidebook
2.5 Regional Training in Energy Advocacy
2.6 Forerunners Boot Camp
2.7 Workshops on International Advocacy
WP3 Roadmap 2050
3.1 Partner Train.-Stakeholder Analysis/Communication
3.2 Create regional stakeholder maps
3.3 Analyze Current Status of Regional Energy Supply
3.4 Create common methodology for energy roadmaps
3.5 Form Local Roadmap Teams
3.6 Create Local Energy Visions
3.7 Design Local Roadmaps for 2050
3.8 Execute Regional Action Plans
3.9 Documenting Visioning and Road mapping process
WP4 Communications and Dissemination
4.1 Creating communication/dissemination plan
4.2 Setting up tools for communication and dissemination
4.3 Local Dissemination Efforts
4.4 International Dissemination Efforts
WP5 Sustainability Actions – CEESEN
5.1 Creation of the Central and Eastern European Sustainable Energy Network (CEESEN)
5.2 Creation of CEESEN virtual platform
5.3 CEESEN Conferences
5.4 Outreach for additional CEESEN members
5.5 Design Forerunner training evaluation plan
5.6 Carry out Evaluation Activities
5.7 Evaluation/Replication Report
MILESTONES
Kick-off
PL
SC2
LT
Train-the-trainer
SC3
ET
Train-the-trainer
SC4
CZ
Forrunner Conference
SC4
Hungary
Forerunner bootcamp
SC5
BG
SC6
Estonia
Dissemination conference
2016
2017
2018
2019
D1.4
D1.1, 1.2
D1.6
D1.3, 1.5
D2.1
MS2
D2.2
MS3
D3.1
MS4
D3.2
D3.3
D3.4
D3.5, MS
D3.6
D3.7
D4.1
D4.2, 4.3
D5.1, 5.2
MS1
D5.3
D5.6
D5.4, 5.5
MS6
CEESEN created and online platform set up
Training completed
Forerunners Bootcamp completed, Synthesis of local energy profiles
Roadmaps 2050 created
Report and guidelines published

7. Story

The global economy is changing. The carbon heavy industrial model is giving a way to smarter and cleaner means of producing goods and services. Energy production is changing from oil and coal to solar, wind and biofuels. Energy services are focusing on efficiency and reducing its environmental impact. European climate and energy policy is on the forefront of this change stating that Europe will be a low-carbon community for 2050. Implementing this policy is challenging but also offers new possibilities for development and prosperity. This is a familiar environment for CEE countries. We have been transforming our economies for the last 25 years - from soviet planned economy to post-soviet market economy. Because of the financial and structural inertia, the energy sector has been the slowest part of the economy to change. Transforming to low-carbon economy is the final step on phasing out the wasteful and damaging energy complex of the 20th century.

Change won't happen overnight. It will be an outcome of continued process where we all participate. If we want to create a sustainable future, we have to start to support existing sustainable developments in our communities. There are people among us who are already supporting it by their work and lifestyle. Because of the prevalent political paradigm these people are usually not fully included in the decision-making process and do not receive public support for their ideas. The goal of PANEL2050 is to reach out to the local advocates of low-carbon economy and include them in the policy development processes. The project wants to transform the communities using their greatest asset - their own active people - the forerunners.

They may be energy service providers offering solar electricity. They may be local bicycle activists, environmental activists, housing developers, ICT service providers etc. We are developing active relationships with these people and organisations and will include them in the newly developed Central and Eastern European Sustainable Energy Network (CEESEN). This network will act as a mutual platform for energy transition in CEE countries by sharing ideas, practices and supporting the development on local, CEE and European level. It also offers tools for energy transition like guidebooks, training materials etc. CEESEN will continue to reach out for the new members even after the PANEL2050 project. It will widen its reach to other CEE countries and also non-EU countries that are facing similar problems.

Forerunners will help create a widely accepted long-term energy policy for their communities. These policies will help guide the process towards low-carbon economy and avoid possible costly mistakes. The process is supported by the tools and knowledge PANEL2050 is offering for the communities. It is also supporting the use of inclusive practises that will lead towards further development of the democratic institutions. Low-carbon economy can be carried out as a publicly supported project offering more opportunities to a larger group of stakeholders.

Our main quest is to:

Find forerunners - people and organisations who are supporting the sustainable energy/transport sector,

Support forerunners in growing their ideas and practices,

Help forerunners to participate in and improve sustainable energy policies for their communities,

Support the development of democratic tradition in the light of sustainable development implantation policies.

8. Objectives

The aim of PANEL project is to create durable and replicable sustainable energy networks at local (municipality/community) level, where relevant local stakeholders collaborate for the creation of a local energy visions, strategies and action plans for the transition towards low carbon communities in 2050.

The PANEL project will focus on the creation of these sustainable local energy networks in CEE countries, where this type of networks at local level is almost completely absent and therefore additional support is needed for the creation of the first successful local energy networks that have the potential to set an example and a new standard for local energy road mapping in other local communities in the CEE region. Furthermore, the PANEL project will not choose a specific focus on a certain type of stakeholder, but will try to work at the local level and assemble all relevant and available stakeholders related to sustainable energy. The number and type of stakeholders will vary very much in different local settings and the ambition of this project is to create sustainable energy networks at local level that will connect and involve all relevant stakeholders that are present at local level into the local policy development and implementation.

At present, the involvement of local shareholders in local policy development in any field in CEE countries is very limited and the aim of this project is to create durable sustainable energy networks in a number of local communities in different CEE countries that will also be a replicable example that can be spread to other communities in CEE countries.

In order to achieve the overall aim of the project, several distinctive objectives are identified:

Objective 1: To identify and support local energy leaders who take the lead in the development and implementation of local action plans, promote the concept to other local (municipalities) and overseeing the long term sustainability of the local stakeholder networks.

In order to ensure that the newly created local sustainably energy networks will continue to operate in the long run, it is necessary to identify the most active forerunners in the network and provide support for these forerunners for them to develop into local energy leaders who can oversee the continuation of the local sustainability networks in the long run; propagate the concept of these networks to other local communities and actively start implementing the strategy by actively developing and implementing actions that will implement the first steps of the identified strategy.

Objective 2: To create local stakeholder networks that will develop a shared and broadly supported vision for low carbon communities in 2050.

It is important to include at local level all relevant stakeholders for the creation of a common shared and broadly supported local energy vision. When stakeholders are not included in the shaping of the local vision, they are less likely to support this vision and contribute to activities that contribute to materialising this vision. It is important that at local level all stakeholders are actively involved in the local dialogue, which will empower local stakeholders to voice their opinions and invite stakeholders also to actively contribute to shaping and formulating a common, shared local sustainable energy vision. Involving and empowering all stakeholders at local level will create more support for the common vision and will create a group of active ambassadors for this vision that will indirectly also increase the likelihood for the necessary support for actions that will shift the local community towards that vision.

Objective 3: To develop new broadly share local sustainable energy strategies.

Once the sustainably energy networks at local level are in place and have developed a shared common vision, it is important for these networks to develop the local strategies of how to reach their vision. These strategies will answer the question how the local community will make the transition from the current status to the envisioned desired future situation and will identify the different steps that have to be taken. These local strategies will provide focus for the sustainable energy networks, and a common objective that will strengthen the links between the different stakeholders and additionally will contribute to local sustainable energy policy formation by analysing and prioritising important strategic choices. Hands-on easy to use tools, knowledge and skills for developing Roadmaps is needed for these local sustainable energy networks.

Objective 4: To improve capacity of local stakeholder network and frontrunners

In order to truly empower local stakeholders it is not only important to invite them to participate in the local sustainable energy dialogue, it is also important to provide them with the necessary knowledge, skills and tools in order to actively contribute to local policy development. Most local stakeholders have limited experience in participating in local policy development and lack the specific skills or tools. For the forerunners in specific it is important to increase their capacity to sustain the network, advocate the concept to other communities and start developing and implementing actions. There is a specific need to increase the visibility of these forerunners and amplify their actions within the local community and beyond.

Objective 5: To strengthen and replicate the concept of local stakeholder networks by targeted communication towards other local communities, regional, national and EU public authorities

In order to further strengthen the concept of local sustainable energy networks, good efficient communication between the local stakeholders is necessary. Different communication tools and platforms, adapted and tailored to specific local needs are required to facilitate the communication between local stakeholders, enabling them to come to a common shared point of view for developing a local shared vision and strategy. Additionally awareness among policy makers on national and EU level has to be raised regarding role national and international policy instruments and legislative frameworks play in supporting and/or hindering the creation and growth of local sustainable energy networks. Finally, in order to replicate the concept of local sustainable energy networks to many different local communities, awareness about the existence, functioning and impact of these newly created networks has to be raised among other local communities.

For more details about the objectives and goals of PANEL 2050 see the Annex 1 part B.

9. Indicators and milestones

Over 60 stakeholders in different CEE countries already have demonstrated their commitment to PANEL project by providing the Letters of Support (please see the annex). These 60 stakeholders will be the initiators of the local sustainable energy networks, involving all other stakeholder at local level and impacting hundreds of stakeholder directly through active inclusion and involvement in local policy development. The PANEL project will initiate a change in the local culture of policy development towards a more open and inclusive collaboration, increasing the quality and support of future local policies. This will be also supported by increased capacity of involved stakeholders who will develop their skill-set needed for successful participation in sustainable energy development up to the level of becoming forerunners. The hundreds of stakeholders that will actively be involved in shaping future local policies in their turn represent thousands of local citizens in these local communities.

The local stakeholders in the energy network will be trained and provided with a guidebook and get access to easy to use methodologies. At local level, most stakeholders are not involved in the development of local energy policies and therefore also lack the knowledge, skills and tools how to do this. Therefore PANEL does not only engage the stakeholders into new local networks, it also provides them with the necessary skills, tools and methods to use. All training material, tools, guidebook and methods will be easy-to use and made available for local stakeholders anywhere. Local stakeholders will be actively encouraged to spread these materials throughout their network to ensure wide uptake and use. Hundreds of local stakeholders will participate in trainings and will be increase their capacity and skills to contribute actively to local policy development.

To increase the structural capacity of local municipalities the local stakeholders will form cooperation networks and develop long term vision for the region. Local authorities will also participate in this process and will be included to capacity building and training. Sustainable energy networks will also develop specific Roadmaps for the implementation of the long term energy vision for the region. This will open up new possibilities of local policy development in sustainable energy sector. Local authorities and development bodies can start to plan mid-term (up to 2030) and short term (up to 2020 and 2025) policies in specific sectors based on the Roadmaps for 2050. Local policies will be improved through a wider participation of stakeholders, the uptake of new methods and tools and specific training that also target local policy makers.

On one hand, the project impact will deploy at the level of all project partner countries (represented by PP1 to PP13) by involving all project partner regions stakeholder networks directly in the proposed actions and addressing further regional stakeholders through the PPs national networks. On the other hand, impacts at the European level will be ensured through energy agencies across all European countries through its well established European networks.

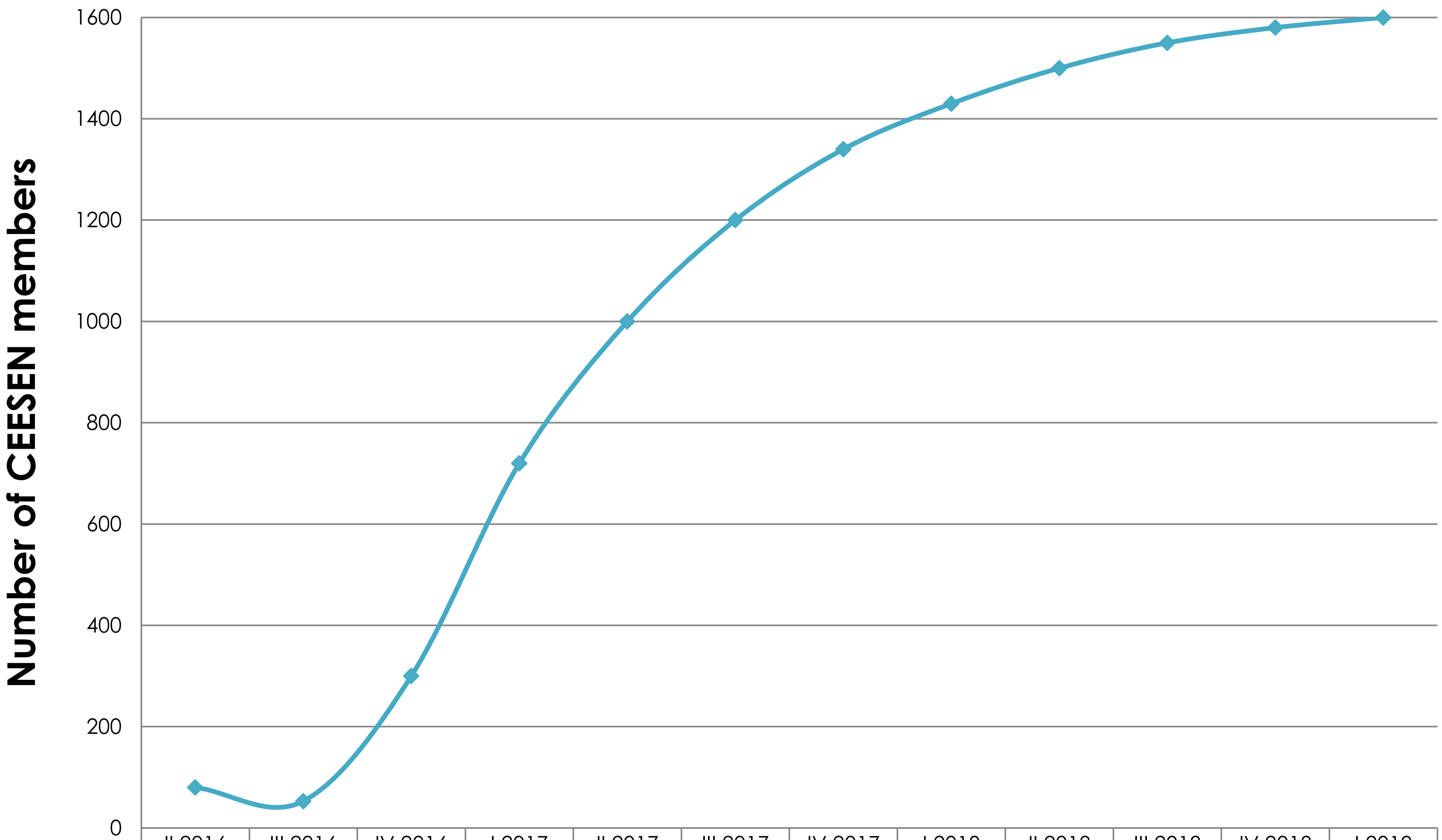
With regard to the specific topics of the call the PANEL project will have the following impacts:

Estimated impact to community by project partners:

Table 4. PANEL 2050 indicators

			Region	*Population*	*Forerunners*	*Informed*	*Influenced*	*CEESEN*	*Action-plans*	*Involved public officers*	*Influenced public officers*
1	TREA	EE	-	-	-	-	-	-	-	-	-
2	AgEnDa	CZ	South Bohemia	636000	10	2000	500	74	10	12	30
3	BDS	MK	North-East	174000	10	25000	500	20	10	3	8
4	CPU	AT	-	-	-	-	-		-	-	-
5	IAERPA	LT	Ignalina	65000	10	20000	400	8	10	1	3
6	LEAB	RO	Bucharest and Ilvof	3500000	15	3000	400	408	15	66	166
7	LEASP	SI	Spodnje Podravje	170000	5	25000	170	20	5	3	8
8	MAE	PL	Mazovia	5290000	25	2000	500	616	15	100	250
9	EMU	EE	Southern Estonia	322000	5	10000	300	38	5	6	15
10	UT	EE	-	-	-	-	-		-	-	-
11	VPR	LV	Vidzeme Planning Region	220280	15	2000	200	26	15	4	10
12	WWFB	BG	North	2670000	10	3000	300	311	10	51	126
13	WWFH	HU	Borsod-Abauj-Zemplen	684000	12	20000	400	80	12	13	32
	Total:			**13731280**	**117**	**112000**	**3670**	1600	107	260	650

CEESEN	1600	Memebers totally
Public officers	260	Involved to planning and policy process
Public officers	650	Increased capacity
Consumers	3000	Informed



	II 2016	III 2016	IV 2016	I 2017	II 2017	III 2017	IV 2017	I 2018	II 2018	III 2018	IV 2018	I 2019
CEESEN	80	53	300	720	1000	1200	1340	1430	1500	1550	1580	1600

Figure 1. Development of CEESEN network.

Enabling policy

Number of new or improved policies and plans: 100

- PANEL activities will result in improved policies and plans in the partner regions. Moreover the Action Plans of the regions will trigger the further establishment of PANLE measurements.
- By offering the possibility to present examples of governance frameworks from non-partner regions for analysis and (potential) hub configuration via the stakeholder platform the policies and plans in other non-partner regions will be influenced.
- All project partners will improve local policies, measures and strategies on more sustainable energy in the partner regions. Those new strategies will be jointly developed and assessed on its feasibility and durability in a peer review process. In that way all partners will be able to use at least ten ready to implement local policies/strategies for sustainable energy.
- Those policies may address: Local energy consulting, information on possible finance, assessment of energy plant sides….

Building capacities and skills

Number of public officers influenced: In total 550 public officers will be influenced

- Related to the tasks at least 260 public officers in the PP regions (20 per region) will be directly involved in order to establish a baseline of the energy policy situation on different levels and give recommendation for the PANLE policies.
- In the development of the PANEL policies and strategies least 65 public officers (5 per region) will be involved for testing of and feedback on the developed policies.

Number of public officers and forerunners with increased capacities: 650 public officers

In the course of capacity building activities the partners will reach at least 650 public officers (50 per partner) in order to improve their capacity to assess the regional energy situation and set effective, tailor-made actions to increase quantity as well as quality of regional and local energy efficiency and renewable energy measures acc. to local needs and framework conditions.

Number of informed consumers: 3000

- PANEL will use the capacity of the newly trained public officers and forerunners to inform with their networks hundreds of end-consumers and stakeholders in the partner regions.
- All training material, tools, guidebook and methods will be easy-to use and accorded with the local needs and made available for local stakeholders anywhere.
- Especially energy agency partners have the mandate and capacity to spread this knowledge to the end consumers in order to motivate them to more energy saving activities.
- Local stakeholders will be actively encouraged to spread these materials throughout their network to ensure wide uptake and use. In each partner region hundreds of local stakeholders will participate in trainings and will contribute actively to local policy development

The basis of calculation of project indicators has been the estimates of the partner regions. In project preparation period all the regional partners had to reach out their target groups to get the first feedback about their interest. Some of that interest was stated by more than 60 officially signed Letters of Support provided with the proposal. This interest was extrapolated to the final numbers in project proposal.

112 thousand users from all over the Europe will be informed trough project dissemination activities described more in detail in WP4. These people will be more aware about the European energy policy. 3670 users will be influenced in in CEE countries and can more actively participate in local energy development. These can be basically anybody from local citizens up to high level decision makers and policy developers. Special interest is towards better organized interest groups like umbrella organizations, environmental organizations etc. Important part of that work will be made in CEESEN network that should include 1500 members by the end of the project.

117 users will be encouraged to become local leaders aka forerunners to advocate the energy sustainability in their communities. These people will be highly motivated and will have sufficient skills for local policy development. More than that, they will also be an active part of the community they are trying to influence and will have the best understanding about the local situation. This new capacity would improve the local decision making and help to archive the goals of European highly ambitious energy policy on local level. Successfully created development model will be well explaned in the Guidebook and disseminated during two project conferences so it could be implemented in other regions of Europe, especially CEE countries and also neighboring countries like Ukraine, Russia, Turkey etc.

10 regional long term energy plans (Roadmaps) will be made in partner regions. These will lead the way to new investments in energy sector. Project will also explore the ways of creating financial capacity with 100 organisational action plans. These plans will help the forerunner organisations lower the financial risks and find new ways of doing more sustainable business.

For more details about the indicators and milestones of PANEL 2050 see the Annex 1 part A and part B.

10. Activities

Central and Eastern European Sustainable Energy Network (CEESEN) – a network for collaboration between local stakeholders for the creation of local energy visions, strategies and action plans for the transition towards low-carbon communities by 2050. The network will be supported by a virtual platform for communication and work of its members. Each new member will have access to all the resources on the platform.

Energy Advocacy Guidebook – this document will be in 13 languages and will be used at the local level by each partner. It will include short case studies of successful forerunners in Eastern Europe, various tools useful to all partners and practical exercises

Regional Trainings in Energy Advocacy – trainings for local stakeholders organized by project partners using the Advocacy Training Curriculum

Forerunners Boot Camp – an 2-week intensive training for forerunners, who are leaders and key spokespeople related to advocacy efforts identified during the Regional Trainings. The programme will include sessions on public speaking, consensus and coalition building, etc.

Workshops on International Advocacy – workshops for organizations part of the CEESEN network. They will include topics such as sustainable energy in the regional and advocacy at EU level

Regional Stakeholder Maps and Energy Analyses – each partner will conduct its own analysis of all possible stakeholders coming from different sectors. Partners will create overviews of the various dimensions of energy consumption and production in their regions.

Local Energy Visions – each partner will create an energy vision for its region based on feedback and input from as wide a range of primary, secondary and tertiary stakeholders as possible

Local Roadmaps for 2050 - roadmaps will explain how the local community will reach the low-carbon economy using their vision, resources, local and national conditions etc. They will be based on the national targets for 2050 and 2030. They will use the common basic layout, dividing the content into five overall categories: transforming the energy system, rethinking energy markets, mobilizing investors, engaging public and driving change at the international level. Roadmaps will be prepared by each partner in cooperation with local Roadmap Teams in their native language and will be compiled into a broad Roadmap document for the CEE region.

Regional Action Plans - short term action plans will be developed by organizations represented in the Regional Roadmap Teams. These action plans will describe immediate activities (next steps) that should be taken by organizations to reach their long term objectives.

CEESEN Conferences – two conferences on sustainable energy will be held in Prague and Tartu. The aim of the conferences will be for members from the network to share their experience in creating their energy visions and roadmaps and to discuss possibilities for joint projects in the future.

10.1 Forerunners

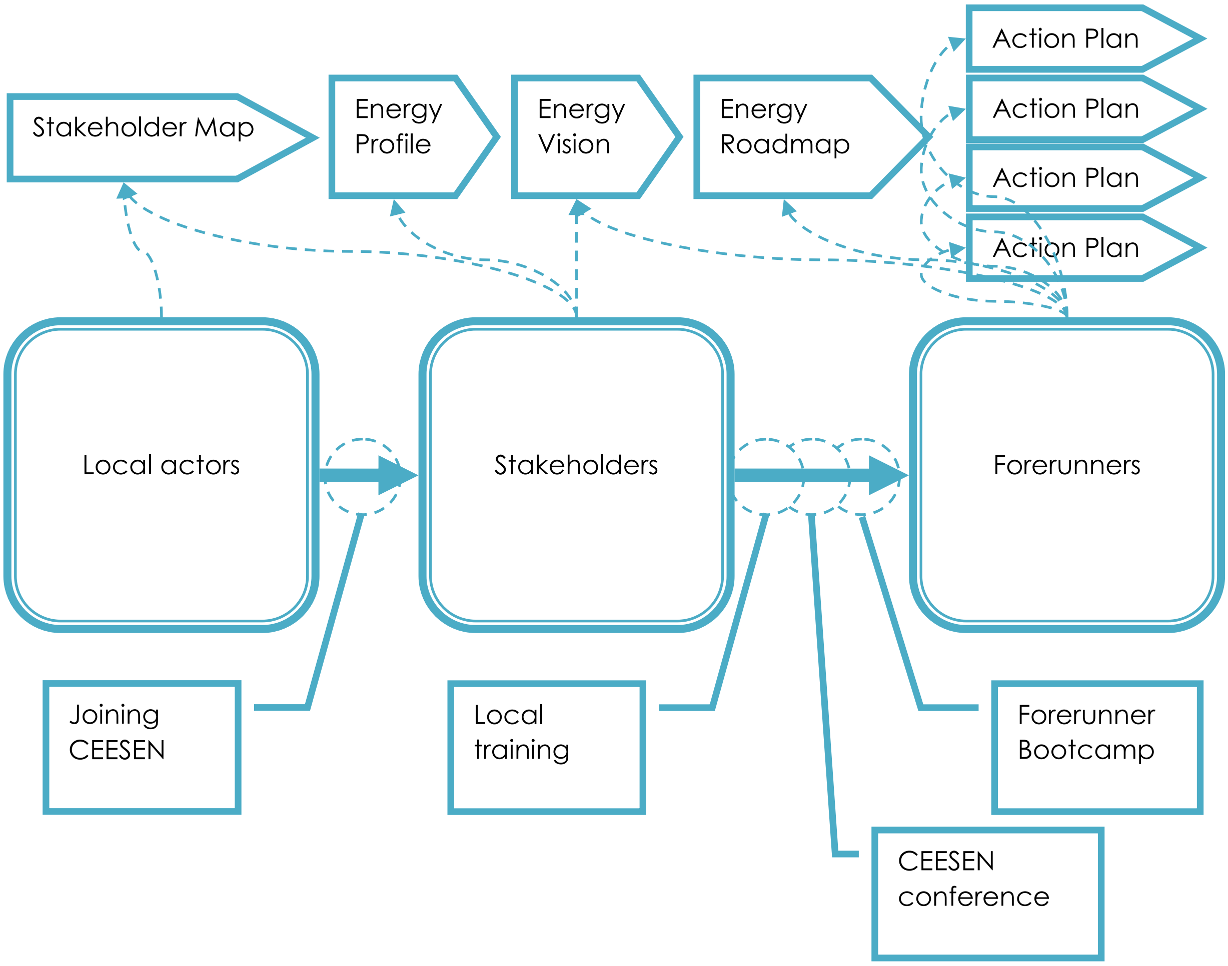


Figure 2. Developing Forerunners in PANEL 2050.

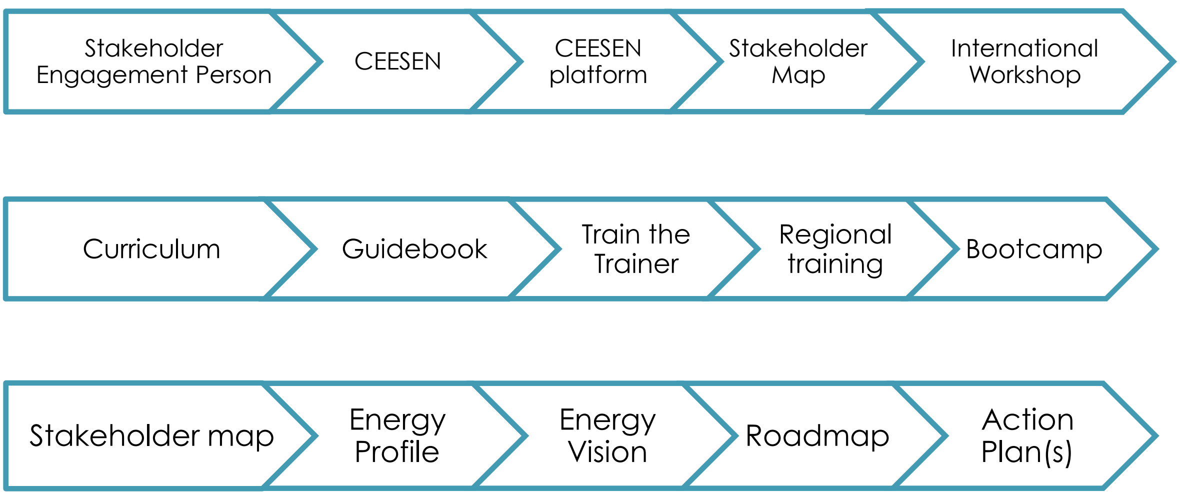


Figure 3. Logical framework of PANEL 2050 – networking, capacity building and energy planning.

Forerunners are the core of this project. The way PANEL 2050 values and supports the work of local forerunners makes this project unique. Profound understanding the role of the forerunners in sustainable energy development is required for successful implementation of this project. This understanding is not something common – it's rare and needs to developed during the project lifetime. Lack of coherent understanding about the role of the forerunners requires remarkable amount of theoretical work to support this development. This theoretical work in the project will be lead by the UTARTU.

Forerunners are organizations or individuals that are helping to transform the local energy sector into more sustainable one. They are the first wave of actors implementing and promoting sustainable practices that will be common in the future but may be uncommon today. In the management theory a specific term 'niche' is used to mark the technical area that are occupied by the forerunners, and 'regime' to indicate the common paradigm. 'Niche' is opposing to the 'regime' in the same way as solar panels are opposing the coal power plants (or urban cyclist are opposing the car centric mobility model). In the ideal world sustainable practices will overthrow the unsustainable economy but this process can only happen if there are enough forerunners to support that. Existing of the forerunners is required for sustainable development to happen and this makes them immensely valuable.

PANEL 2050 identifies the local forerunners and supports their work. Also other local actors are supported to become stakeholders and unlock their potential as forerunners. Participation in policy making is required from local actors to become a stakeholder. To become forerunners even more active position is required. Organizations and individuals have to be active in policy making and take the initiative on developing sustainable energy/transport policy to be the successful forerunners.

Active stakeholders are typically lobby groups and environmental organizations that are pushing for sustainability agenda or commercial interest groups that are supporting new technologies and fuels. Environmental groups are trying to lower the environmental footprint by reducing energy and carbon intensity. In many cases they are politically active but not very influential. Low-energy building cluster is advocating for energy efficient buildings to develop their market. Same goes for other umbrella organizations.

Additionally it is possible to include stakeholders that does not have the sustainable energy agenda (but working on the field related with the topic) but are active on political level. It is suggested that they should be included if they will adopt also sustainable energy topic to their work. Bicycle lobby group is advocating for active mobility that will help reduce the usage of fossil fuels in the region but they haven't identified fuel efficiency as a separated target. They could advocate this on political level if they could receive means and ways to do so. It is also possible to include partners that have sustainable energy agenda but are lacking the political involvement in case they are interested to add political activities into their work in future.

Although regions and municipalities all over Europe have to develop sustainable low-carbon energy plans, this project has identified common issues and obstacles that regions and municipalities from CEE countries face and has developed an approach for increasing the capacity of forerunners from regions in CEE countries in the initiation and fostering of sustainable local energy networks. These networks will include stakeholders from different arenas (private, public, civil society) and develop jointly a shared energy vision on sustainable energy generation and energy efficiency and develop a concrete local roadmap including actions for implementation.

Selection of Forerunners

Recruitment to trainings and Bootcamp will be done by the Project Partners. The decision for inviting the forerunners to the Bootcamp will be made by the Steering Committee of PANEL 2050 project based on the suggestions of Project Partners and the analysis of UTARTU. The main criteria is the importance and impact of the forerunner to the local energy transition process. Also the activeness and the motivation of the organization/person will be considered. Because of the limited resources only the most active and motivated forerunners will be invited. This process and the decisions will be recorded in Stakeholder Engagement Template and supported by the experts of UTARTU.

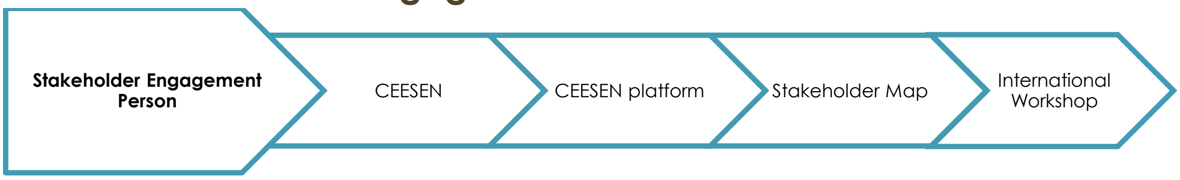
10.2 Working with stakeholders

Developing sufficient connections with the local stakeholders is required for later engagement. UTARTU together with Agenda, CPU and TREA will develop a dedicated methodology for the engagement process. This methodology will involve the elements of the communication, identity management and promotion. With the help of the WP2 the Project Partners will develop the capacity for successful engagement: how to create and maintain successful business relationships, design the proper messages, create inspiring work environment for the mutual meetings etc.

The focus of the work on stakeholder engagement will be on Stakeholders Engagement Persons (SEP) – trained experts on engagement that also have good overview about the local energy sector. UTARTU is supporting the work of these experts with the training, tutoring and tools. With this help the SEPs can evaluate the potential and the possibilities to activate the local stakeholders. Contacting, selecting and engaging the stakeholders will be made by SEP's. SEP's will support also the work of WP3 and WP5 as the experts of engagement.

After distributing the job description of Stakeholders Engagement Persons (SEP), the partner organizations will be asked to nominate and conduct the selection process either within the organization or reaching out the external resources. All the Project Partners will nominate Stakeholders Engagement Persons (SEP) whose job will be the direct work with the local stakeholders. These SEP will go through the dedicated development program Train the Trainers and will be supported by UTARTU on developing the local cooperation with the stakeholders. The job description (developed by UTARTU and CPU) will serve as a guiding tool in finding the appropriate person. The action should be coordinated by UT and conducted by each organization, except TREA and CPU. The action is fulfilled by month 4, June 2016.

10.3 Stakeholder Engagement Persons



UTARTU will help to set up the SEP position inside of the partner organizations and will support their work with the training, tutoring and set of tools: online forms for the effective engagement procedures.

Task 2.3.1 Creation of job description for the stakeholder engagement persons.

Task 2.3.2 Selection of the stakeholder engagement persons SEPs.

SEPs are considered to serve as trainee persons and participants of the train the training workshops. This job description outlines the role of the person who will carry out local stakeholder mapping and participation in WP2 workshops. Under the actions of WP2 UT and TREA will conduct workshops with PANEL partners so that they will in turn be able to conduct training in their own language with stakeholders from their community and to eventually identify forerunners. Based on the responsibility that should be carried out by the SEPs, there is a list of skills that all the SEPs ideally should have:

Required skill of the Stakeholder Engagement Persons:

- Have good communication skills and be willing and able to network with diverse people (government, business, NGO, community, and media) on a regular basis.
- Have an experience or willingness to conduct training.
- Be organized and capable of documenting their activity and coordinating the activities of other members of the stakeholder involvement team, if required
- Have knowledge of the energy-related issues being addressed (or at least be able to learn quickly about them).
- Be open-minded and willing to try different approaches to energy advocacy
- Have an ability to communicate and write in English
- Having experience in community outreach would be useful
- Being aware of cultural context, socio-economic and political backgrounds of the country of their operation.
- Have prior experience working with media or be willing to learn to communicate with them, e.g. by identifying stories of possible interest to media and drafting press releases

UT together with CPU will be responsible for creating the job description. See link: https://drive.google.com/open?id=0B1siFMKnAVIkSlNDRUlyQnZHNHM

After distributing the job description of SEP, the partner organizations will be asked to nominate and conduct the selection process either within the organization or reaching out the external resources. The job description will serve as a guiding tool in finding the appropriate person. The action should be coordinated by UT and conducted by each organization, except TREA and CPU.

Task 2.3.3 Developing the template for mapping the stakeholders.

The Stakeholder Engagement Template aims to report and document the stakeholder engagement process throughout the whole project. The template will serve as a tool to carry out local stakeholder mapping. As stated in the job description for the Stakeholder engagement person, partners should:

• Identify relevant stakeholders from different sectors of society, including those who are supportive as well as those that could be considered 'opponents' to efforts, such as certain industrial actors. Special effort should be given to identifying stakeholders that are not engaged currently in energy transition but could have a great impact on the process.

• Develop strategies for reaching out to stakeholders they have previously not communicated with – and creating rebuttals to the claims or arguments made by opponents.

• Establish good personal communication with identified stakeholders and start networking as soon as possible.

The template should be used to document the results of this activity on a regular basis (at least weekly), so that it can be shared with the consortium and be used as inputs for the manual and for the training that will be offered.

The first worksheet of the template contains crucial information about the stakeholders.

The second sheet of the Stakeholder engagement template serves for the preliminary assessment of stakeholders, addressing two core questions: such as:

- How supportive is the stakeholder to energy transition? (-6.0 Opponent to 6.0 - Supportive)
- How deeply they will be affected by the transition? (1- low impact; 6 - high impact)

The third part of the template (Excel Sheet 3 - Objective of Engagement) is a logical continuation of stakeholder assessment part. As a reflection question, the one should think about the what could the specific role of selected stakeholders in the transition process and why there is need to engage them.

In this regards, identifying the objective of their engagement will guide partners to set the appropriate communication strategy and help us to ensure there are no hidden objectives or unstated hopes in the process of engagement. The overall objective of any public engagement exercise is to get effective public engagement that makes a difference to policy. In the template, the Justification of Engagement means listing Objective(s) and examples are provided in the template.

In order to identify the weakness or strength of the engagement, it is import to record and document the process of stakeholder engagement. This particular part of the template (Excel Sheet 4 - Log of engagement activity) should include the information about the every single action that was taken in communication with stakeholders. In most cases, it will be events, meetings of the stakeholders where the stakeholder engagement person should participate and establish a communication. The first column should include Date of the event or another type of event and there should be provided the description of the activity.

For more detailed description of the stakeholder engagement tools see Stakeholder Engagement Template – Instructions in GDrive under WP2.

10.4 CEESEN

The project objectives are difficult to be fulfilled without the deep understanding and appreciation of the peculiarities of each region and the particular community. Therefore, it is vital to attract the responsible, aware and community-oriented organizations, which are not only concerned about the environmental and energy issues but might become the ambassadors – referred to as the Forerunners in this project - of the sustainable energy policy in their community. Collaboration between different partners has led to the preliminary identification of some forerunners. Further identification will be completed by creating Sustainable Energy Networks with local stakeholders and Forerunners as the members of this network.

The Forerunners shall be the key drivers of the regional communities towards the development, implementation and continuity of the sustainable energy policy. The identification and empowerment of Forerunners is key to success of this project. The project approach consists of the following stages:

- Developing the local sustainable energy networks from the regional stakeholders, who have sustainable energy issues on their agenda and have the credentials to be able to influence local communities;
- Creation of a replicable and simple local sustainable energy network model including the local forerunners, the community and the policy makers. The model for local sustainable networks will be geographically scalable;
- Increasing awareness about the feasible model of local sustainable energy networks on national and EU levels.

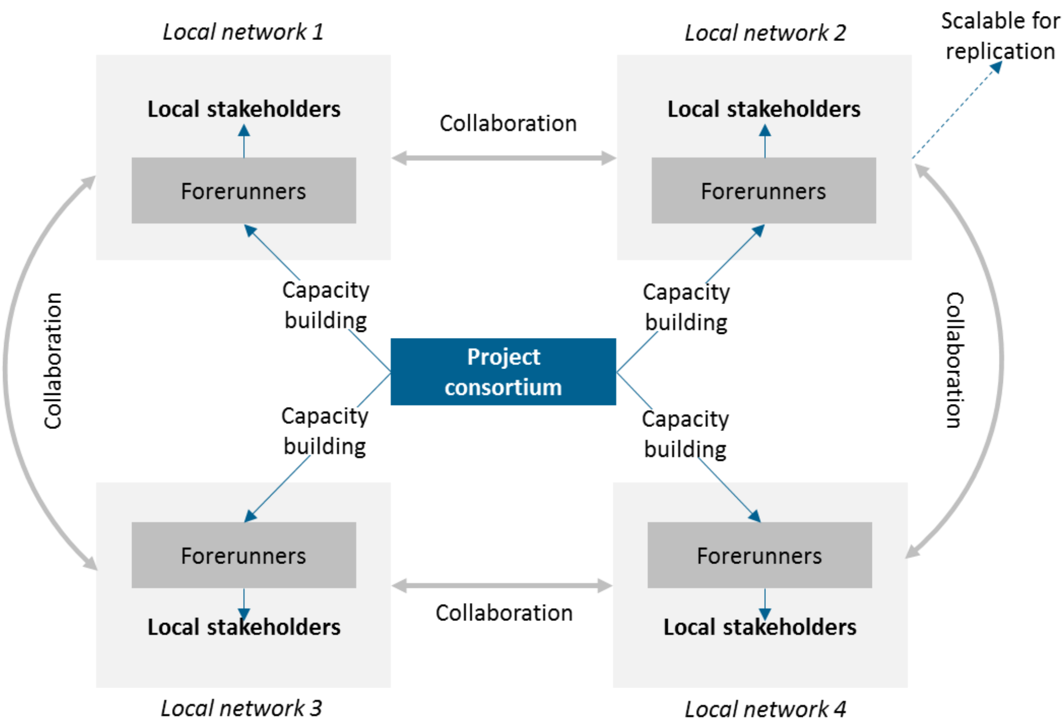


Figure 4. Local sustainable energy networks where forerunners working with other stakeholders

The main goals of the project is to create the Central and Eastern Europe Sustainable Energy Network (CEESEN), a new energy player on the EU energy market that unites different energy actors in the region for the purpose of engaging and empowering them to transform their local energy markets by developing and eventually implementing locally adopted energy policies and plans that focus on renewable energy and energy efficiency, and are in line with EU 2050 emission targets.

CEESEN will appear in the context of at least six existing networks with a similar purpose: Energy Cities, the Covenant of Mayors, Managenergy, FEDERENE, ICLEI, Polis. The fact is that none of them represent the CEE perspective completely. Most existing networks are widely international, having either very small or no CEE representation. In addition, their members rarely represent more than one sector of society.

CEESEN was thus planned as a solution to the missing CEE perspective in a holistic and focused fashion. Unlike the networks above, CEESEN will unite all actors in the energy field: individuals, cities, municipalities, regions, scientists, NGOs, energy agencies and public institutions. Another challenge would be to maintain the CEESEN network and its energy advocacy activities beyond the scope of PANEL2050. This will be a platform that unites actors for the purpose of networking, and that collects all relevant documents related to this field.

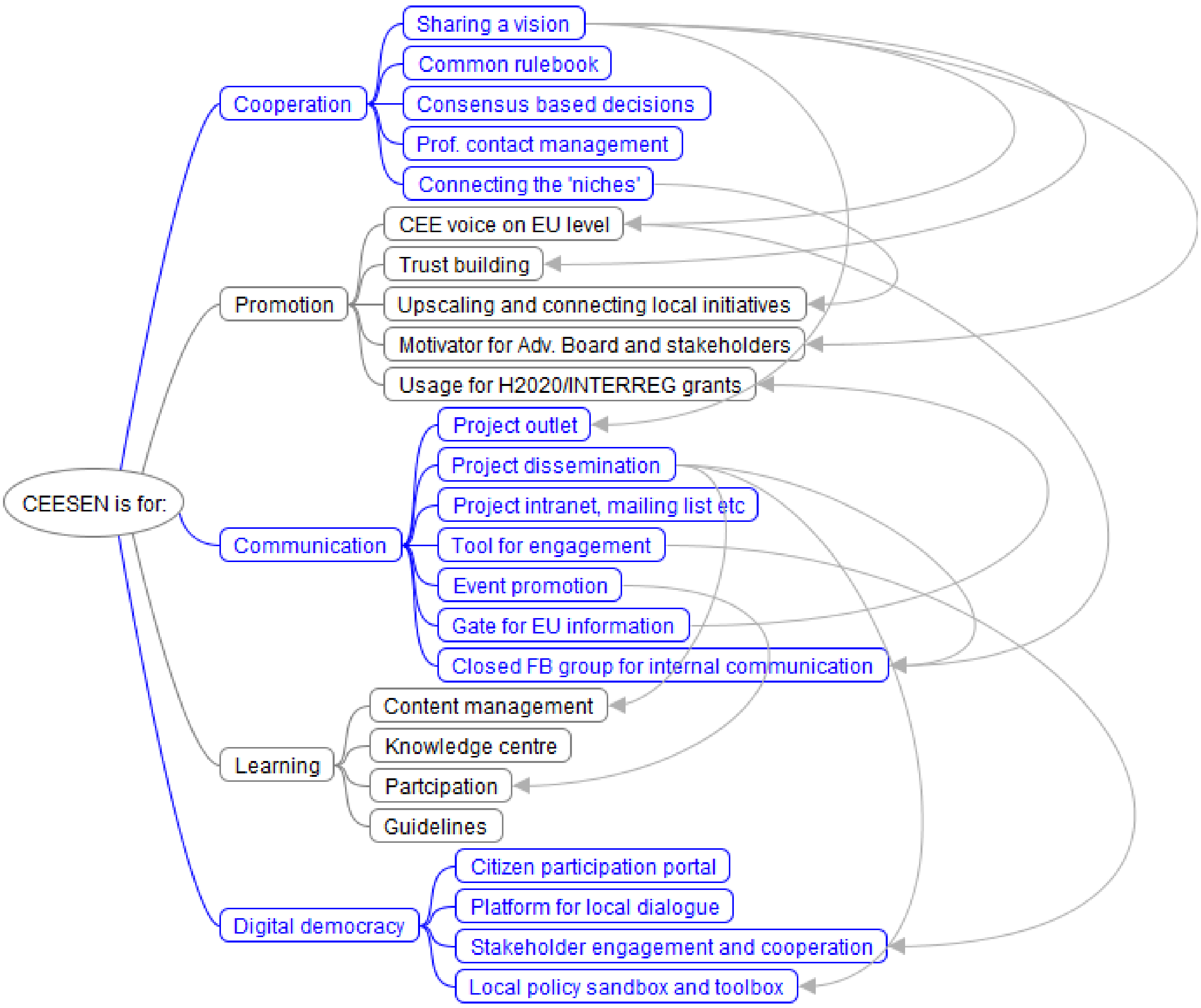


Figure 5. CEESEN functionality proposed by PANEL 2050 consortium.

For more details about the CEESEN visit WP5 Guidelines of Implementation and Communication Plan.

10.5 CEESEN platform

Project web-page (D4.2) has been developed as a part of the CEESEN virtual platform (D5.2) and is publicly accessible under https://ceesen.org/panel2050. This decision to connect project web-page and CEESEN platform was made in order to focus the promotion work onto the main milestone of the project – CEESEN network (MS5) and to attract as many CEESEN members as possible. This means creating less communication channels is preferable in order to have a single go-to place for people who want to join CEESEN. This will make promotion easier: We will have one link to promote both the project and CEESEN. Being part of the platform will also increase the sustainability of the web page after the project has ended. It is also more efficient to promote one web page instead of two separate ones. 10 localisations to regional languages are in process and will be finished for the end of January of 2017.

Simplifying communications

It is challenging to manage a communications channel nowadays and generate traffic through it. As the „noise" in media is massive, it is getting to be more and more challenging even to grab attention, not to mention to keep audience and gain regular visitors. It is advised to focus on fewer channels but manage them properly and generate all the traffic that an issue can within these few channels. Otherwise we can easily loose target groups. Therefore, to focus on a single channel and diversify the content is a smart tactic to gain visitors. Once a channel is properly established and traffic is gathered there, it is easier to reach out to the target audience than to convert them to visit another channel.

In order to attract as many CEESEN members as possible, it is best to simplify communications. This means having less communication channels in order to have a single go-to place for people who want to join CEESEN. This will make promotion easier: We will have one link to promote both the project and CEESEN. This is very helpful for the Facebook promotion of CEESEN since people spend up to 20-30 seconds maximum on each post. Having two links in one post (webpage to describe the CEESEN context/vision and CEESEN platform to ask them to actually join) is very likely to reduce the number of people who click on the CEESEN link and join the network.

Communicating our goals and work, not our project

Since the main idea of the PANEL2050 project is to train and/or create future energy leaders and use CEESEN as their networking tool beyond the project, it makes sense to unite them. We need to always communicate the energy context/results/outcomes, not the project, since we work for an ideal: the green, sustainable energy of CEE. Having a separate project website will take attention away from the goal by focusing people on the tool (the project). Naturally there will be space for summarizing the project and its activities as required by the programme. But it can be a different menu, with even a different landing page.

Making sure the platform is alive after the project's end

A project website is not likely to attract any visitors once the project is over because it will not produce any content. The action will be taking place on the CEESEN platform, which will keep growing. We need to unite both in order to keep the PANEL2050 mission alive after PANEL2050 is over. This is the goal of the project as well.

Keeping all content in one place

Last but not least, uniting CEESEN and the PANEL2050 website will help keep all project content in one place. If we separate them, all PANEL2050 documents (visions, roadmaps, action plans) will be stored elsewhere on a site that is most likely never visited again. This is the goal of the project as well.

How shall it be done?

Each partner will develop a landing page (not necessary if the English website has 13 language versions, but it is like this according to the project plan) that is dedicated to promoting CEESEN and inviting people to join. They will invite stakeholders to go to that website in order to join CEESEN using all of their communication channels: Facebook posts/promotion, LinkedIn messages, newsletters, other e-mail and personal communications.

CEESEN online platform

A dedicated online platform (deliverable 5.2) is created for supporting the work of CEESEN and it is accessible over the Internet in ceesen.org. The members can become the users of the platform and participate in its activities: trainings and new cooperation projects. Online platform will serve mostly as an education, database/ information platform for partners, forerunners, and interested parties. It will provide information in an accessible way. It should be simple, informative, understandable, layered (detailed information available after clicking). There will be a news tab, but the main page will not list news. The website's main language will be English and it will have 13 regional language versions, as agreed following the CEESEN platform survey (that is, separate CEESEN landing pages do not need to be created individually by each partner on their own websites).

The website's home page should inspire and invite people to join the community of energy leaders (CEESEN). All publicity rules of the Horizon 2020 Programme/EU will be followed.

CEESEN platform is offering for its members

- Identity management (introduce partner organisations/individuals)
- Content management (create unique content and provide existing content from other sources)
- Visualization (support CEESEN users with visual navigation tools)

Structure of CEESEN platform

Landing page

|

+ News

|

+ Trainings General View – Training

|

+ Projects General View - Project

|

+ Members General View (together with the map) - Member

|

+ Documents General View - Document

|

+ PANEL2050

Text under the heading of each sub-page (the one in the static textbox) should be as follows:

+ News – “Share your story, project or event”

|

+ Trainings – “Participate in our trainings or suggest your own”

|

+ Projects – “Find out about new projects and share your ideas.”

|

+ Members – “Meet your fellow members”

|

+ Documents – „Contribute to a shared database for energy transition”

|

+ PANEL2050 – “For a low-carbon community in CEE”

Member Area is providing the tools for identity management and partnership. All the members of the CEESEN network can create a partner profile for themselves. These profiles are visible for all the members and partly visible for visitors (as a short business card). The profiles are presented using their internal rating for encouraging the user activity on platform.

Document Area is providing tools for document management. All the documents provided will be tagged by type, publisher, year of release and year of update, number of pages, number of figures and number of tables, topic. Documents are presented with the information about the number of downloads (views), links with ideas in Project Area, events in calendar (trainings) and News. Based on these variables the internal rating calculated. The documents will have absolute link and this link can be shared in other platforms such as Facebook. Documents have to be already uploaded to different server (!) and will be presented on platform using the absolute link provided by hosting service. Documents can have different versions and the information of these versions will be unified. For example the Guidebook that already has number of downloads will maintain this number also after the update. Also the relevance score of the document will be transferred to updated version. Old version will be locked for viewing and will automatically go to the updated one. Documents can have visual links defined by the uploader. Contact details of the author are added to the shell of the document.

Project Area is a cooperation tool focusing on the shared activities of the new developments between the CEESEN members. Entries of Project Area are presented with the information about the author, organization, views, supporters, events, topics and contacts. This information will be used to calculate the rating. Every Idea can be printed, published in social media, promoted for invitation and joined. Access to Project Area is provided only for the members of CEESEN.

Training Area is a simple and straightforward tool for managing training sessions. It includes the information about its content, size, schedule, teacher, participants, related documents and the forum posts. It offers possibility to print the training form that will include participation list and necessary disclaimers about the funding. It is also publish the training information into social networks like Facebook, invite people to join and participate in training. It is possible to send emails to all the participants once. Private communication will be held over the email. The general information about the training can be viewed by visitors but registration as a member is required to participate in trainings.

Partner Area is a cooperation tool focusing on international dimension. Countries are presented by the number of forerunners, Ideas on Project Area, trainings, News activities. The Leader of the CEESEN network is also presented. It is possible to contact all the members from one country but this has to be approved by the national administrator. Countries will be also presented by the relevance that is calculated using the activities of the CEESEN members in the country. This will be presented on dedicated view of the Country Area.

Information management

All the content in CEESEN platform is evaluated by the algorithm. Internal rating is calculated based on this evaluation. Content is presented by the graphical interface using this rating and the evaluation combines the appeal of the object (page views, downloads, incoming links, connected members) and usability (connected documents, trainings, history of activity). This functionality is only partly executed and will be developed further during project lifetime.

The priority of the information is decided by the algorithm considering:

- how much is the information linked with everything else happening in platform,
- how much is the information used (downloaded or visited),
- how recent is the content (when was it created).

For example a document that is uploaded to Document Area in the platform and has many links from Training Area and has been downloaded many times gets higher score on relevancy than the document that is not linked and not downloaded. Content with a low relevancy will be covered with more relevant content and will finally be visible only trough specific filtering or in search.

Another example would be a partner profile in Member Area that is active, has a lot of content created in the platform (Project Area, Calendar, Training area) has higher relevancy score compared with the partner who has created a profile but never added any content.

Content can be filtered using several filters at the same time. First filter would be based on the time of activity – it's possible to show content created during last month, 6 months, 1 year, 2 years and 5 years. Older content would be only accessible through the search. Second filter can show the content based on the name, type, topic, activity and history. \`Name\` is free text inserted into the box. \`Type\` is a content specific variable (\`Guidebook\` in Document Area). Topic is global variable (see the topics). Activity can modify the first filter for example to choose between the activity of training and the overall activity. \`History\` shows only the content that is older than specific time (1 month, 6 months etc). Not all the areas of the platform will have all the options for a second filter.

CEESEN platform will use the coherent topic system (meta-data) that are used in all the areas of platform the same way. All the published content can have up to five tags that will include three mandatory topic tags:

- topic of the field: energy, transport, society, environment, economy
- topic of activity: policy, planning, advocacy, learning, teaching, commerce, technology

- topic of the geographical focus: global, EU, CEE, national, regional, county, municipality, local, end user.

Access to information

Registered members have the full access to the information on CEESEN platform. Non-registered users can search and browse the newsfeed, documents and trainings. They also can see the 'business card' view of the CEESEN members. However they won't be able to visit the Project Area nor create any new content on the platform. Registered users will have a full access to all the areas of platform, they can upload the training materials, create news and events, partner profiles, create and access the Project Area. National partners (Project Partners, one per country) will have the full access to all of these and will act as moderators for national forums.

CEESEN promotion

Establishing the CEESEN network as a leading actor in the energy field that engages and empowers local actors and transforms local energy markets is the main goal of the project, so project communications will mostly be directed toward current and future stakeholders. Most communication activities will therefore not involve media and the general public, but experts in the field and local policy officials. The success of the network will depend on the individual networking and communication efforts of each PANEL2050 partner.

The communication towards media and the wider public would be based on milestones, e.g., the developed energy profiles, roadmaps, visions and action plans; the successful eventual union of existing energy networks under CEESEN; any important agreements reached during the two PANEL2050 conferences, etc.

All external media communications would aim to create local awareness of EU-level energy goals and the need and the ways of their local implementation. They would chiefly support CEESEN forerunners efforts to act as opinion leaders in their regions. External target groups for the promotion have been identified as:

- Local stakeholders (suppliers, users, specialists, development organizations, investors, etc.),
- The scientific community in CEE and internationally,
- Educational institutions in CEE and internationally,
- Other experts: transport and modality experts, urban designers, service providers, infrastructure experts, ICT experts, etc.,
- Local public institutions (municipalities, city halls, etc.) in CEE,
- Policy makers at a regional, national and EU level,
- The general public in participating local areas and throughout CEE,
- Specialized media – local and international (examples: journalists who work for a specific division of a media – environment, energy, EU politics; or media that specializes on these topics – magazines, online media, etc.)

All communication activities on all channels should be streamlined to promote CEESEN as a leading voice regarding energy in the CEE and invite experts to join the green energy revolution in CEE. All public communications related to energy carried out by all partners should make an effort to mention CEESEN, as well as create awareness on energy issues.

For more details about the CEESEN platform visit WP5 Guidelines of Implementation and Communication Plan.

10.6 Energy Advocacy Guidebook

Energy Advocacy Guidebook is developed under PANEL2050 action that provides a practical guidance for the necessary steps to take in order to achieve the aim of this project. PANEL2050 aims to create durable and replicable sustainable energy networks at local (municipality/community) level, where relevant local stakeholders collaborate for the creation of a local energy visions, strategies and action plans for the transition towards low carbon communities in 2050.

The purpose of the Guidebook is to assist initially the PANEL2050 partner institutions in successful engagement of stakeholders in the process of ensuring the feasible collaboration of the local communities in the field of energy transitions and energy visioning. The guidebook is part of the wider capacity building activities oriented for stakeholders in the energy sector and supported by a training program. Authorities looking to update their methodology for implementing energy management will also be able to use this guidebook. The guidebook targets the CEESEN members as well. They are considered as forerunners in PANEL2050 action and supposed to be interested in making use of this guidebook in the process of energy transitions in their own communities.

The guidebook will serve as a main tool for the partners to empower the local stakeholders with different educational actions while conducting the regional training in energy advocacy. Since the guidebook targets the wider audience beyond the PANEL2050, it will aim to achieve the transformation of the knowledge to the wider public across the CEE region. The guidebook will be written in English and then translated into 10 different languages, therefore it could be used at the local level in each partner country.

The manual contains strong theoretical background and practical exercises which could be carried out by the readers for analyzing their environment and developing advocacy strategies. It also includes examples of various tools to be used by readers, such as sample letters of support/press releases, SWOT, Stakeholder analysis worksheets and logical frameworks for putting together different elements of an advocacy strategy. The guidebook is used during the various training described below and will be made available on partner and project websites. It also includes short case studies of successful forerunners in Eastern Europe and other countries which will illustrate how various concepts described have been effectively been put into action. In order to ensure wider usage of the guidebook special care will be taken to write the manual inaccessible easy to understand language.

The content of the Guidebook is based on addressing the specific tasks and needs of the PANEL2050 project partners. In particular, while using the guidebook the partners will be able to:

- Identify relevant stakeholders for the energy transition process;
- Ensure sustainable participation and build up political support and public acceptance for sustainable energy management;
- Empower stakeholders in terms of technical knowledge related to the energy efficiency;
- Create feasible communication channels for reaching relevant stakeholders.

The development of the Guidebook starts from the beginning of the project. Experts from Johan Skytte Institute of Political Studies at the University of Tartu are responsible partners for the development and delivery of the Guidebook. UT is responsible for developing the overall structure of the Guidebook and enrich it with the input coming from Partners such as TREA, EMU, and CPU. The process includes creating the conceptual framework for the guidebook, analyzing the state of local stakeholders of PANEL2050 and importantly developing the curriculum for the training. This action will allow the responsible partner to put together the training curriculum and best practice case studies in the Guidebook. The work on this Guidebook will begin in month 1 and it will be delivered by month 10 for the train the trainer workshops.

The content of the Guidebook is developed in multiple dimensions. The initial action for that is creating the conceptual framework, which will gather the academic articles and generate the knowledge from them. The next step involves gathering the input from the partners regarding different thematic dimension of the guidebook. This action will be implemented as part of the development of training methodology. In particular it includes following tasks:

Task 2.2.1 Identifying the relevant literature. Due to fact that the energy transition is very complex process, early identified materials will cover the following topics: advocacy and policy making, energy management, renewable technologies and social innovation. These thematic clusters will allow the guidelines to address various aspects of the energy transitions, although the advocacy and policy-making aspects are ground of the guidelines. UT together with TREA will conduct a research for the relevant literature and gather it. The theoretical work has identified 20 relevant scientific papers/writings covering these topics including the works of C. Frei, G. Seyfang, A. Haxeltine, A. Smith, T. Hargreaves, R. Kemp, N. Longhurst, G. Feola, P. J. Taylor etc. The main question of this research has been the role of communities and their actors in the energy transition process. The theoretical knowledge will be analyzed together with the practical experiences of UTARTU and other consortium members and used in the process of building up the methodology for engaging stakeholders for energy transition in CEE countries.

As part of generating the knowledge outside of the consortium, there will be a created list of academic articles and guidebooks, which will be used as a ground for creating the general framework of the guidebook. The number of studies was addressing the issues of strategic niche and energy transition managements, discussing the questions such as how the niche growth is developing in the “locked-in” energy systems and what are the economic effects of transitions. The studies were also focused on grassroots’ level and social innovations, where grassroots initiatives were defined as innovations that tend to operate in civil society arenas and involve committed activists who are using greener technologies and technique (Seyfang, G., & Longhurst, N. 2013). The actions included:

- innovative networks of activists and organizations that lead bottom-up solutions for sustainable development;
- solutions that respond to the local situation and the interests and values of the communities involved.

The literature review showed that grassroots innovations, like many volunteer organizations, often struggle with securing and sustaining participation over time. Most of the time it is voluntary that limits the abilities to promote the innovations. There have been conducted several actions and studies (Bertoldi, P., Cayuela, D. B., Monni, S., & de Raveschoot, R. P. 2010; Cardinaletti, Marco ED 2009; Peterson, D., Matthews, E., & Weingarten, M. 2011) towards elaborating the energy advocacy issues focusing on the sustainable transitions. There was limited focus on engaging the wider range of social groups in transitions. Addressing this limitation, the guidebook includes the specific tool for managing the feasible engagement of the grassroots and creating the tools for wider inclusion of the actor operating in the energy sector.

Task 2.2.2 Creating the preliminary baseline for the Guidebook. After analyzing the collected materials, conducting the first TtT workshops, and studying the stakeholder mapping (WP2.3.9) UT will create the framework for the guideline, including the preliminary chapters based on the thematic clusters identified earlier. The framework of the guidebook will be created by month 9, November, 2016. The document will be shared with all the partners. Meanwhile UT will organize a Skype conference in month 9, November 2016 with TREA, CPU, EMU addressing the questions regarding guidebook.

Task 2.2.3 Collecting the input from the partners to enrich the predefined clusters of the guidebook. This means that after creating the general framework, partners such as TREA and CPU, who will be the main supporters of developing the content of this guidebook, will provide their input. Three main partners will provide input for the guidelines. TREA from Estonia is responsible for bringing input regarding the energy management issues, EMU from Estonia is responsible for enriching the guidelines with input about the renewable technologies and CPU from Austria for the social innovation aspects.

UT will serve as coordinator for gathering the input for the guidebook since it should also predominantly include the contact coming from the WP3.

Task 2.2.4 Creating initial version of the guidebook. After fulfilling the sub-task outlined above UT will synthesize collected input from individual partners and feedback from all the partners and put it into one integrated document. Further development of the guidebook is described in next tasks. The first version of the guidebook will be ready by month 10, December, 2016.

Task 2.2.5 Gathering the feedback for further development of guidebook. The focus will be on testing how relevant is the guidebook for PPs (SEPs). It will also address the previous experience of PPs and their actions conducted under PANEL2050 by month 12. This task includes distributing and collecting written materials presenting the partner input. This action will be conducted alongside the set of Skype conferences with partners (2.1.5). This particular action will be completed by month 12, February 2016. This part of action is further discussed under WP2.4.

Task 2.2.6 Finalize Guidebook. UT will be responsible for putting together all the feedback and producing the final version of the guidebook. The action will be implemented during month 13, March 2017.

Task 2.2.7/Task 2.4.5 Translation of the guidebook into 13 local languages. All the partners are responsible for translating the training curriculum and guidebook into their own languages. The materials will be translated into 13 languages (D2.2 Guidebook on Energy Efficiency Advocacy in 13 languages (M14)).

The initial users of the guidebook are PANEL2050 consortium members. In particular, the stakeholder engagement persons who are supposed to conduct the capacity building actions for the local stakeholders and the specialist in the area of green sectors and green efficiency who are supposed to be forerunners of the energy transitions at the local level. The process of identifying the target audience of the guidebook is combined with WP3 actions, where mapping of potential stakeholders is included in development of long-term energy roadmaps. At the same time, the guidebook will target wider group of stakeholders across the CEE region, including organizations, governmental bodies, agencies, municipalities and activists. PANEL2050 aims to establish CEESEN platform at the end of the project, which will unite the individuals, cities, municipalities, regions, scientists, NGOs, energy agencies and public institutions. The members from around 100 organizations and 1.500 individuals from the CEE region are considered as crucial users of the guidebook.

The guidebook will be interactive and used for the regional energy advocacy training by the stakeholder engagement persons. It will be integrated to the training curriculum with detailed guidance. It will include the conceptual framework of the energy transitions, examples of various tools to be used by readers, such as sample letters of support/press releases, SWOT and Stakeholder analysis worksheets, and logical frameworks to connect together different elements of an advocacy strategy. The structure and content of the guidebook addresses the need of using it independently, since it is supposed to be shared with the wide range of actors operating in the energy sector across CEE region.

The main expectation with using the guidebook is:

- Increased capacities of the PANEL2050 members to conduct the successful energy advocacy campaigns and energy road mapping.
- Increased energy advocacy capacity of the local stakeholders and forerunners for conducting the energy advocacy campaigns.

The guidebook has a strong influence on WP3, which anticipates that PANEL partners will work with trained stakeholders from WP2 to develop and implement local roadmaps. This specifically goes to 3.1 objectives of WP3, such as train the PANEL partners on how to conduct Stakeholder Analyses and communicate with diverse types of stakeholders from different sectors (government, business, third sector). The guidebook will be one of the main tools for executing this objective.

Under WP4 there will be conducted main dissemination actions related to the guidebook. By month 14 the guidebook will be delivered, by month 10 it will be shared with the partners for receiving feedback. The audience that will be targeted for the dissemination actions are the specialists in the area of energy sector. As from communication channels, it will be shared through WWF newsletters and internal mailing list, PP websites, CEECEE online platform, English and local-language digital platforms. The leading partner of WP3 will be responsible for conducting the dissemination actions.

10.7 Curriculum and Training Materials

By 2050, the EU aims to cut its emissions substantially – by 80-95% compared to 1990's levels as part of the efforts required by developed countries. It will turn Europe effectively into a highly energy efficient and low-carbon economy which in turn will create new jobs and strengthen Europe's competitiveness. In Central and Eastern Europe the growth of renewable energy generation is under EU average. This means that the CEE countries have to increase their current efforts to attain the 2020 EU ambition. There are number of trends in the energy sector that were identified as essential by leading studies. The first leading factor is ensuring energy efficiency, which is strongly tied to the delivering energy efficiency improvements across the economy. Furthermore, development of the low carbon technologies will enable to make low-cost and faster energy transitions which are considered as an import trend in the process. Another category of trends is addressing the grids and integrated market operations. Also the fuel shift in transportation and buildings, where the electricity markets and electricity mobility are considered as key elements in the transition process. At the same time, along with these trends, there is a number of concerns about the implementation and further development of energy transitions, where the part of implementation plays a crucial role. This is part of the process, where the question of advocacy and stakeholder engagement will arise. In this regard, the main trend and agenda is creating the feasible participatory models of advocacy actions that will ensure the inclusive and consensus-oriented solutions.

During months 1 – 10, staff from the Johan Skytte Institute of Political Studies at the University of Tartu (UT) with the energy experts from the Tartu Regional Energy Agency (TREA) and CPU will work together to develop the Energy Advocacy Training Curriculum. The curriculum will be based in part upon advocacy methods used by the World Wild Life Fund and training models that have already been developed via projects funded by the European Environmental Bureau. As part of the generating knowledge outside of the consortium, there is a list of academic articles and guidebooks, which will be used as a ground for general framework of the curriculum. The detailed list of the bibliography for the training curriculum is provided under WP2.2 action.

Curriculum will be created for the strengthening advocacy capacities of the project partners and at the same time to provide feasible educational tools for Stakeholder Engagement Persons SEPs, who will be participating in any internal capacity building effort under PANEL2050. They will be serving as the trainee persons later in the project, conducting local energy advocacy trainings for the forerunners in their communities. Most motivated and highly performed local energy advocacy training participants will, in turn, be selected for the 'forerunners boot camp' in which they will be given the opportunity to develop specific skills needed to advocate effectively, such as public speaking and presentation skills. These train the trainer sessions under WP2.3 will serve as tools for building the capacities of the project partner, in particular SEPs and as a tool for development of feasible training curriculum.

Development of the curriculum includes the following tasks:

Task 2.1.1 Drawing the conceptual framework for the curriculum. By gathering the academic studies and reports related to the four pillars of the curriculum such as energy advocacy and stakeholder engagement, grassroots innovations, communication and energy road mapping, UT will coordinate drawing the conceptual framework. It will include creating the content of training curriculum. With participation of CPU and TREA the action should be fulfilled by month 6, August 2016.

Task 2.1.2 Creating the draft training curriculum. Once the framework will be defined by UT , it will be shared with partners to elaborate on the core clusters of the curriculum. The curriculum will include the following thematic dimensions

- Problem Identification and Goal Setting
- Identifying Target Audiences and developing Advocacy Strategies
- Creating Compelling and Appropriate Message for target audiences
- Identifying resources and potential/actual opponents (SWOT)
- Selecting the appropriate Messengers for the message and target audience
- Identifying the appropriate Communication Channels
- Evaluation of results
- Understanding the Cultural Context in general and with specific target audiences
- Technical Training related to energy efficiency.

In particular, the curriculum will consist of the following components:

- Problem Identification and Goal Setting – Training participants will learn how to conduct research and consult with secondary stakeholders for better understanding of the current situation, most significant problems and identifying goals for solving them. These should be specific, measurable, achievable and realistic – so that success in reaching them could be evaluated.
- Identifying Target Audiences and developing Advocacy Strategies – Trainees will learn how to analyze and select their targeted audiences. They will also learn about the different advocacy strategies that should be taken within the various audiences. This includes:
    - Public sector – The focus is on understanding the policy cycles at work (at the local, regional or national levels as appropriate), processes at work so that advocates can get their issues into the agenda, which can lead to inclusion in legislation and eventually adoption (or repeal) of laws.
    - Private Sector – Advocacy towards private sector is typically related to efforts to change corporate/industry behavior and to include direct interaction with the firm(s), media campaigns or citizen mobilization.
    - Non-profit Sector – Advocacy with citizens typically occurs on two levels. Internal stakeholders of the organization, its members, staff, volunteers, donors, clients, supporters etc. require specific forms of communication to get and keep them engaged in the work of the organization. For citizens outside of the organization, usually some level of segmentation is valuable, in which the specific attitudes and concerns of the group could be addressed by the organization.
- Creating Messages – Participants will learn to tailor messages to specific targeted audiences. For example, messages to companies might focus on business opportunities that energy efficiency can offer. For policy makers the message could be about the possibilities of lowering the operating costs of government. The particular importance for this project will be helping advocates to translate sometimes complicated technical jargon related to energy efficiency into language that can be easily understood by stakeholders at all levels (scientists, policy makers, citizens etc.).
- Identifying resources and potential/actual opponents – Something similar to SWOT analysis, successful advocates are capable of identifying the technical, financial and other resources that are available or needed. Stakeholders in this project will also learn how to identify partners who can be supportive as well as opponents who might

work against advocacy efforts. It will be important to be capable of the development of strategies for filling weaknesses, obtaining needed resources or creating rebuttals to the claims or arguments made by opponents.

- Selecting Messengers – For many messages the deliver itself can be as important as the content of the message. In addition to identifying appropriate spokesperson, trainees will learn how to develop collaborations with other organizations for further promotion of their desired messages. This part of the action will be further developed under the forerunners boot camp (WP2.6) which will help stakeholders to develop the skills needed as better messengers.
- Communication Channels – Related to the other elements of the program, students of trainings will also identify various methods that can be used for dissemination of their message, whether it be via print/electronic media, online or personal interactions.
- Evaluation – Training participants will also learn how to evaluate the progress and success of their efforts and how to use this information for further improvement of the advocacy efforts.
- Technical Training Related to the energy efficiency and transitions– As part of the stakeholder training, a technical element will be developed by TREA, CPU and AgEnda. This part of the training will be based on the actions conducted under WP3.

The partners involved in these tasks are TREA and CPU. The action should be fulfilled during the month 6, August, 2016.

Task 2.1.3 WP2 and WP3 share approaches before October meeting. Before October meeting UT, AgEnda and CPU will exchange the approaches about what is planned to be addressed during the first round of the TtT in October. The task is fulfilled month 7, September 2016

Skype Conference between UT, TREA, CPU, AgeEnda – Mid of September, 2016.

Task 2.1.4 synthesizing content of training curriculum from WP2 and WP3. This part of the action will synthesize the input coming from WP3 about the technical aspects of energy efficiency and advocacy policy created in this WP. There will be a Skype conference in the mid of 7 months, September 2016, among the UT, TREA, AgEnda and CPU. The preliminary content of training curriculum will be created by month 7, September, 2016

Task 2.1.5 October Meeting. Information gathered from SEP's during the October meeting (described in task 2.3.6), conceptual framework will be further developed to create the draft curriculum. In the first round the training will focus on getting to know the stakeholder engagement persons (SEPs) for each partner and studying the current situation of the stakeholder engagement. The action is conducted in month 8, October 2016

Task 2.1.6 Update of the Training curriculum. The first round of the TtT will be part of the curriculum development. Training curriculum will be updated based on the feedback from the October meeting. After conducting the training, the curriculum will be updated, more precise and generally well defined. UT will coordinate this action and organize a Skype conference with TREA, CPU, EMU, AgEnda and ideally with rest of the partners to discuss the further development of the training curriculum. The action will be conducted by month 10, December 2016.

Task 2.1.7 Second round of the TtT. The second round of the TtT (Task 2.3.7 Conducting the Second Round of Train the Training workshop) will be part of the development of final version of the training curriculum. This is further discussed under WP 2.3.8. The TtT session is conducted in month 11, January 2017.

Task 2.1.8 Collecting the feedback from stakeholder engagement person SEPs. The feedback from PPs and in particular SEPs who are supposed to become the trainee persons later. There will be a questionnaire created for the Skype conferences that will be conducted after every TtT workshops. This action is further discussed under the WP2.4.

There will be two rounds of gathering the feedback for finalizing the training curriculum. First set of the Skype conferences will be conducted in month 12, February 2017.

This task will be accomplished by month 12, February 2017.

Task 2.1.9 Finalizing the initial version of training curriculum. This is the final stage where UT will be responsible for combining the obtained feedback from the main partner, involved in developing the curriculum and synthesize the results coming from the TtT workshop. After creating the draft of the training curriculum and conducting the second round of TtT workshop with trainee persons the process of developing the curriculum will be continued. This action is further discussed under the WP2.3 action. The final version of the training curriculum will be ready by month 12, February 2017.

Partners involved – TREA, CPU

Month 12, February 2017

Task 2.1.10 – Translation of the final version of training curriculum as described in WP4. After finalizing the training curriculum, it will be shared with PPs to be translated in 13 languages (D2.1 Written Curriculum and Training Materials in 13 languages (M12)) by month 12, February 2017

Partners Involved:

All partners – translating the training curriculum by month 12, February 2017

10.8 Train the Trainer

The TtT workshops are considered as capacity building tools for the PPs and in particular for the SEPs. They are supposed to conduct regional training in energy advocacy. Therefore, Tot workshops are considered as essential for following steps under WP2. The learning outcomes that will be achieved under TiT workshops are: advance the knowledge in different aspects of the political advocacy in terms of energy transition and management. Therefore, this learning outcome will be relevant for the local and regional stakeholders as well.

The purpose of the training is to prepare partners to engage in the preparation of regional stakeholder maps which are described in task 3.2. This includes reaching out to various stakeholders and communicating with them. This is considered especially important because identifying and including the appropriate number of stakeholders could be a challenging task for many organizations in CEE countries as there is a limited cultural background for doing so. Train-the-trainer training program is used for increasing the capacity of project partners on policy development and advocacy. Training will also develop the specific skills that are needed for implementing PANEL projects in partner regions. The focus is on active learning and participation.

Trainers will first go through two rounds trainings sessions, one in October and one in January. These rounds will be conducted in Lithuania and Estonia during the project meetings. The training program will be created under WP2.1 action. In the last round the focus will be on the participatory teaching methods, the selection of examples from the local region to use as problems for trainee persons and for the participants of the regional training in energy advocacy.

Task 2.3.6 Conducting the First round of Train the Trainer workshops. UT with the collaboration of TREA, CPU will conduct a series of Train the Trainer workshops for partners. The program of the trainings will be created under WP2.1. Some of the partners don't have the experience in teaching or conducting trainings while others have teaching experience but lack of knowledge in political advocacy. Therefore there will be applied comprehensive approach while conducted the trainings including the number of methods such as lectures about selected core clusters of the curriculum, role plays, logical mapping exercises which will help SEPs to established the structural approach towards the energy advocacy.

The training session will include a solid amount of open discussion over presented topics and reflection on previously conducted work under PANEL2050. The first round training will focus on getting to know the stakeholder engagement persons (SEPs) for each partner. This includes their background, experience and capabilities; discussing more in depth strategic stakeholder management techniques, in an effort to assist partners in working with their stakeholders and providing some sort of training on the technical side of things, i.e. in regards to WP3.

The responsible partner for the action is UT while collaborating with CPU and TREA.

The training will be called "Energy Advocacy TtT: towards empowering the forerunners in energy transitions". The name will be affiliated with the overall slogan of the CEESEN Network. The trainings are considered as a milestone in WP2 action.

The training session will be conducted in month 8, October, 2016 in Ignalinas, Lithuania

See link: https://docs.google.com/document/d/1HereOz_rE_3QHf1YrKo0yLcf8NgaVPFMfRbaJZ-EVwo/edit#

Task 2.3.7 Conducting the Second Round of Train the Training workshop. The final round of the training will be conducted with the SEPs who are supposed to become trainee persons and conduct the regional training in energy advocacy. This training will solicit the feedback and best practices coming from the previous round of the TtT. The training will focus on further in-depth analysis of creating the advocacy strategies targeting the identified stakeholders, conducting the political advocacy, financing sources, strategies of the advocacy actions and road mapping aspects of energy transition under WP3.

The training will involve individual partners such as TREA, CPU, WWF And SEPs from all PPs

The training will be conducted in Tartu, Estonia in month 12, February, 2017

Task 2.3.8 Collecting the feedback for integrating the experience of the PPs regarding the content of the train the trainer workshops.

The feedback from PPs and in particular from SEPs, who are supposed to become trainee persons later, will be generated as a result of the Skype conferences that will be conducted after every TtT workshops. This action is further discussed under WP2.4. Initial training structure will be consulted at the second project meeting with the partners and stakeholder engagement persons. Therefore they will be asked to come up with the written feedback about the curriculum. At the first TtT workshop this issue will be proactively discussed and recorded. The discussion will include any relevant experiences and cases that might be useable for integrating the PPs relevant experience into the curriculum and later in the guidebook.

There will be two rounds of gathering the feedback from finalizing the training curriculum. The set of the Skype conferences will be conducted in month 12, February, 2017

This task will be accomplished by month 12, February, 2017

10.9 Regional Trainings in Energy Advocacy

Task 2.5.1 Selection of the participating organizations for regional trainings in energy advocacy. The partners are conducting the mapping of the stakeholders on the constant basis through the template developed under WP2.3 action. Since in the template there is requested detailed information about the partners, their positioning in the potential energy visions and preliminary objectives of their engagement, it will guide the partners to select relevant organizations and individuals. Variation is based on the size of the region and number of interested actors. Partners will notify between 7 and 10 organizations in their region about the local energy advocacy training. Some of these organizations have already been identified as illustrated in the attached letters of support. At the same time, there will be more attention paid towards the organizations that are in weak positions in the evaluation graph that is integrated into the template. The action of selection of participants will be coordinated by UT and conducted by the PPs. The task will be fulfilled by month 14, April 2017.

The expected knowledge and required skillset of the regional training participants are:

- operating in the field of energy sector which will respond to the early defined structure of the training curriculum
- facing the challenges in terms of conducting successful energy advocacy campaigns
- evaluated as actors having a strong impact in energy sector but limited capacities in technical terms.
- having an experience in conducting energy advocacy campaign so under the training there will be addressed the practical aspect of advocacy work of stakeholders

Partners Involved:

SEPs – Conducting the selection process by M14, April 2017

Task 2.5.2 Identifying the needs and expectations of participants for the regional training in energy advocacy. After conducting the training and crafting the preliminary version of the training curriculum PPs and Stakeholder Engagement Person SEPs will be asked to gather the feedback and expectations from the stakeholders. This will include sharing the curriculum with the partners and gathering the feedback. One brief material overviewing the stakeholder's expectations and needs will be shared with the UT, which will integrate and address all these needs in the final version of the training curriculum and guidebook. In total 10 documents will be gathered. Ten partners (expect UT, CPU and TREA) will submit the stakeholder's feedback by month 15, May 2017.

Partners Involved:

SEPs – Providing a document from each PP country regarding the feedback for Workshop in International advocacy by month 15, May 2017

Task 2.5.3 Integrating the expectation of the regional training participants into the training curriculum. The action will be conducted by UT with the collaboration of TREA and CPU. The final version of the training curriculum will be integrated with the feedback gathered from potential participants of regional trainings. This effort will enrich the curriculum and guidebook which are supposed to serve for stakeholders and wider public from CEE regions with same challenges and limitations. UT will update the training program for the PPs and distribute suggested program to all PPs responsible for conducting regional trainings. The action will be accomplished by month 16, June 2017.

Partners Involved:

TREA CPU – Finalizing the training program by month 16, June 2017

Task 2.5.4 Conducting regional training in energy advocacy. Under this task early identified Stakeholder Engagement persons will serve as trainee persons. SEPs who received training in task 2.3 will provide training for local forerunners. The duration will be individually identified for each partner as well as the structure and some critical aspects of the training curriculum. The main structure of the training will include four essential parts taken from previously crafted training curriculum, such as advocacy and policy-making, renewable energy, energy management and social innovations. There will be widely used lectures and presentations, open discussions and reflections, role plays, logical group exercises and case study methods as training methods. At the same time there will be used video presentations focusing on different successful cases gathered during developing the structure and content of the training program. The handouts and supportive materials prepared for the TtT workshops will be used at the local training. It is estimated that 2 - 3 people will participate from each organization. In total approximately 200 people will receive training. Local trainings will take place between months 16 – 21, June-November 2017.

Task 2.5.5 /2.6.5/2.7.7 Evaluation of the training. MAES is the partner coordinating and executing the evaluation process under PANEL2050. Therefore, evaluation of this particular action under WP2.5 will be conducted by the MAE. Under the WP5.5 MAES with the collaboration of UT will design the evaluation plan for the regional pieces of training in energy advocacy and for the Forerunners Boot camp. The plan will include the critical indicators and precise mechanism for evaluating the capacity building efforts. This action will be conducted during months 10-15, December 2016-May 2017. The plan will be delivered by month 15, May 2017.

Partner involved:

MAE – Creating the evaluation plan month 15, May 2017

Regional training in Energy Advocacy influences work packages 3and 5.

Work package 3 is influenced in terms of implementing the development of roadmaps. PANEL2050 aims to create regional energy roadmaps (WP3.2), local energy visions (WP3.7), design and execute the roadmaps and regional action plans (WP3.7 and WP3.8).

Work package 5 is influenced in terms of creating the CEESEN online platform (WP5.1) which is supposed to gather the stakeholders participating in the local training at the first place. These stakeholders are considered as forerunners in the energy transition process under PANEL2050.

10.10 Forerunners Boot Camp

Participants of the forerunners boot camp will engage in an intensive training program in which they will practice public speaking and making presentations, learn about consensus and coalition building and other related topics as well as the technical aspect of energy transition and energy advocacy. The training curriculum created under WP 2.1 will be undated under WP2.6, so it will have the same baseline but adjusted for the participants of Boot Camp.

They will also be connected with people and organizations behind successful campaigns and receive insights about the reality of challenging social standards. Forerunners will also receive training on the visioning and road map methodology developed by the PANEL project so that they can play a key role in the development and promotion of the Roadmap 2050 for their region (described in WP3).

Task 2.6.1 Selection of the participating organizations participating in the Forerunners Boot Camp. The partners are conducting mapping of the stakeholders on the constant basis through the template developed under the WP2.3 action. Since in the template there is requested detailed information about the partners, their positioning in the potential energy visions and preliminary objectives of their engagement, it will guide the partners to select relevant organizations and individuals. Variation is based on the size of the region and number of interested actors. The forerunner boot camp will take place during month 24. There will be selected 3-5 people from each region so the estimated amount would be 40 forerunners.

During the selection process there will be more attention paid to the organizations that are in weak positions according to the evaluation graph that is integrated into the template. After conducting the regional training in energy advocacy, SEPs will be able to identify relevant participants of the Boot Camp. The action of selection of participants will be coordinated by UT and conducted by the SEPs. The task will be fulfilled during month 21, November 2017.

The expected knowledge and required skillset of the regional training participants are:

- operating in the field of energy sector which will respond to the early defined structure of the training curriculum
- facing the challenges in terms of conducting successful energy advocacy campaigns
- evaluated as actors having strong impact in the energy sector but limited capacities in technical terms.
- having an experience in conducting the energy advocacy campaign so under the training there will be addressed the practical aspect of advocacy work of stakeholders

Partners Involved:

SEPs – Conducting the selection process month 21, November 2017

Task 2.6.2 Identifying the needs and expectations of potential participants of Forerunners Boot Camp. After conducting the first TtT training and crafting the preliminary version of the training curriculum PPs and the Stakeholder Engagement Person SEPs will be asked to gather feedback and expectations from the stakeholders. This will include sharing the curriculum with the partners and gathering the feedback. One brief conclusion overviewing the stakeholder's expectations and needs will be shared with the UT who will integrate and address these needs in final version of the training curriculum and guidebook. Partners will submit the stakeholder's feedback by month 22, December 2017.

Partners Involved:

SEPs – Providing a document from each PP country regarding the feedback for the Boot Camp by month 22, December 2017

Task 2.6.3 Integrating the expectation of the Forerunners Boot Camp.. The action will be conducted by UT with a collaboration of TREA and CPU during the revision process of the training curriculum and guidebook. The early created training curriculum under 2.1 will be updated by UT based on the feedback coming from the selected forerunners. This effort will enrich the curriculum and guidebook which are supposed to serve for the stakeholders and wider public from CEE region with same challenges and limitations. The action will be accomplished by month 23, January 2017.

Task 2.6.4 Conducting the Forerunners Boot Camp. The Boot Camp will provide capacity building tools for the forerunners selected after conducting the regional training in energy advocacy. The main structure of the training will include four essential parts taken from previously crafted training curricula, such as advocacy and policy-making, renewable energy, energy management and social innovations. There will be widely used different lectures and presentations, open discussions and reflections, role plays and logical group exercises and case study methods. There will be also used video presentations focusing on different successful cases gathered during developing the structure and content of the training program. The handouts and supportive materials prepared for the TtT workshops will be used at the local trainings.

SEPs are supposed to be active actors in conducting the Boot Camp and contribute the implementation of it as trainers.

The forerunner boot camp will take place during month 24, February 2018.

Task 2.5.5 /2.6.5/2.7.7 Evaluation of the training. MAE is the partner coordinating and executing evaluation process under PANEL2050. Therefore, evaluation of this particular action under WP2.5 will be conducted by MAES. Under WP5.5 MAEwith UT will design the evaluation plan for regional pieces of training in energy advocacy and for the Forerunners Boot camp. The plan will include critical indicators and precise mechanism for evaluating the capacity building efforts. This action will be conducted during months 10-15, December-May 2017. The plan will be delivered by month 15, May 2017.

Partner involved:

MAE– Creating the evaluation plan month 15, May 2017

10.11 Workshops on International Advocacy

These trainings will focus on broader sustainable energy situation in the region. The training curriculum will be updated to include engaging in advocacy at the EU level. Workshops will target initially the forerunners and members of the CEESEN network. There will be conducted four rounds of the workshops approximately up to 2 days. The training curriculum will be mainly based on early created training curriculum, but there will be taken specific efforts for creating more relevant program for the particular participants of the workshops. In this part of the action Stakeholder Engagement Persons are playing a crucial role since they are supposed to fulfill the sub-tasks related to the identification of participants, contributing the adjustment of the training program and finally participating as trainers in the execution of trainings.

Task 2.7.1 Nominating the participants for first Workshops on International Advocacy. The selection process will be conducted by the hosting organization of the workshops. SEPs from PPs will be responsible for conducting the selection process with consultation of UT. For the first round of the training it will be conducted by hosting organization AgEnda in collaboration with UT. Selected members from the forerunners who join the Eastern Europe Sustainable Energy Network (described in WP5) will also attend workshops during the partner meetings scheduled during this project. The selection process will be conducted by the hosting organization of the workshops. SEPs from PPs will be responsible for conducting the selection process with consultation of UT. Variation of participants is based on the size of the region and number of interested actors. It is anticipated that between 3 and 5 people from each region will be selected so that at least 40 forerunners will be trained. Under the training there will be addressed practical aspect of advocacy work of stakeholders.

The expected knowledge and required skillset of the regional training participants are:

- Being part of the CEECEN Network
- operating in the field of energy sector which will evenly respond to the early defined structure of the training curriculum
- facing the challenges in terms of conducting successful energy advocacy campaigns
- evaluated as actors having a strong impact in the energy sector but limited capacities in technical terms
- having an experience in conducting the energy advocacy campaign

Based on the developed selection criteria hosting organization will nominate 7-10 individuals coming from the stakeholders. The nomination process will be accomplished by month 16, June 2017.

Partners Involved:

AgEnda – Conducting the selection process by month 16, June 2017

Task 2.7.2 Training program for Workshop International Advocacy. UT will adjust the training curriculum for the first round of workshop on international advocacy. Since the information of the participants will be available it will create ground for elaborating the feasible and relevant training program targeting the participants of workshop. The training curriculum will be created with support of TREA, CPU and shared with hosting partner of the workshop. For the thematic clusters there will be selected responsible partners, such as TREA, who will bring input regarding the energy management. EMU from Estonia is responsible for enriching the guidelines with input about the renewable technologies and CPU from Austria for the social innovation aspects. The adjusted training program will be shared with rest of the partners for receiving feedback. As training methods there will be widely used lectures and presentations, open discussions and reflection, role plays and logical group exercises and case study methods. The handouts and supportive materials prepared for the TtT workshops will be used for this action.The action will be coordinated by UT during month 17, July 2017

Partners Involved:

TREA CPU EMU – updating the training curriculum (WP2.1) for workshops by M17, July 2017

Task 2.7.3 First round of the Workshops on International Advocacy. There will be conducted two round trainings in international advocacy. Each of these will include around 20 stakeholders/forerunners. The main structure of the training will include four essential parts taken from previously crafted training curricula, such as advocacy and policy-making, renewable energy, energy management and social innovations. The workshop will be conducted alongside with the forerunner conference and project meeting in Czech Republic. At the same time SEPs from the hosting organization will be responsible for contributing and conducting workshops as trainer. The first workshop will be conducted by month M 18, August 2017

Partners Involved:

AgEnda – conducting the selection process M 18, August 2017

CPU TREA – Facilitating the technical dimension of training M 18, August 2017

Task 2.7.4 Updating the training program of workshops on international advocacy. After conducting the first round of advocacy training UT will be responsible for updating the training curriculum and preparing it for the upcoming workshops. The action will be conducted by month 21, November 2017

Task 2.7.5 Selection of the participants of the second round of workshops on international advocacy. The selection process will be conducted by the hosting organization of the workshops. SEPs from PPs will be responsible for conducting the selection process with consultation of UT. Variation of participants is based on the size of the region and number of interested actors. It is anticipated that between 3 and 5 people from each region will be selected so that at least 40 forerunners will be trained. There will be addressed practical aspects of advocacy work of stakeholders under the training.

See list of criteria in Task 2.7.1

Based on the developed selection criteria, hosting organization will nominate 20 stakeholders/forerunners

The nomination process will be accomplished by month 23, January 2018

Task 2.7.6 Second round of Workshops on International Advocacy. This updated program will be ground for the next Workshops on International Advocacy. This task will be coordinated by UT. The event will be conducted by month 25-27, March - May 2018.

PANEL2050 project aims to create durable and replicable sustainable energy networks at local (municipality/community) level, where relevant local stakeholders collaborate for the creation of local energy visions, strategies and action plans for the transition towards low carbon communities in 2050. Under this particular action, there will be taken an additional effort in empowering and building advocacy capacities of the regional stakeholder in conducting the successful everyday operations in terms of energy transitions. This effort will bring an additional value of empowering the process moving toward the low-carbon societies. The stakeholders selected for the Forerunners Boot Camp are supposed to become forerunners in this process and therefore any action targeting their advancement is considered as a great contribution to the overall aim of the PANEL2050. Regional training in Energy Advocacy influences work packages 3 and 5.

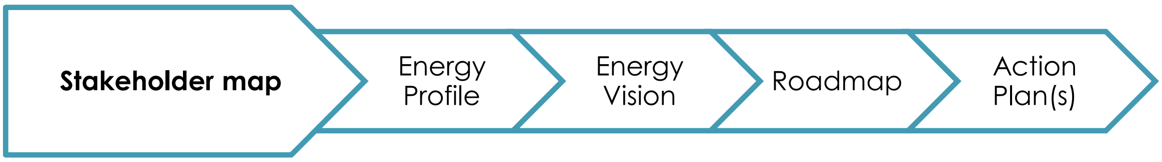
Task 2.5.5 /2.6.5/2.7.7 Evaluation of the training. MAE is the partner coordinating and executing the evaluation process under PANEL2050. Therefore, evaluation of this particular action under WP2.5 will be conducted by MAE. Under WP5.5 MAE with the collaboration of UT will design the evaluation plan for the regional training of training in energy advocacy and for the Forerunners Boot camp. The plan will include critical indicators and precise mechanism for evaluating the capacity building efforts. This action will be conducted during month 10-15, December-May 2017. The plan will be delivered by month 15, May 2016.

Partner involved:

MAE– Creating the evaluation plan month 15, May 2017

Work package 3 is influenced in terms of implementing the development of the roadmaps. PANEL2050 aims to create regional energy roadmaps (WP3.2), local energy visions (WP3.7), design and execute the roadmaps and regional action plans (WP3.7 and WP3.8). Work package 5 is influenced in terms of creating the CEESEN online platform (WP5.1) which is supposed to gather the stakeholders participating in the local training at the first place. These stakeholders are considered as forerunners in the energy transition process under PANEL2050.

10.12 Regional Stakeholder Maps and Energy Profile



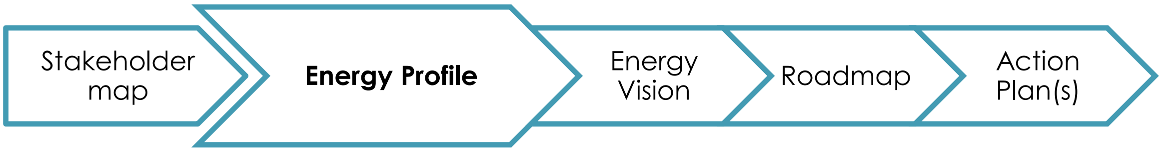
Partners will conduct stakeholder analyses of their regional sustainable energy sectors. The first step is to identify institutional stakeholders, which partners have already started to do while developing this proposal (see the 60 letters of support that are attached). Stakeholders come directly from the energy sector or related areas like transport or environmental technologies but also represent industry, commerce, civil society etc. As part of the maps, project partners will identify the ways in which these stakeholders are affected by energy efficiency issues and policies as well as the roles they could play going forward.

UTARTU will be responsible for developing the template for the maps and it will be conducted in collaboration with CPU and TREA. It will be accompanied with the instructions including the criteria for evaluating the state of the stakeholders. The template will be created in a digital form and located in the project intranet.

The mapping will be done by the nominated Stakeholder Engagement Person (SEP) who will be responsible for directly interacting with the stakeholders throughout the project. Before and in-between the trainings SEPs will be given two rounds of homework assignments, such as presenting the filled template of Stakeholder Mapping and stakeholder engagement template. This will help the SEPs to identify the forerunners for the PANEL2050.

The results of stakeholder mapping from each PPs play crucial role in elaborating the feasible training curriculum that will include the relevant advocacy and engagement strategies. Therefore in the capacity building efforts of the SEPs/Trainee Persons this analysis will be conducted before every training round, one in August after submitting the first round of templates and in December. This analysis will enrich the training curriculum for the final stage of TtT in February.

10.13 Regional Energy Profile



Partners will create overviews of the various dimensions of energy consumption and production in their regions. To do so, various steps will be taken:

- Creation of a common methodology – Partners will develop profiles based in part upon the methodology that was outlined in the World Energy Council's report Assessment of Energy Policy and Practices. This includes making macro level assessments of specific 'building blocks' spread across the institutional, economic, social and environmental levels. At the micro level, the specific energy policies and practices that governs the region will be examined. Using a common approach will ensure that partners collect similar information to enable cross-regional comparisons.
- Data collection and analysis – Between months 12 and 18 (HA: I think the collection of statistical data should be done earlier - months 6 to 12 - see also 3.1 where template for data collection will be developed), partners will consult existing statistical data and other primary/secondary sources and will interview key stakeholders in creating their regional profiles (HA: stakeholder interviews from month 12 to 18).
- Synthesis Report – Profiles of each participating region will be compiled into a synthesis report written in English that will be ready by month 24. The Report "Energy Efficiency Situation of Central and Eastern European Regions" will be made available on the project website and disseminated as described in WP 4.

10.14 Local Energy Visions

Methodology energy visions is based on the work of prof. Christoph W. Frei (World Economic Forum, World Energy Council) described in policy paper "What if...? Utility vision 2020" (Energy Policy 2008). The overall purpose of the paper was to describe investment models that would correlate the innovation driven energy sector. One of the ideas offered in the paper was the concept of the Energy Vision Ideal Types – four main categories that will form the framework for future energy developments. Author tries also to evaluate and map the involvement of different interest groups in the community. Following figure (from the paper) describes the development framework on the dimensions of most energy intense sectors (transport and electricity), ideal types, involvement of social groups and possible conflicts in that process.

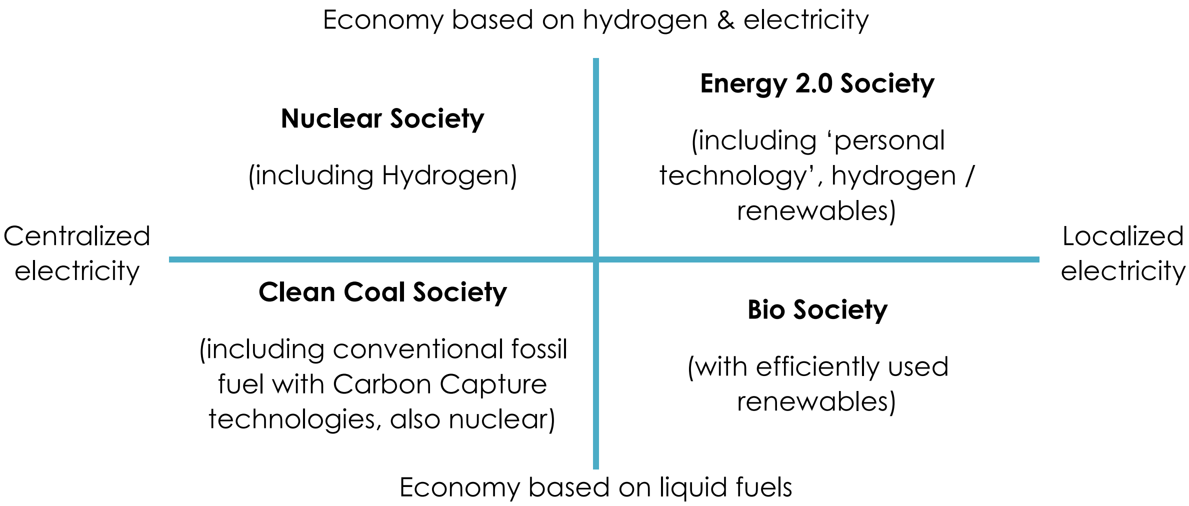


Figure 6. Energy Vision Ideal Types based on the work of C. W. Frei[1].

Methodology is based on the notion that if we would have clear understanding about what will energy and transport sector look like after 50 years we would align our investments accordingly. Unfortunately nobody has that knowledge today. We can only estimate that and the most useful way is to define our energy future in the overlap of electricity and mobility technologies dividing these based on the energy production on the scale from centralized to localized (for electricity) and from liquid to hydrogen (for mobility). From this framework four complementary and contrasting Energy Vision Ideal Types will emerge that will have different impacts and implications to the local community. All these have their specific challenges and supporters and none of them comes for free. Community can draw out the main parameters of its energy vision with the help of this tool. It doesn't have to be one of the Ideal Types (most cases it is not) but it has to be agreed by all of the stakeholders who will support the development in the future. Financial support or behavioural change – without the active support of the local stakeholders and forerunners the vision won't be anything more than piece of paper.

[1] Frei, C. W. "What if...? Utility vision 2020" (Energy Policy 2008)

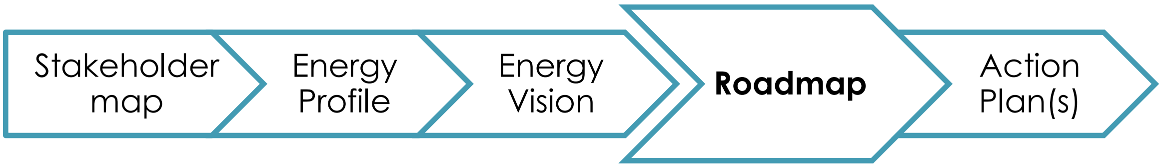
This approach is most relevant. International Energy Agency has estimated in World Energy Outlook 2014 that the cumulative investment to energy production and efficiency up to 2035 would be $48 trillion. At the same time the investors are searching for new fields for higher marginal and are more and more basing their decisions on the economical and social processes. Recent developments against nuclear and fracturing technologies have shown the strong interest also from the third sector and citizen's society to be involved into the energy dialogue. For combining these interests in the framework of technological innovation the Vision Ideal Types is the best and robust way available.

Example. About 75 % of the electricity is produced by coal in the region N. Last years have shown the severe increase of the electricity price that correlates with new EU regulations on additional taxation of large scale boilers. Previous studies have shown that the region has a potential for producing energy from wood residues but this resource won't be enough to cover the existing energy demand. Another study has identified the potential for more efficient usage of energy. Local development team has involved the Forerunners:

- Municipal Waste Water Plant,
- University of Applied Sciences,
- PV service provider,
- ESCO for renovations of apartment buildings.

Based on the existing studies the Forerunners have defined the vision for energy transition of the whole region for 2050 as a mix of Energy 2.0 and Bio ideal types, focusing on increasing the efficiency of energy consumption and increasing the usage of bioenergy (using municipal waste and wood waste). The Forerunners and experts involved have identified these areas having the biggest positive impact to whole region: less pollution, new and smarter jobs, better prospects for upcoming generations and best usage of local resources. The future of the coal mining will be related with usage of coal as a resource of chemical industry (Smart Coal). Need for dedicated social program for the mining industry has been indicated in the vision. Based on the vision a reach for new Forerunners was carried out to cover the areas of bioenergy production and energy supply.

10.15 Local Roadmaps for 2050



European community has developed energy strategy to 2050 for implementing long-term energy policy. This document is called Roadmap for moving to a competitive low-carbon economy in 2050. It defines the low-carbon economy as a main goal for the future. It is based on the work of UNFCCC and acknowledges the global community has to reduce its emissions by half by 2050. In Europe it means the reduction by 80-95%. The Roadmap describes the challenges, milestones, resources and impact of that process. All the members will adopt the Roadmap to their legislative systems. The aim of the project is to do the same on regional level. Regional Roadmaps will endorse local investments and help to set up mid-term and short-term local policies.

According to the PANEL methodology the Roadmaps won't be top-down regulation but will use local energy visions that is developed by the local stakeholders. This will add up to the sustainability of the process as it will be valued by the community. They will be based on the long term energy visions that will be developed by the local stakeholders. These visions will be developed to more detailed and elaborate long term energy plans that will follow the overall logic and approach of European Roadmap 2050. This process will be done focusing to the open and inclusive procedures to get maximum involvement and recognition by the community. Specific methodology for visions and roadmaps will be developed by the PANEL experts in the first phase of the project.

After the development of Roadmaps the communities will have to start to implement these. Success of this phase will depend on the commitment of the forerunners. If this commitment has not achieved during the development process, the implementation of the Roadmap will be much more difficult. PANEL partners will develop local action plans as the first step of implementation. Further implementation depends on the pressure and capacity of the forerunners.

Example. Coal using region has defined the Vision as a mix of Energy 2.0 and Bio. Local development team has involved the Forerunners: Municipal Waste Water Plant, Regional Landfill (added after development of the Vision), University of Applied Sciences, PV service provider, ESCO for renovations of apartment buildings. The roadmap has defined the strategy for improving the energy performance, renovation, Smart-Grids, local energy production, energy from waste and usage of RES. According to this vision all the residential buildings in the region will be fully renovated to be a 'plus buildings' with well insulated envelope and integrated solar photovoltaic and hot water collectors. Buildings will be integrated into Smart Grid system that will allow to sell the locally produced electricity. Municipal Waste Water Plant will create biogas production using the sewage water and rural waste from the farms. Regional Landfill will develop a biogas production using landfill gas. Largest city with 200 t inhabitants will develop a high efficient cogeneration plant using wood residues. Local transport will be shifted from diesel to biogas and electric vehicles. University will develop intensive research on biogas, Smart Coal (chemical usage of coal) and Smart Grid technologies.

It is important to notice that the involved Forerunners still do not cover all the areas of the transition process, notably the development of Smart Grids and Smart Coal. It is suggested to indicate the need for additional commitment and to involve additional Forerunners covering these missing elements.

10.16 Regional Action Plans

Local communities have defined their path for energy transition by setting the vision and developing the Roadmaps. After this the forerunners will take the transition process to their hands and define their own strategy in the form of Regional Action Plans. These plans will focus on these specific organisation or administration that will be responsible for developing the plan.

Based on long term Roadmaps of task 3.7, short term action plans will be developed by organizations represented in the Regional Roadmap Teams. These action plans will describe immediate activities (next steps) that should be taken by organizations to reach their long term objectives. It is anticipated that the forerunners trained in WP2 will be instrumental the development and implementation of these plans. The scope of the action plans will be for 2-3 years and be started during the project period. They will contain the list of actions, schedule and the budget, also indicators and clearly described desired outcome.

Example. Region has defined the vision as a mix of Energy 2.0 and Bio. The roadmap has defined the strategy for improving the energy performance, renovation, smart-grids, local energy production, energy from waste and usage of RES. Local forerunners are: Municipal Waste Water Plant, University of Applied Sciences, PV service provider, ESCO for renovations of apartment buildings.

- Municipal Waste Water Plant will develop Regional Action Plan focusing on producing biogas from sewage water/rural residues and producing electricity and heat using the biogas;
- Regional Landfill will develop Regional Action Plan focusing on producing biogas from landfill and producing electricity and heat using the biogas;
- University of Applied Sciences will develop 4 separate Regional Action Plans focusing on more efficient production of biogas, better energy production technologies and supply, Smart Coal technologies;
- PV service provider will develop Regional Action Plan for increasing the PV production in energy mix;
- ESCO will develop Regional Action Plan for retrofitting the apartment buildings to the 'plus' level (positive energy balance);
- Regional Government (added after development of Roadmap) will develop Regional Action Plan for creating a BIOENERGY cluster - a supporting body for integrating these separate activities with the regional developments.

9 Regional Action Plans will be developed in the region for the end of the project. It is important to notice that these Action Plans are not covering all the areas of the transition process, notably the development of Smart Grids. It is suggested to indicate the need for additional commitment and to involve the forerunners covering these missing elements in the future.

10.17 International meetings

Several international meetings are planned throughout the project period: six regular Project Meetings combined with Steering Committee meetings, four International Workshops, two Conferences, two Train the Trainings and one Forerunners Bootcamp. As some of these events can be combined, it is estimated that there are totally eight international events so the partners will travel eight times. Table is showing the suggested amount of people (Project Partners and stakeholders) participating in the events according the indicated travel budget of the partners. However the final amount of people travelling will depend of the actual travel cost during these events.

Table 5. Number of participants for project activities financed by the project

Project team:	*TREA*	*AgEnDa*	*BDS*	*CPU*	*IAERPA*	*LEAB*	*LEASP*	*MAE*	*EMU*	*UT*	*VPR*	*WWF Bu*	*WWF Hu*	***Total***
Kick off meeting	2	2	2	1	2	2	2	0	2	2	2	2	2	**23**
3 SC meetings (1 person each)	3	3	3	3	2	3	3	3	3	3	3	2	2	**36**
Train the Trainer	0	2	2	2	2	2	2	2	0	0	2	2	2	**20**
CEESEN conference	1	na	1	1	1	1	1	1	1	2	1	1	1	**13**
Forerunner Boot Camp	1	1	1	1	1	1	1	1	1	3	1	na	1	**14**
Final conference	0	1	1	1	1	1	1	1	0	0	1	1	1	**10**
Stakeholders:														
CEESEN conference	10	na	4	3	4	4	4	6	8	2	4	4	9	**62**
Forerunner Boot Camp	na	8	3	na	4	3	3	3	4	na	3	4	na	**35**
Total:	**17**	**17**	**17**	**12**	**17**	**17**	**17**	**17**	**19**	**12**	**17**	**16**	**18**	**213**

Stakeholders are invited to participate in CEESEN conference and Forerunner Boot Camp. Project Partners can cover the cost related with the accommodation and the travel of these stakeholders. This cost is foreseen under the Direct Cost in the budget. However it is required to choose very carefully these stakeholders, justify and report the selection process.

Recruitment to CEESEN Conference and Forerunner Boot Camp will be done by the Stakeholder Engagement Persons of the Project Partners. The decision for inviting the forerunners to the CEESEN conference will be made by the Steering Committee of PANEL 2050 project based on the suggestions of Project Partners and the analysis of UTARTU. The main criteria is the importance and impact of the forerunner to the local energy transition process. Also the activeness and the motivation of the organization/person will be considered, also the visibility factor (how much media coverage can forerunners create). Only the most active and motivated forerunners will be invited. This process and the decisions will be recorded in Stakeholder Engagement Template and supported by the experts of UTARTU.

10.18 Communication

Developing a communication strategy, calendar and action plans

The communication strategy, calendar and action plans are our communication vision, blueprint and detailed task list for the next two years and a half. **They will be finalized by October 31, 2016 following input from all WP leaders!**

The communication strategy lists the communication context and functions as the vision about how we want to position CEESEN within this context, i.e., what we would like people to think and feel about us in the future and how we should approach communications in order to achieve this. It will also list our specific communication goals and objectives. (They will help us plan better, focus and streamline our communication messages in the next three years.). Furthermore, the strategy will identify our key audiences and set the structure of communication: what channels we should use (social media, website), how those channels should look, as well as what tools we should use (Facebook promotion, press releases, direct communication, etc.) and why.

LINK to the document: https://docs.google.com/document/d/1ADEdzi_wXXkKeuo4ZR0-NBkiwxp9N-NbU0nqtOyFYmU/edit

The communication calendar is a chronological list of all outputs and events that can be communicated to stakeholders or wider audiences: regional profiles, roadmaps, visions, training sessions, conferences, etc. It also includes international holidays connected to climate, energy and the environment. Communicating PANEL2050/CEESEN around such dates helps increase our visibility and communication impact. *Our messages will benefit from the communication efforts of other organizations around the world that are communicating on the same energy/climate topic* because we will enter the same conversation (using the same hashtags, key words, etc.). This will also help deliver messages aligned with global conversations and goals on the topic and position us as an opinion leader.

The communication plan/calendar also briefly outlines the specific input WP4 will need to prepare or guide partners during the communication process. Further, it identifies the audiences for each output, what will be done to communicate it, and what channels will be used. Lastly, it lists the tentative deadlines. Those are based on the PANEL2050 project proposal and will most likely change depending on the progress of the work. **All deadline updates, as well the updates as to the communication activities, channels, etc., will be reflected in the communication action plans that will be developed on a 6-month basis.**

LINK to the document:

https://docs.google.com/spreadsheets/d/156QlbYHwoVUaUWSU5HEt4f8snF5UZBYzU854lQGDFgE/edit#gid=0

Developing detailed action plans
Every 6 months, WP4 will also develop action plans, which will be a far more detailed list of tasks leading up to the communication of each project output/event. The benefit of having an action plan is that it will list the specific individuals responsible for each task, as well as updated deadlines, which will be coordinated with the partners from which WP4 will need input.

LINK to the first 6-month action plan:

https://docs.google.com/a/wwfdcp.bg/spreadsheets/d/118a_gCqBQ4cQ49r_YpvkK5JZVTap2K508iGvC7_8z80/edit?usp=drive_web

Coordination of communication activities
WP4 will guide and coordinate all communication work. We will initiate talks to brainstorm news, follow the communication calendar and ask WP leaders how progress is going so we can plan communication activities ahead of time, consult partners on issuing local press releases, write international press releases, set up Facebook promotion posts and give guidance on local social media communication by the 13 partners, provide templates for approaching future stakeholders, lead the process of preparing the PANEL2050/ CEESEN visual identity, etc.

Printing and disseminating the guidebooks
Several guidebooks in English will be created via this project outside WP4. Those will include:

The energy stakeholder/forerunner training manual (see WP2)

The evaluation report and replication manual (see WP5)

All printing and distribution costs will be covered in this WP. WP4 will also be responsible for the international dissemination of the materials, while each partner will coordinate local dissemination activities.

10.19 Communication activities

Coordinating the communication work: WP4
In order to perform this task well, we will need each partner to provide an overview of their communication capacity so we can plan our time and tasks accordingly. Since many partners do not have trained communication people, WP4 will need each of the 13 partners to name one employee who will serve as our contact point. The main purpose of this is to brainstorm ideas for possible stories for the website and press releases. The best story ideas come from knowing some of the details of work. This is why it is necessary to set up regular Skype conversations that will perhaps happen once in two months. The frequency may change based on the progress of the project.

Developing the CEESEN/ PANEL visual identity: WP4
The CEESEN/PANEL visual identity will be developed under the coordination of WP4. A creative brief will be sent out to 3 creative agencies (2 in Hungary and 1 in Bulgaria) and the best offer will then be chosen. The process of creating a visual identity will be monitored by WP4 at different stages of the agency's work and progress will be communicated to the rest of the project's partners.

LINK to the creative brief: https://docs.google.com/document/d/1dZDEY6lmFj0HlKO1g7sZZqun96uiol2XhzkKnVWqFto/edit?usp=sharing

Developing the CEESEN website: WP5 in close collaboration with WP4
Since the website and the CEESEN platform will be merged, the technical structure/solutions will come from WP5 with the input of all partners, including WP4. The implementation and coordination will also be the responsibility of WP5. However, WP4 will set the structure and tone of the website with partner input (how it will look, what menus it will include) and coordinate the preparation of the initial and consequent website content.

Facebook promotion
Facebook will be used to promote the CEESEN itself and gain more members, as well as invite people to sign up for the training sessions and conferences. More posts can be boosted when the energy profiles, visions and roadmaps are ready too. The promotion will be done in Hungarian by WWF-Hungary, in Bulgarian by WWF-Bulgaria and in English by

WWF-CEE. If possible, all other partners should do it too in their languages following WP4 guidelines.

Why do we need to do Facebook promotion?

Facebook promotion is a cheap way to expand your audience reach a lot. It allows you to choose audiences with specific interests that live in specific areas and target your communication well. It also establishes you as a leader in the field by making you visible. Boosting a post can give you a 10-15 times better reach, or more.

Social media posts

A list of all Facebook profiles of the 13 partners will be collected. It is advisable that all partners add the WWF-CEE Facebook profile as a "Pages to watch" so that they see when a post appears and share it on their profiles.

WP4 will provide guidelines on what types of posts partners should use for promotion, how often and for what budget, etc.

WP4 will also provide some posts in English that could be used for local dissemination if relevant.

Printing and disseminating the guidebooks

Several guidebooks in English will be created via this project outside WP4.

Those will include:

- The energy stakeholder/forerunner training manual (see WP2),
- The evaluation report and replication manual (see WP5).

All printing and distribution costs will be covered in this WP.

Direct local dissemination

Disseminating the guidebook, energy visions, roadmaps and guidelines will rely mostly on the local dissemination efforts of the 13 partners using their existing networks and the future stakeholders they approach, as well as possibly on the Advisory Board.

International dissemination

This will be done mostly through the communication channels of WP4, but we will also rely on the 13 partners and the Steering Committee for further input in order to maximize our outreach. This action means the preparation of regionally relevant press releases (at least one per year) and approaching regional media channels with these.

Mailchip account (optional)

This is a free online tool for creating and newsletters, PRs etc. WWFBG's account will be used for communication activities on international level and in Bulgaria. Communication team will provide assistance to every partner that wants to start using the tool locally.

Why do we need Mailchimp?

Some advantages to regular email are: creating own design or using templates; building email lists with segments for each target group; sending information once to a large list; monitoring receive, open and react rate, etc.

10.20 Media and PR

Writing the press releases
WP4 internationally and all partners locally

NOTE: The press releases that will be sent internationally will be written by WP4 in English and checked and approved by the WP leaders whose activity we are communicating. Flexible, fast reaction will be required for this in order not to lose the momentum.

However, we will rely on the partners to draft the press releases for national/local media or at least give us very rough drafts to work on closely with the communication contact point. The regional PRs can be used and translated locally, but additional work will be most probably needed to make it more relevant on a local level, or to draft other PRs based on local stories, too. The WP4 folder in Gdrive contains detailed instructions on writing a press release.

LINK to the document:

https://docs.google.com/a/wwfdcp.bg/document/d/1CySni8GQAkxNchdspN16DnL-31bnhbi8q1g8n3NEkUw/edit?usp=drive_web

Why do we need to issue press releases?

The success of CEESEN/PANEL2050 communications will rely largely on local communication efforts and press releases are one of the main tools we will use. Sending press releases to local media is a key way in order to have your message heard and start building awareness (and a reputation) as an energy leader in the region. Also, press releases are the best tool to target audience – you can reach out to those who will understand the point of CEESEN. Once the organization starts consistently sending news to their media list on the topic of energy and including expert contact information, they are on media's "radar" and can be contacted to talk on energy news multiple times, even news not initiated by CEESEN. CEESEN can be recognized as an expert and asked in relevant topics.

Building up media lists:
Each of the 13 partners

Building up a media list requires knowing the local media landscape and language and making many phone calls. Since some partners do not have media lists, WP4 has provided instructions on building up a media list.

LINK to the document:

https://docs.google.com/a/wwfdcp.bg/document/d/15stmdJNsi1XhsZFwDgZZ7UxlVIYoE3xS8jpDMwcLPGA/edit?usp=drive_web

Why do we need to build and/or update our media lists?

We need to expand our reach in order to ensure the maximum dissemination of our ideas and documents. There is a lot of turnover in media in the region (journalists often change media, the field they write in, etc.) so even if a partner has a media list, if this list is older than 1 year, it would be good to update it. Updating a list is also a way to establish personal contacts with media, introduce yourself and let the journalist know they can expect to hear from you in the context of energy.

10.21 Internal Communication tools

Developing and maintaining instruments for internal communication: WP5.

CEESEN platform (member login area)

The network's platform will be the main channel for internal communication, not only for current project partners, but also for new-coming members. The platform will be developed by WP5 with contribution from WP4 in terms of visual design. It will allow members to have discussions, share documents, for partnerships and co-create future projects. Further instructions on the use of the forum will be provided by WP5.

Mailing list

A mailing list/group is an instrument used to ease email communication by sending an email to one address ceesenpanel@wwfhu.org that is received by all members of the group meaning all partners in the project. Using it one avoids missing someone's contact when copying email addresses and also keeps record of emails in a separate directory of google – Google groups (if google service is used).

Why is it a good idea to have a CEESEN mailing list?

People who do not have Facebook/LinkedIn will rely on traditional mailing lists in order to keep up-to-date on what is coming: PANEL2050 documents, conferences, training sessions, news, etc. It is also useful to have an additional channel of informing them.

Google Drive

Google drive is a google function used already by all partners to work collectively on documents. It is also a storage place for documents of the project. One thing to be looked after in the course of the project is organization of files and folders as the amount of materials will increase drastically. Google space is also important to have in mind.

NOTE: If you run out of space, please be careful when deleting files! It may turn out you delete something important that was created by someone else and is difficult to retrieve afterwards.

Skype

Another online tool used already by the project team for regular and ad-hoc meetings.

10.22 Communication Calendar

Detailed chronology of activities/ deliverables to communicate (C) or disseminate (D). The main ones are in bold. (M= month)

TEXT VIEW:

Communication strategy, calendar, action plan ready – M 3 (May 2016)

Website, visual identity and other communication tools ready - M 6 (August 2016)

C/ Creation of CEESEN network and virtual platform - M 1-6 (May –Aug. 2016)

D+C/ Energy advocacy guidebook in 10 languages for local stakeholders ready by - M 14 (April 2017)

> The guidebook will include practical exercises for analyzing their environment and developing advocacy strategies + good examples of energy forerunners. Will also include 1) advice for energy management on local level based on local profile and development goals; 2) advice for building up political support and public acceptance for sustainable energy management; 3) examples of other regions with simple explanations of how and why something works or not.

C/ CEESEN Conferences - M 18 and M 36 (August 2017 and Feb 2019)

C/ Train the trainer workshops by end of M 10-12 (Dec. 2016 --28 Feb 2017)

C/ Regional Training in Energy Advocacy M 15 -21 (May-Nov 2017)

C/ Workshops on International Advocacy M 18 and M 27 (August 2017 and May 2018)

C+D/ Ten Regional energy profiles in local language (approximately 20 pages) M18 (August 2017)

> The energy profiles will outline the current state of energy supply and usage in the respective region (analytical profiles of the current energy situations)

C/ Forerunners Boot Camp M 24 (February 2018)

C/ One English synthesis report of the visions on CEE regions available on project website as pdf file M28 (June 2018)

C/ One English synthesis report of the roadmaps on CEE regions available on project website as pdf file M 31 (Sept 2018)

C/ One English synthesis report of the energy profiles of CEE regions available on project website as pdf file ("Energy Efficiency Situation of Central and Eastern European Regions" Report) M24 (February 2018)

C+D/ Ten regional visions for sustainable energy future. Description of the visions developed regionally by using the energy future ideal types methodology. Printed in local language (approximately 20 pages) M27 (May 2018)

C+D/ Ten Roadmaps for Energy Future 2050. Based on the national targets for 2050 as well as 2030 and on vision of local stakeholders and the latest available expertise on energy technologies. Printed in local language (approximately 20 pages). M30 (Audust 2018)

C+D/ 100 Regional Action Plans to lay out the next steps for stakeholder organizations, inspired by the local Roadmap 2050. Printed in local languages (approximately 10 pages each) M30 (August 2018)

Energy Efficiency Forerunner Model Evaluation Report in English to be presented at the final conference M35 (January 2019)

For more detailed communication calendar please visit Communication Plan.

10.23 EU disclaimer

Obligations and rights arising from the H2020 Annotated Model Grant Agreement

All partners should follow the requirements for communication according to: Article 38 of the H2020 Annotated Model Grant Agreement.

Any communication activity related to the action (including in electronic form, via social media, etc.) and any infrastructure, equipment and major results funded by the grant must:

(a) display the EU emblem and

(b) include the following text:

For communication activities: "This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 696173."

For infrastructure, equipment and major results: "This [infrastructure][equipment][insert type of result] is part of a project that has received funding from the [European Union's Horizon 2020 research and innovation programme][Euratom research and training programme 2014-2018] under grant agreement No [number]."

When displayed together with another logo, the EU emblem must have appropriate prominence. More guidance on using the EU emblem can be found at the following link: http://publications.europa.eu/code/en/en-5000100.htm

Any communication activity related to the action must indicate that it reflects only the author's view and that the [Commission][Agency] is not responsible for any use that may be made of the information it contains.

Communication activities should:

- Be effective (i.e. suited to achieving the action's communication goals)
- Be proportionate to the scale of the action (e.g. activities carried out by a largescale action with beneficiaries coming from several different countries and a large budget must be more ambitious than those of a sole participant of a monobeneficiary grant)
- Address audiences that go beyond the action's own community (including the media and the public).

Any communication activity that is expected to have a 'major media impact' (i.e. media coverage (online and printed press, broadcast media, social media, etc.) that will go beyond having a local impact and which could have the potential for national and international outreach) must be first notified to the Commission/Agency.

10.24 Risks of communication

Lack of sufficient communication capacity in most partners, coordinating 13 partners, conflicting time schedules, ensuring same quality throughout, achieving PANEL brand recognition (CEESEN will appear in the context of at least six existing networks with a similar purpose).

Mitigation: Frequent online and other meetings, updates and reminders of tasks

Difficulties in reaching out to relevant target audience

Mitigation: Targeting with relevant tools and media channels

Challenges in convincing forerunners/stakeholders to be part of CEESEN (as other competitor networks exist)

Mitigation: Using all connections of all partners (13 partner and their own personal channels can be the key for this)

10.25 Visual identity and branding

Unique visual identity has been developed for CEESEN and PANEL 2050 project is focusing its public promotion activities on promoting the CEESEN and its platform. The visual identity of a project has been designed as one strong brand that will have the network as the main pillar for external communications activities. This supports its visibility across its target audiences. It helps the audience perceive the various materials published within a project as coming from one brand. Visual identity contains:

- logo
- website design
- Brand guide (a simple brand guide, how to place the logo on different documents, and how to place partners' logos, etc.)
- template design of the manuals, visions, roadmaps, replication manual and evaluation report (project materials)
- template for letters, PRs, email signatures, PowerPoint presentations.

Figure 7. Logo of CEESEN.

Figure 8. CEESEN branding examples using the elements of visual identity.

Guidelines on using CEESEN visual Identity

The visual identity pack includes the following materials

https://drive.google.com/open?id=0B12g4wBHaGqWN3haUXZVVEkzZkU

1. **LOGO**

3 types of logo each with a jpg and vector file

2. **eMail signature**

Please, add this jpg to your email signature

3. **Letterhead**

Use the MS Word (docx) file whenever you engage in official correspondence. Pay attention to the footer and add your details!

4. **Business card**

Use the vector file (ai file) to give to a printing house and have your CEESEN business card. Please, note that you need to fill in your details before printing the card. Most printing houses have a designer that can do that for you.

5. **PowerPoint Presentation**

The presentation template has the option to be used with your organization's logo or only with the CEESEN logo. Please, make sure you use one of the two first slides as a beginning and the last slide as an end to your presentation. Regarding the slides in between, you can chose from the different designs according to your needs.

6. **Website**

Includes all the preview files and the vector files for the website

7. **Trainings, Visions, Roadmaps, Action plans; Project report, Replication report and Evaluation reports**

Includes designs for each of the documents described. Again there are options to use the document with and without your organization's logo. If you want to edit any of these documents, for example change its picture, you have the work files in the folder.

8. **Conferences**

Includes designs for an invitation and a programme for the conferences. Again there are options to use the document with and without your organization's logo.

9. PR

Please, use the MS Word file (docx) when preparing your press-release.

10. Brand book

If you work with a designer on developing a certain product, please keep in mind to send him/her the CEESEN brand book for guidelines on colors, logo usage, etc.

11. EU Flag

Use the jpg file to add to any public document your organization produces under CEESEN (PANEL2050 project). No need to use it for internal/working files.

12. Font

The font of CEESEN is MULLER. You can download it from this folder and use it in all your documents. However, the font may not be read by all versions of word on all devices, so it may be safer to use Century Gothic, which is a font you will find in your MS Word.

13. Partners logo use

A simple example of the use of partner logo with the CEESEN logo

11. Project reports

The coordinator must submit to the Agency the technical and financial reports set out in this Article. These reports include requests for payment and must be drawn up using the forms and templates provided in the electronic exchange system. Project is divided into two reporting period RP1 and RP2. The coordinator must submit a periodic report within 60 days following the end of each reporting period. The periodic report must include the technical and financial report. In addition to the periodic report for the last reporting period, the coordinator must submit the final report within 60 days following the end of the last reporting period, including final technical report including summary of publications and final financial report with the request for payment of the balance. Additional progress report will be submitted in M10 (December 2016).

TREA with CPU has set up an internal reporting and monitoring procedure with regular project reports in every 6 months. The report consist the evaluation of project indicators (monitoring the process and its outcomes) and overall performance of the Project Partners. The structure of the project report is

- Deliverables –WP lead beneficiaries only - Please state the status of the deliverables in your WP, which are relevant for this period.
- Milestones – WP lead beneficiary only - Please state the achieved milestones and foreseen milestones of your WP for this period.
- Critical implementation risks and mitigation actions - Foreseen Risks.
- States of the Play for Risk Mitigation - Please indicate the states of the play for risk mitigation.
- Unforeseen Risks - Please provide a description of unforeseen risks encountered in this reporting period.
- Dissemination and exploitation of results.
- Scientific publications - for scientific and R&D partners only - Please give scientific publications related to the project and published in this reporting period. Also joint publications should be reported. DOI alone is sufficient. Please complete the fields if no DOI is available.
- Dissemination and communication activities - Indicate which activities directly linked to the project were realized and how many.
- Estimate how many persons of the different target groups have been reached.
- Impact on SMEs.
- Gender - Gender of R&D participants involved in the project (actively participating and paid by the EU project).
- Other issues - For instance, issues linked to consortium management, need for an amendment to the grant agreement, possible co-operation with other projects/ programmes, or any question on which you need the EASME to give you a feedback.
- Use of resources - Please mention if you have major over- or under-spending of resources (in person-months and/or personnel costs) compared to the initial allocation, or major unforeseen expenses, in particular sub-contracting that was not planned in Annex 1 (in this case, please note it will need to be approved by the EASME and you need to make a specific request).
- Additional information on eligible costs.
- Explanation of the work carried per partner out by the beneficiaries and Overview of the progress.
- Objectives.
- Explanation of the work per partner carried out per WP.
- Impact (if applicable).
- Update of the plan for exploitation and dissemination of result (if applicable).
- Update of the data management plan (if applicable).

- Follow-up of recommendations and comments from previous review(s) (if applicable).
- Deviations from Annex 1 (if applicable) – Tasks, use of resources (financial), unseen subcontracting, unforeseen use of in-kind contribution.
- Periodic financial report.

The outcomes of this evaluation are provided to the Steering Committee.

11.1 Monitoring system

Monitoring of indicators has been set up by TREA and uploaded into the intranet of the project together with the schedule of the project activities (as a gant chart). Monitoring system is a combination of the effort done by TREA, WP leaders and Project Partners with Internal Reports and spreadsheet tools developed for every WP.

11.2 Process indicators

Spreadsheet based planning tools with detailed gant chart are part of dedicated guidelines in every WP. These planning tools are used for developing the management routine in every WP.

Task no.	WPx Tasks	ToDos of WPx Team	Working material / templates provided by WPx team	to be provided WPx team, month	ToDos of PPs	PPs inputs, month	Output x WPx	Relevance to deliverable

Task	PANEL 2050 Project description acc. to H2020 proposal ACTIVITIES OF WP1	TASKS - WP LEADER	2016									
			3	4	5	6	7	8	9	10	11	12
			1	2	3	4	5	6	7	8	9	10

11.3 Performance indicators

The performance of Project Partners is evaluated according the main indicators of the project:

- Energy Visions prepared – mount of energy visions prepared in the project per partner region;
- Roadmaps prepared – amount of Energy Roadmaps for 2050 prepared in the project per partner region;
- Action Plans prepared – amount of Regional Action Plans prepared in the project per partner region;
- Forerunners empowered – amount of forerunners activated/created/empowered in the project per partner region;
- Consumers informed – amount of consumers informed trough public campaigns in the project per partner region;

- Consumers influenced - amount of consumers involved to capacity building events like trainings, conferences and workshops in the project per partner region;
- CEESEN members engaged – CEESEN members recruited in the project per partner region;
- Public officers involved to policy development (roadmaps and action plans) in the project per partner region;
- Public officers influenced – amount of public officers involved to capacity building events like trainings, conferences and workshops in the project per partner region.

12. Partners and roles

Tartu Regional Energy Agency, TREA, Estonia, is the Coordinator of the project. TREA is the original initiator of the project idea and developer of the proposal. TREA focuses on sustainable energy advocacy and international cooperation.

AgEnDa z.s., AgEnDa, Czech Rep, is a non-profit organisation founded in 2003 in order to support renewable energy sources utilization on regional level, to raise awareness about environmental friendly technologies and to create a communication platform for R&D and bussiness sector. Since its origin AgEnDa has implemented number of national and international projects aiming at renewable energy sources utilization, technology transfers and support to cooperation between R&D and industry. AgEnDa is founding member of Czech Biogas Association and member of Euroregion Silva Nortica. We have broad experience with participation and leadership of numerous national, crossborder and international projects.

Balkan Development Solutions, BDS, FYROM, is the only non-EU partner in consortium. It is a consulting company for providing consulting, project management and capacity building services in public and private sector, established in 2007 in Skopje, Republic of Macedonia. However, its co-founders hold more than 20 years of proven domestic and international experience in development field, gained through their professional careers and engagements on high-level positions in many internationally funded development projects in the Balkan region and abroad.

ConPlusUltra, CPU, Austria is the only non-East European partner in consortium - an Austrian consulting company specialized in the identification, development and implementation of renewable energy, energy efficiency and climate protection projects, operating from two offices in Austria (St. Poelten and Vienna). We have a long, successful history of supporting national and regional governments in designing and developing energy strategies and policies, implementing measures, evaluating programs and assessing framework conditions and have cooperated with major financing institutions such as The World Bank or the EBRD on many renewable energy and energy efficiency financing projects. Among ConPlusUltra's highly qualified professionals are energy, public consulting, business innovation, climate protection, legal compliance and health & safety experts.

Ignalina Nuclear Power Plant Regional Development Agency, IAERPA, Lithuania is the outcome of the first full energy transition in Europe where Lithuania shifted from covering its electricity with nuclear to other sources. For closing the Ignalina NPP a new organisation IAERPA was created for improving the regional development.

Local Energy Agency Bucharest, LEAB, Romania, is the energy agency of the capital of Romania. It is working in one of the largest cities in the consortium supporting local governments on energy and environmental issues.

Local Energy Agency Spodnje Podravje, LEASP, Slovenia, is an energy agency located in City of Ptuj in the region of Spodnje Podravje. Agency is supporting local governments, working together with SMEs and bringing together the stakeholders of energy sector.

Mazowiecka Agencja Energetyczna, MAE, Poland, is the energy agency of the biggest area in the consortium – Mazovia region with 5,29 M inhabitants. City of Warsaw with it's 1,8 M inhabitants is located in the region. MAE is also a supporting institution in acquisition of resources from the EU for the region as well as for actions improving energy security and development of new technologies. The Agency advices the Mazovia managing authority in implementation of regional operational programme (ERDF), helping to prepare the selecting criteria for regional calls for proposals.

University of Life Sciences, EMU, Estonia, is university of agricultural sciences in Southern part of Estonia. Established in 2006, Centre of Renewable Energy is main link between researchers and entrepreneurs in Estonian renewable energy sector, promoting co-operation and knowledge transfer inside the university as well as between university and its partners. We currently have workgroups working on biogas, bioenergy from grasses and agricultural crops, short rotation forests, biomass from the forestry, technological solutions for production and use of renewable energies and also economic and social aspects of biofuels production and use.

University of Tartu, UTARTU, Estonia. Founded in 1632, the University of Tartu is the largest and oldest university in Estonia, with over 14 000 students. UT's faculty of 1800 lecturers and professors has produced over 34 000 publications, 7 500 which are included in the ISI Web of Science, which ranks it in the top 1% of the world's most cited universities across multiple disciplines, including social sciences. UT also has developed formal partnerships with 71 universities in 27 countries, primarily in Europe, the United States and Asia. All of this has enabled UT to be ranked in the top 3% of world's institutions and on the 301th -350th place according to Times Higher Education (THE). The unit involved in the activities of PANEL is the Johan Skytte Institute of Political Studies that has expertise in the areas needed by the PANEL project, including knowledge of policy processes and involvement of civil society organizations and other stakeholders in planning and mapping processes.

Vidzeme Planning Region, VPR, Latvia, is the regional authority in Northern part of Latvia and the only local authority in the project. Competences of VPR in regional development planning, in design and implementation of regional policies and successful experience in engagement of local, regional and national stakeholders.

WWF Világ Természeti Alap Magyarország Alapítvány, WWFHU, Hungary, is environmental NGO founded in 1991 as a national office (WWF Hungary), member of WWF Network. After 25 years of existence and more than 100 successful projects carried out, the mission is still to build a future in which people can live in harmony with nature.

See the detailed description of the Project Partners from Annex 1 part B.

13. Governance (Consortium Agreement)

See the detailed description of the Project Partners from Consortium Agreement.

The Steering Committee is the decision-making body of the consortium.

The Coordinator is the legal entity acting as the intermediary between the Parties and the Funding Authority. The Coordinator shall, in addition to its responsibilities as a Party, perform the tasks assigned to it as described in the Grant Agreement and this Consortium Agreement.

The Advisory Board assists the Steering Committee and the Coordinator.

6.2 Members

The Steering Committee shall consist:

one representative of MITTETULUNDUSUHING TARTU REGIOONI ENERGIAAGENTUUR, Estonia

one representative of AgEnDa z.s., Czech Republic

one representative of Balkan Development Solutions BDS, Former Yugoslav Republic of Macedonia

one representative of CONPLUSULTRA GMBH, Austria

one representative of Ignalinos atomines elektrines regiono pletros agentura, Lithuania

one representative of Agentia pentru Eficienta Energetica si Protectia Mediului, Romania

one representative of Local Energy Agency Spodnje Podravje, Slovenia

one representative of MAZOWIECKA AGENCJA ENERGETYCZNA SPZOO, Poland

one representative of EESTI MAAULIKOOL, Estonia

one representative of TARTU ULIKOOL, Estonia

one representative of VIDZEMES PLANOSANAS REGIONS, Latvia

one representative of SDRUZHIE VVF - SVETOVEN FOND ZA DIVATA PRIRODA, DUNAVSKO-KARPATSKA PROGRAMA BULGARIA, Bulgaria

one representative of WWF Világ Természeti Alap Magyarország Alapítvány, Hungary

(hereinafter referred to as “Member”).

Each Member shall be deemed to be duly authorised to deliberate, negotiate and decide on all matters listed in Section 6.3.6 of this Consortium Agreement.

The Coordinator shall chair all meetings of the Steering Committee, unless decided otherwise by the Steering Committee.

The Parties agree to abide by all decisions of the Steering Committee.

This does not prevent the Parties from submitting a dispute for resolution in accordance with the provisions of settlement of disputes in Section 11.8 of this Consortium Agreement.

6.3 Operational procedures for the Steering Committee

6.3.1 Representation in meetings

Any Member:

- should be present or represented at any meeting;
- may appoint a substitute or a proxy to attend and vote at any meeting;
- and shall participate in a cooperative manner in the meetings.

6.3.2 Preparation and organisation of meetings

6.3.2.1 Convening meetings:

The chairperson shall convene ordinary meetings of the Steering Committee at least twice a year and shall also convene extraordinary meetings at any time upon request of any Member.

6.3.2.2 Notice of a meeting:

The chairperson shall give notice in writing of a meeting to each Member as soon as possible and no later than 14 calendar days preceding an ordinary meeting and 7 calendar days preceding an extraordinary meeting.

6.3.2.3 Sending the agenda:

The chairperson shall send each Member a written original agenda no later than 14 calendar days preceding the meeting, or 7 calendar days before an extraordinary meeting.

6.3.2.4 Adding agenda items:

Any agenda item requiring a decision by the Members must be identified as such on the agenda.

Any Member may add an item to the original agenda by written notification to all of the other Members no later than 7 calendar days preceding the meeting.

6.3.2.5 During a meeting of the Steering Committee the Members present or represented can unanimously agree to add a new item to the original agenda.

6.3.2.6 Any decision may also be taken without a meeting if the chairperson circulates by e-mail to all members a written document which is then approved by e-mail by the defined majority of Members (see Section 6.3.3 of this Consortium Agreement). Such document shall include the deadline for responses.

6.3.2.7 Meetings of the Steering Committee may also be held by teleconference or other telecommunication means.

6.3.3 Voting rules and quorum

6.3.3.1 The Steering Committee shall not deliberate and decide validly unless 8 of the 13 Members are present or represented (quorum).

6.3.3.2 Each Member shall have one vote.

6.3.3.3 Defaulting Parties may not vote.

6.3.3.4 Decisions shall be taken by consensus whenever possible, and by simple majority in all other cases.

6.3.4 Veto rights

6.3.4.1 A Member which can show that its own work, time for performance, costs, liabilities, intellectual property rights or other legitimate interests would be severely affected by a decision of the Steering Committee may exercise a veto with respect to the corresponding decision or relevant part of the decision.

6.3.4.2 When the decision is foreseen on the original agenda, a Member may veto such a decision during the meeting only.

6.3.4.3 When a decision has been taken on a new item added to the agenda before or during the meeting, a Member may veto such decision during the meeting and within 15 days after the draft minutes of the meeting are sent.

6.3.4.4 In case of exercise of veto, the Members shall make every effort to resolve the matter which occasioned the veto to the general satisfaction of all Members.

6.3.4.5 A Party may not veto decisions relating to its identification as a Defaulting Party. The Defaulting Party may not veto decisions relating to its participation and termination in the consortium or the consequences of them.

6.3.4.6 A Party requesting to leave the consortium may not veto decisions relating thereto.

6.3.5 Minutes of meetings

6.3.5.1 The chairperson shall produce written minutes of each meeting which shall be the formal record of all decisions taken. He shall send draft minutes to all Members within 15 calendar days of the meeting.

6.3.5.2 The minutes shall be considered as accepted if, within 15 calendar days from sending, no Member has sent an objection in writing to the chairperson with respect to the accuracy of the draft of the minutes.

6.3.5.3 The chairperson shall send the accepted minutes to all the Members of the Steering Committee, and to the Coordinator, who shall safeguard them.

6.3.6 Decisions of the Steering Committee

The Steering Committee shall be free to act on its own initiative to formulate proposals and take decisions in accordance with the procedures set out herein.

The following decisions shall be taken by the Steering Committee:

- Content, finances and intellectual property rights
- Proposals for changes to Annexes 1 and 2 of the Grant Agreement to be agreed by the Funding Authority
- Changes to the Consortium Plan
- Modifications to Attachment 1 (Background Included) and Attachment 2 (Background Excluded)
- Additions to Attachment 4 (List of Third Parties for simplified transfer according to Section 8.2.2)

Evolution of the consortium

- Entry of a new Party to the consortium and approval of the settlement on the conditions of the accession of such a new Party

- Withdrawal of a Party from the consortium and the approval of the settlement on the conditions of the withdrawal

- Identification of a breach by a Party of its obligations under this Consortium Agreement or the Grant Agreement

- Declaration of a Party to be a Defaulting Party

- Remedies to be performed by a Defaulting Party

- Termination of a Defaulting Party's participation in the consortium and measures relating thereto

- Proposal to the Funding Authority for a change of the Coordinator

- Proposal to the Funding Authority for suspension of all or part of the Project

- Proposal to the Funding Authority for termination of the Project and the Consortium Agreement

In the case of abolished tasks as a result of a decision of the Steering Committee, Members shall rearrange the tasks of the Parties concerned. Such rearrangement shall take into consideration the legitimate commitments taken prior to the decisions, which cannot be cancelled.

6.4 Coordinator

6.4.1 The Coordinator shall be the intermediary between the Parties and the Funding Authority and shall perform all tasks assigned to it as described in the Grant Agreement and in this Consortium Agreement.

6.4.2 In particular, the Coordinator shall be responsible for:

- monitoring compliance by the Parties with their obligations

- keeping the address list of Members and other contact persons updated and available

- collecting, reviewing and submitting information on the progress of the Project and reports and other deliverables (including financial statements and related certification) to the Funding Authority

- preparing the meetings, proposing decisions and preparing the agenda of Steering Committee meetings, chairing the meetings, preparing the minutes of the meetings and monitoring the implementation of decisions taken at meetings

- transmitting promptly documents and information connected with the Project

- administering the financial contribution of the Funding Authority and fulfilling the financial tasks described in Section 7.3

- providing, upon request, the Parties with official copies or originals of documents which are in the sole possession of the Coordinator when such copies or originals are necessary for the Parties to present claims.

If one or more of the Parties is late in submission of any project deliverable, the Coordinator may nevertheless submit the other parties' project deliverables and all other documents required by the Grant Agreement to the Funding Authority in time.

6.4.3 If the Coordinator fails in its coordination tasks, the Steering Committee may propose to the Funding Authority to change the Coordinator.

6.4.4 The Coordinator shall not be entitled to act or to make legally binding declarations on behalf of any other Party or of the consortium, unless explicitly stated otherwise in the Grant Agreement or this Consortium Agreement.

6.4.5 The Coordinator shall not enlarge its role beyond the tasks specified in this Consortium Agreement and in the Grant Agreement.

6.5 Advisory Board

An external Advisory Board will be appointed and steered by the Steering Committee. The Advisory Board shall assist the decisions made by the Steering Committee. The advisory board is a body that will provide non-binding strategic advice to the project management bodies (Project Coordinator, Steering Committee, task leaders). The informal nature of an advisory board gives greater flexibility in structure and management compared to the Steering Committee.

Advisory board will be regularly consulted for dissemination activities and coordination actions identifying good practices within related initiatives.

The Advisory Board will consist of regional, national and international influential personalities in the field of energy and climate policy.

Their main responsibility will be in:

- Promoting the Project activities to a wider audience,

- Providing feedback to project outputs,

- Enabling discussions between key policy makers and the PANEL project partners (Parties).

The procedures for Advisory Board will be constituted by Steering Committee. In the first Steering Committee meeting the Project partners will agree on a list of nominated advisory board members. The SC will also agree on a thematic and geographical distribution of the list of nominees. Those nominees will be contacted and invited to form the Board.

The Coordinator shall write the minutes of the Advisory Board meetings and prepare the implementation of the suggestions. The Board members shall be allowed to participate in Project meetings upon invitation but have not any voting rights.

See the more detailed description of the fork of the consortium from Consortium Agreement.

14. Financial provisions (Consortium Agreement)

7.1 General Principles

7.1.1 Distribution of Financial Contribution

The financial contribution of the Funding Authority to the Project shall be distributed by the Coordinator according to:

- the Consortium Plan

- the approval of reports by the Funding Authority, and

- the provisions of payment in Section 7.3.

A Party shall be funded only for its tasks carried out in accordance with the Consortium Plan.

7.1.2 Justifying Costs

In accordance with its own usual accounting and management principles and practices, each Party shall be solely responsible for justifying its costs with respect to the Project towards the Funding Authority. Neither the Coordinator nor any of the other Parties shall be in any way liable or responsible for such justification of costs towards the Funding Authority.

7.1.3 Funding Principles

A Party which spends less than its allocated share of the budget as set out in the Consortium Plan will be funded in accordance with its actual duly justified eligible costs only.

A Party that spends more than its allocated share of the budget as set out in the Consortium Plan will be funded only in respect of duly justified eligible costs up to an amount not exceeding that share.

7.1.4 Return of excess payments; receipts

7.1.4.1 In any case of a Party having received excess payments, the Party has to return the relevant amount to the Coordinator without undue delay.

7.1.4.2 In case a Party earns any receipt that is deductible from the total funding as set out in the Consortium Plan, the deduction is only directed toward the Party earning such income. The other Parties' financial share of the budget shall not be affected by one Party's receipt. In case the relevant receipt is more than the allocated share of the Party as set out in the Consortium Plan, the Party shall reimburse the funding reduction suffered by other Parties.

7.1.5 Financial Consequences of the termination of the participation of a Party

A Party leaving the consortium shall refund all payments it has received except the amount of contribution accepted by the Funding Authority or another contributor. Furthermore a Defaulting Party shall, within the limits specified in Section 5.2 of this Consortium Agreement, bear any reasonable and justifiable additional costs occurring to the other Parties in order to perform its and their tasks.

7.2 Budgeting

The budget set out in the Consortium Plan shall be valued in accordance with the usual accounting and management principles and practices of the respective Parties.

7.3 Payments

7.3.1 Payments to Parties are the exclusive tasks of the Coordinator.

In particular, the Coordinator shall:

- notify the Party concerned promptly of the date and composition of the amount transferred to its bank account, giving the relevant references

- perform diligently its tasks in the proper administration of any funds and in maintaining financial accounts

- undertake to keep the Community financial contribution to the Project separated from its normal business accounts, its own assets and property, except if the Coordinator is a Public Body or is not entitled to do so due to statutory legislation.

- With reference to Articles 21.2 and 21.3.2 of the Grant Agreement, no Party shall before the end of the Project receive more than its allocated share of the maximum grant amount from which the amounts retained by the Funding Authority for the Guarantee Fund and for the final payment have been deducted.

The payment schedule, which contains the transfer of pre-financing and interim payments to Parties, will be handled according to the following:

Funding of costs included in the Consortium Plan will be paid to Parties after receipt from the Funding Authority in separate instalments as agreed below:

- 40% on receipt of first pre-financing payment from the Funding Authority,

- 20% in month 12 of the project (February 2017). In case of financial misuse or non-fulfilment of activities according to the Consortium Plan of a partner, the Steering Committee can decide to hold back the respective partner budget,

- one interim payment, on the basis of the request(s) for interim payment, after the first reporting period (month 1-18) according to Grant Agreement Article 21.3,

- one payment of the balance, on the basis of the request for payment of the balance, after the Project period according to Grant Agreement Article 21.4.

Funding for costs accepted by the Funding Authority will be paid to the Party concerned.

The Coordinator is entitled to withhold any payments due to a Party identified by a responsible Consortium Body to be in breach of its obligations under this Consortium Agreement or the Grant Agreement or to a Beneficiary which has not yet signed this Consortium Agreement.

The Coordinator is entitled to recover any payments already paid to a Defaulting Party. The Coordinator is equally entitled to withhold payments to a Party when this is suggested by or agreed with the Funding Authority.

15. Work packages

WP1 Management				
Project Leadership	Management Entities	Project Meetings	Communication with EC	Project Reports

WP2 Forerunner Training Programme	WP3 Roadmaps 2050
Design Training Curriculum	Create Local/Regional Stakeholder Maps
Create Guidebook	Analyze Current Status of Local Energy Supply and Usage
Train the Trainer Workshops	Create common methodology for developing energy roadmaps
Feedback, Revisions and Translation of Curriculum	Consult Stakeholders and Citizens
Conduct Local Advocacy Training	Create Local Energy Visions
Conduct Forerunners Boot Camp	Design Local Roadmaps for 2050
International Advocacy Workshops	Design Local Action Plans

WP4 Communications and Dissemination			
Communication Plans	Communication Tools	Local Dissemination Activities	International Dissemination Activities

WP5 Sustainability		
Establish Sustainable Energy Network	Network Conferences	Other Sustainability Actions

See the detailed description of the work packages from Annex 1 part A

16. Outcomes and deliverables

D1.1. Project manual. General guidelines for activities, deadlines and deliverables for the project. Document in English for consortium members. TREA (M6)

D1.2. Project management tools (intranet for partners, internal mailing system). TREA (M6)

D1.3. Monitoring and evaluation system with progress indicators for all reports. Software solution for project management, will be based on open source web-application. TREA (M10)

D1.4. Minutes of project meetings. Documents for internal usage, prepared in English. TREA (M36)

D1.5. Progress report in month 10. TREA (M10)

D1.6. Report on data management. Will deal with the questions of data usage and following the ethical standards of Horizon 2020 programme. TREA (M6)

D2.1 Written Curriculum and Training Materials in 13 languages. UTARTU (M12)

D2.2 Guidebook on Energy Efficiency Advocacy in 13 languages. UTARTU (M14)

D3.1 Ten Regional energy profiles in local language (approximately 20 pages). AgEnDa (M18)

D3.2 One synthesis report in English on CEE regions available on project website as pdf file. AgEnDa (M24)

D3.3 Ten regional visions for sustainable energy future. Description of the visions developed regionally by using the energy future ideal types methodology. Printed in local language (approximately 20 pages, optional in EN). AgEnDa (M27)

D3.4 One English synthesis report on CEE regions available on project website as pdf file. AgEnDa (M28)

D3.5 Ten Roadmaps for Energy Future 2050. Based on the national targets for 2050 as well as 2030 and on vision of local stakeholders and the latest available expertise on energy technologies. Printed in local language (approximately 20 pages, optional in EN). AgEnDa (M30)

D3.6 One English synthesis report on CEE regions available on project website as pdf file. AgEnDa (M31)

D3.7 100 Regional Action Plans. Lays out the next steps for stakeholder organizations, inspired by the local Roadmap 2050. Printed in local languages (approximately 10 pages each). AgEnDa (M30)

D4.1. Communication plan. WWFBG (M3)

D4.2. Project web-page in english with 10 localisations to regional languages. WWFBG (M6)

D4.3. Project logo(s) and visual identity. Developed in cooperation with graphic designers. WWFBG (M6)

D5.1 Central and Eastern European Sustainable Energy Network (CEESEN) formed. MAE (M6)

D5.2 Online Platform for CEESEN. MAE (M6)

D5.3 CEESEN Conferences. AgEnDa (M18)

D5.4 Energy Efficiency Forerunner Model Evaluation Report in English. MAE (M35)

D5.5 Energy Efficiency Forerunner Model Replication Guidelines (Long term energy planning & Forerunner Training) in English. MAE (M36).

D5.6. Dissemination Conference. TREA (M36)

See the detailed description of the deliverables from Annex 1 part A

17. Helpful information and additional reading

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5. Feola, G., & Nunes, R. (2014). Success and failure of grassroots innovations for addressing climate change: The case of the Transition Movement. Global Environmental Change, 24, 232-250.

6. Kemp, R., Schot, J., & Hoogma, R. (1998). Regime shifts to sustainability through processes of niche formation: the approach of strategic niche management. Technology analysis & strategic management, 10(2), 175-198.

7. McLain, R., Poe, M., Hurley, P. T., Lecompte-Mastenbrook, J., & Emery, M. R. (2012). Producing edible landscapes in Seattle's urban forest. Urban Forestry & Urban Greening, 11(2), 187-194.

8. Seyfang, G., & Haxeltine, A. (2012). Growing grassroots innovations: exploring the role of community-based initiatives in governing sustainable energy transitions. Environment and Planning C: Government and Policy, 30(3), 381-400.

9. Hargreaves, T., Hielscher, S., Seyfang, G., & Smith, A. (2013). Grassroots innovations in community energy: The role of intermediaries in niche development. Global Environmental Change, 23(5), 868-880.

10. Smith, A., Fressoli, M., & Thomas, H. (2014). Grassroots innovation movements: challenges and contributions. Journal of Cleaner Production, 63, 114-124.

11. Shove, E., & Walker, G. (2010). Governing transitions in the sustainability of everyday life. Research policy, 39(4), 471-476

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14. Seyfang, G., & Longhurst, N. (2013). Desperately seeking niches: Grassroots innovations and niche development in the community currency field. Global Environmental Change, 23(5), 881-891.

15. Smith, A. (2012). Civil society in sustainable energy transitions. Governing the Energy Transition: reality, illusion or necessity, 190-202.

16. Hammer, S. (2009, June). Capacity to act: The critical determinant of local energy planning and program implementation. In Fifth Urban Research Symposium, Cities and Climate Change: Responding to an Urgent Agenda (pp. 28-30).

17. Taylor Aiken, G. (2015). (Local-) community for global challenges: carbon conversations, transition towns, and governmental elisions. Local Environment, 20(7), 764-781.

18. Newman, L., Waldron, L., Dale, A., & Carriere, K. (2008). Sustainable urban community development from the grassroots: challenges and opportunities in a pedestrian street initiative. Local Environment, 13(2), 129-139.

19. Thompson, M. (2015). Between boundaries: from commoning and guerrilla gardening to community land trust development in Liverpool. Antipode, 47(4), 1021-1042.

20. Seyfang, G., Park, J. J., & Smith, A. (2013). A thousand flowers blooming? An examination of community energy in the UK. Energy Policy, 61, 977-989.

21. Peterson, D., Matthews, E., & Weingarden, M. (2011). Local energy plans in practice: case studies of Austin and Denver. Contract, 303, 275-3000.

22. Sustainable Energy for All - A Brief Guide to Advocacy Planning (2012). Prepared by UNDP on behalf of Sustainable Energy for All, pp 1-6.

23. Cardinaletti, Marco ED (2009) Tools and concepts for Local Energy Planning: Methodological guidelines for the development of Sustainable Energy Communities and Systems in urban decentralized areas of the Mediterranean Region, EASY pp1-57,

24. Bertoldi, P., Cayuela, D. B., Monni, S., & de Raveschoot, R. P. (2010). " HOW TO DEVELOP A SUSTAINABLE ENERGY ACTION PLAN (SEAP).