D.T2.4.1

TOOLBOX PUBLISHED ON AND ON-LINE PLATFORM

Subtitle

Version 1
MM YYYY

The deliverable D.T2.4.1 was fulfilled with the help of two different channels.

On the one hand, it was published on the **ENES-CE homepage**. It can be found by following this link:

https://www.interreg-central.eu/Content.Node/WPT-2.html

On the other hand, it was published in two newsletters. One for Tool1 + 3 and one newsletter for Tool 2.

Newsletter for Tool 1+3:

Newsletter No. 3

14th December 2020

ENES-CE
is addressing the issue of energy efficiency in Central Europe

Development and publishing of tools to support communication in citizen energy projects

The ENES-CE project set itself the task of developing various tools for the public. Here, the focus was on communication as well as economic efficiency. In total, three tools were developed. In this issue we are presenting you two tools that deal with communication (Tool 1 and Tool 3).

Tool 1 concentrates on the methods for a successful workshop. Since workshops are often an essential part of citizen participation, this file can be used in many ways. It contains hints, tips and success factors for conducting them.

Tool 3, on the other hand, focuses more generally on possible communication channels. At the beginning the target group is analysed. This step is essential to ensure targeted communication and should be done before any action is taken. In the second step, numerous methods and tools are introduced and their respective advantages and disadvantages are presented. After a basic classification of the tools has been made, a variety of recommendations are then made.

Tool 3 Example: Best Practice Communication

In the next issue of our newsletter, we are going to present you next interesting tool: The Community Energy Investment Guidelines - technical, business and legal aspects (Tool 2).

To each individual thereby the following points are regarded:

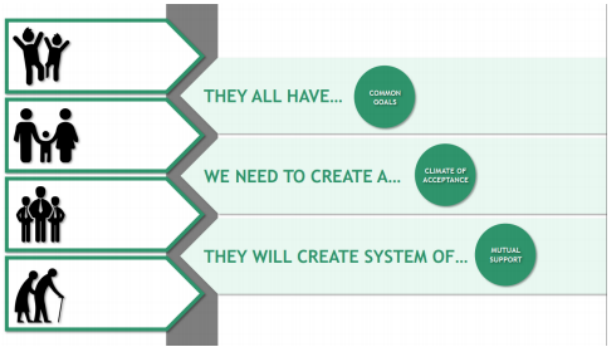
- Target group
- Advantages
- Recommended frequency
- Recommendations for a successful post
- Examples

Finally, numerous best practices from the community of Pfaffenhofen (Germany) will be presented. Digital and offline examples will be shown.

This collection of tools is suitable for people who want to promote citizen participation in energy projects. Nevertheless, a certain amount of previous experience is an advantage.

Tool 1: https://www.interreg-central.eu/Content.Node/200117-1950-D.T2.2.1-Tool1-Co-design-workshop-methods.pdf

Tool 3: https://www.interreg-central.eu/Content.Node/Communication-Tool-final.pdf



Tool 3 Example: Target Audiences

This project is co-financed by the European Regional Development Fund through the Interreg Central Europe programme www.interreg-central.eu/Content.Node/ENES-CE.html

Newsletter for Tool 2:

Newsletter No. 5

20th April 2021

ENES-CE
is addressing the issue of energy efficiency in Central Europe

Development and publishing of tools to support communication in citizen energy projects

The ENES-CE project set itself the task of developing various tools for the public. Here, the focus was on communication as well as economic efficiency. In total, three tools were developed. In this issue we are presenting you tool number two that deals with the first assessment of citizen energy projects (Tool 2).

When starting a new energy cooperative for renewable energy projects, the problem is often how to judge different projects and investment possibilities. This tool gives a strong indication on how high the quality of the specific project is. The tool was created in an EU-wide cooperation and therefore is now a very good tool to get a first feeling for PV-projects worldwide. The tool has open interfaces to integrate other technical and business management Excel-based tools, which can then also be used to map larger overall systems in the field of renewable energies. PV heat pump systems, for example.

The tool consists of the excel based tool itself as well as some guidelines on how to use it. It was created based on already existing and used tools. One is able to insert basic key indicators and receive a financial outlook as well as an assessment of acceptance by the public. Therefore, in the first step you have to put in your basic assumptions:

Project Assumptions

Legend
Green cells indicate information and are updated automatically based on user input into yellow cells.
Input information about the project into yellow cells.
Grey cells are not used.

Project Generation		Annual Escalation	Year Start	Year End	Notes
Project Name	PV_SWP				
Project Owner	Stadtwerke				
Manufacturer	IBC Solar				
Number of production units	112				
Unit Size (W)	330				
Project Size (kW)	36,96				
Generated Energy per kWp	915 kWh/kWp	-2%	1	20	
Rate of self-consumed eletricity	40%				

Project Cost		Notes
Total Cost	€ 78.000,00	
Years to Depreciate	20	

Revenue		Annual Escalation	Year Start	Year End	Notes
Power Purchase Agreement Rate / Market RES Rate (€/kWh)	€ -	2,0%	1	20	
Funds for Self-consumed Electricity (€/kWh)	€ -	2,0%	1	20	
End customer price for Electricity (€/kWh)	€ -	2,0%	1	20	

Equity & Flip Structure			Year Start	Year End	Notes
Flip Year	0				
Flip Buy-Out Payment/Fee	€ -		0	0	
Local Owner Percentage Pre-Flip	100%		1	0	
Local Owner Percentage Post-Flip	100%		1		
Equity Owner Percentage Pre-Flip	0%		1	0	
Equity Owner Percentage Post-Flip	0%		1		
Other Public or State Provided Funding	€ -				
EU Grant	€ -				
Local Owner Contribution	€ 78.000,00				
Equity Investor Contribution	€ -				
Total Debt	€ -				

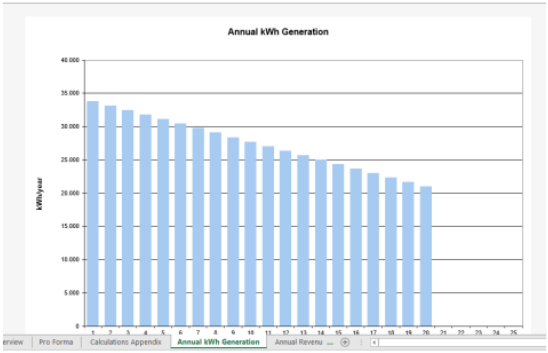
Incentives			Annual Escalation	Year Start	Year End	Notes
Production Incentive Payment (€/kWh)	€	0,28	1%	1	20	

Expenses			Annual Escalation	Year Start	Year End	Notes
Operations & Maintenance	€	672,00	1,5%	1	20	
Operations & Maintenance Contingency Fund	€	328,00	1,5%	1	20	
Project Management Fee	€	323,00	1,5%	1	20	
Insurance	€	600,00	2,0%	1	20	
Property Tax	€	200,00	-1,0%	1	20	
Lease Payments to Landowners	€	328,00	2,0%	1	20	
Admin/Financial/Legal Management			2,0%	1	20	
Production Tax Expense (€/kWh)	€	-	2,0%	1	20	
Warranty Expense	€	-	2,0%	4	20	
Decomm. Fund Pre-Warranty Expiration	€	-	2,0%	1	20	
Decomm. Fund Post-Warranty Expiration	€	-	2,0%	1	20	
Other Expense	€	-	1,0%	1	20	

Based on those numbers, you will receive different financial Key Performance Indicators (KPI) as:

- A project summary
- The annual kWh generation
- The annual revenues
- The sales revenues
- The loan payments
- The annual expenses
- The returns
- The Cash-Flow
- The IRR
- And more

The annual power generation for example will be shown as seen here:



In addition to the financial performance, you can measure the impact on the public opinio
as well. Therefore, the individual measurements are explained like shown in this example:

Qualitative assessment criteria for community energy projects

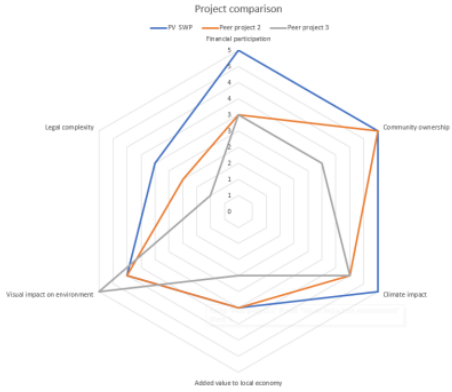
Grade	Financial participation Description	Community ownership Description	Climate impact Description	Added value Description
5	The project has been fully funded by the local community through sales of shares and/or debentures. The funds come predominantely from individuals or companies that have their residence in the community" - here I think it is not important to speak of financial returns	Owned by community through democratically organized entity (e.g. energy cooperative). Voting on major decisions is organised on principle "one member one vote"	Part of the comprehensive local strategy to combate climate change (SEAP, SECAP or local development strategy). Important is that the development of the strategy has involved local community stakeholders.	At least 50% of the project (within the N contribution t permanently
4	The project has been fully funded by citizens through sales of shares and/or debentures. The funds come predominantely from individuals or companies that do not have their residence in the community	Partially owned by local government and citizens in form of public private partnership. Citizens are organised in an organisation like an energy cooperative with "one member one vote principle".	Part of the wider stuctured programme of sustainability actions, possibility for the replication or expansion of the project and/pr outcomes of the project are part of the coordinated strategy of multiple community stakeholders. Significant measurable effects are result of the project.	30-50% of loc could be sour region) or sys employment created jobs.
3	The project has been funded by a combination of financial contributions from citizens, local companies, the local government and a private investor who does not come from the community.	Fully or majority owned by citizens or local investors but without governence on "one member one vote principle"	Individual larger action, with measurable and significant impact on the emmissions reduction but is not part of comprehensive structured programme neither involves other community stakeholders.	15-30% of loc could be sour region) or sig local employ created jobs.

In the next step one has to rate its own project in regard to these topics:

Project comparison

Project name	Financial participation	Community ownership	Climate impact	Added value to local economy	Visual impact on environment	Legal complexity	Project cost	IRR	NPV
PV SWP	5	5	5	3	4	3	€ 78.000,00	0,04	€ 32.761,30
Peer project 2	3	5	4	3	4	2	€ 350.000,00	0,08	€ 87.145,00
Peer project 3	3	3	4	2	5	1	€ 441.000,00	0,13	€ 45.621,00

As a result, a graphic is shown, which can be presented and which is very visual to compare projects against each other:



In combination with the other two tools, the collection is complete and can help individuals and groups to make their first steps in the direction of citizen projects. It will help to analyse and implement projects.

This collection of tools is suitable for people who want to promote citizen participation in energy projects. Nevertheless, a certain amount of previous experience is an advantage. All the tools are free to use and can be downloaded following this link:

https://www.interreg-central.eu/Content.Node/WPT-2.html