DELIVERABLE D.T4.1.1

Capitalization and pilot actions guidelines	**Version 1** **09/2020**

D.T4.1.1: Capitalization and pilot actions guidelines

A.T4.1 PA preparation and investments

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1. Introduction.

This document will serve as a guide to the projects carried out by the TARGET-CE project partners in previous years. Within D.T4.1.1 there will be indicated projects, experiences and problems during implementation, ready-made solutions and the results achieved within them. This document covers all action plans that have been implemented under other projects financed under the European funds and highlights in particular those that are of particular importance in the implementation of pilot actions in the TARGET-CE project.

All collected information on will be beneficial during A.T4.2 and A.T4.3.

2. Aims

The main purpose of developing this document is to indicate how to perform pilot actions and how to deal with problems, distribution of responsibilities between PP and PA. The main goals of the activities performed under the TARGET-CE project are to reuse solutions from previously implemented projects and to adapt them to the requirements of new PAs. All activities performed in the project should be carried out in accordance with the guidelines presented in this document.

3. Data collection on previously elaborated action plans

The entire consortium was included in performing D.T4.1.1 and had to demonstrate any action plans they had carried out in previous years. In order to detail and present full information about action plans, all partners filled in the sent excel file containing data such as:
- Action Plan Title
- Description of Action Plan
- What steps were taken during implementation (point out the steps)
- Main goals, impact, benefits predicted to generate from execution of Action Plan
- Technology used during implementation
- Obtained knowledge, know-how (if applicable)
- Number of involved stakeholders/people/organizations
- Type of stakeholders/sector involved
- Target groups
- Resources needed (people, technology, budget ect.)
- Main goals, impact, benefits finally generated from execution of Action Plan
- Problems encountered during implementation of Action Plan
- Steps taken to eliminate problems and results of those steps
- Problems not eliminated during implementation
- Mitigation actions taken to problems not eliminated
- Comparison of goals predicted and achieved
- Ideas, new information, solutions which can increase the efficiency of implemented Action Plans
- Possibilities of development (software, technology, management - if applicable)
- Other information useful to implement Action Plans similar to this one (not included in table e.g. indicators of project not included in goals, social reception of project (if any exist), future plans to use outcome of project)

Every partner deliver basic information on completed or ongoing action plans. A total of 40 action plans were compiled and to some extent carried out by the partners of the TARGET-CE project. This shows the considerable experience of the consortium in this area and the likelihood of efficient development and implementation of pilot actions included in A.T4.2.

The following table enlist provides an overview of the Action Plans implemented by the TARGET-CE Project Partners:

No.	PP	Project	Action Plan Title
1	FBK	BOOSTEE-CE	Pilot actions guidelines (https://www.interreg-central.eu/Content.Node/CE906-BOOSTEE-CE-D.T.3.3.2-Pilot-actions-guidelines-(1).pdf)
2	EUWT NOVUM	BOOSTEE-CE	Pilot actions guidelines
3		E-FIX	INNOVATIVE ENERGY FINANCING MECHANISM DEVELOPMENT IN THE MAZOVIA REGION, POLAND
4		EMPOWER	Improving governance – Action Plan for the Mazovia Region
5			Construction of renewable energy installations in Domanice municipality
6			Replacement of heating factors with the installation of renewable energy sources in Jablonna Lacki municipality
7			Sunny municipalities of East Mazovia - solar energy in Korczew municipality
8			Thermomodernization of public buildings in Korczew municipality
9			Replacement of heating devices with the installation of renewable energy sources in Korczew municipality
10			Replacement of heating devices in residential buildings in Stara Kornica municipality
11			Construction of renewable energy installations in Kotun municipality
12	MAE		Thermomodernization of public buildings in municipality of Kotun
13		PANEL 2050	Construction of renewable energy installations in Mokobody municipality
14			Sunny municipalities of East Mazovia - solar energy in Paprotnia municipality
15			Sunny municipalities of East Mazovia - solar energy in Przesmyki municipality
16			Sunny municipalities of East Mazovia - solar energy in Repki municipality
17			Construction of renewable energy installations in Skorzec municipality
18			Energy for the future - renewable energy sources in Stara Kornica municipality
19			Thermomodernization of public buildings in Stara Kornica municipality
20			Ecological Mazovia Municipalities - solar energy in Suchozebry municipality

21			Construction of renewable energy installations in Wodynie municipality
22	UCBR	Energy@school	ENERGY GUARDIANS SMART-SCHOOL MANAGEMENT PLAN - in Fusignano by the Istituto Comprensivo "L. Battaglia" (primary and lower secondary school) - 3 buildings
23	KSSENA	eCentral	Renovation of Ljudska univerza Velenje
24		Energy@school	ENERGY GUARDIANS SMART-SCHOOL MANAGEMENT PLAN - Primary school Frana Kranjca
25			ENERGY GUARDIANS SMART-SCHOOL MANAGEMENT PLAN - Primary school Frana Roša
26			ENERGY GUARDIANS SMART-SCHOOL MANAGEMENT PLAN - Primary school Hudinja
27			ENERGY GUARDIANS SMART-SCHOOL MANAGEMENT PLAN - III. Primary school Celje
28			ENERGY GUARDIANS SMART-SCHOOL MANAGEMENT PLAN - IV. Primary school Celje
29			ENERGY GUARDIANS SMART-SCHOOL MANAGEMENT PLAN - Primary school Ljubečna
30			ENERGY GUARDIANS SMART-SCHOOL MANAGEMENT PLAN - Primary school Lava
31	City of Split	CitiEnGov	City of Split Action EE plan 2017-2019
32			City of Split Annual EE plan 2017
33			City of Split Annual EE plan 2018
34			City of Split Annual EE plan 2019
35	W.E.I.Z.	CitiEnGov	Sustainable Energy and Climate Action Plan (SECAP)
36		Store4HUC	FEASIBILITY STUDY FOR IMPLEMENTING ENERGY STORAGES IN WEIZ (AT)
37			INVESTMENT SPECIFICATION FOR THE INTEGRATION OF AN ENERGY STORAGE IN HUC OF WEIZ
38	SIPRO	Citiengov	Eco-citizens Programme
39			Transnational concept for setting up/enhancing Energy units within PA in Central Europe
40			Energy dashboard

Action Plans by Partner:

- MAE – PP3 – 19 Action Plans (EMPOWER, EFIX, PANEL 2050)
- KSSENA – PP5 – 8 Action Plans (eCentral, Energy@school)
- City of Split – PP6 – 4 Action Plans (CitiEnGov)
- SIPRO – PP8 – 3 Action Plans (CitiEnGov)
- W.E.I.Z. – PP7 – 3 Action Plans (CitiEnGov, Store4HUC)
- FBK – PP1 – 1 Action Plan (BOOSTEE)
- EUWT NOVUM – PP2 – 1 Action Plan (BOOSTEE)
- UCBR – PP4 – 1 Action Plan (Energy@school)

During data collection were collected data point out below. The whole xls. document is available at this link: https://drive.google.com/drive/folders/15t7n1gnXLc_4VRebGShJN8wfa5ZkKGak.

The summary of this data collection is an attachment to this document

4. Lessons learned from past actions

As listed above Action Plans brought a new light and perspective to execution of upcoming and anticipated Pilot Actions within TARGET-CE project, especially in case of recycled tools (BOOSTEE, CitiEnGov, eCentral, FEEDSCHOOLS, Energy@School).

One of the most important things about the formerly executed Pilot Action that almost the same European regions took part in it and are similar in those upstreamed and downstreamed tools.

On the basis of the collected data in Annex A, we can manage to exclude the information, bring up the results and lessons learned and implement the best solutions .

All the information gathered show the full scope and course of implemented activities. Collected information gave general knowledge about:

1. Types of activities
   Taking into account the type of activities carried out, they can be broadly defined as activities increasing energy efficiency, but the dominant part here are activities related to RES installation, thermal modernization and energy management. Action plans can lead to the simplest possible implementation of TARGET-CE activities, especially those using the same technology.

2. Similarities to planned PA in TARGET-CE
   Previously carried out action plans have pilot actions that will be similar to those currently foreseen under the TARGET-CE project. These activities include the pilot actions elaborated in BOOSTEE and CitiEnGov projects – One Place Platform (BOOSTEE) and Energy Dashboard (CitiEnGov)

3. Impact
   Mostly impact is expressed in units of electricity or heat, reduction of greenhouse gas emissions, surface area of modernized buildings, reduction of electricity and heating costs, but also by changing the behavior of building users. During the elaboration of energy management plans are needed similar information to show correctly the impact and results of project.

4. Obtained knowledge
   During these projects main benefit were awareness of buildings owners, employees, teachers, pupils ect. Workers of PPs which developed these AP and whole actions also obtained important know-how about the ways how to correctly use the resources, technical and non-technical solutions, equipment ect. Those experience will be recycled and used to fully implement planned actions.

5. Involved stakeholders
   To correctly execute actions were engaged various types of stakeholders, mostly it was workers of municipalities, regions, residents, pupils. To capitalize those actions is needed to fully engage them, prepare trainings, materials and information to be sure that they're clearly understand the needs and specific of action.

6. Resources
   Mostly it was (in previous actions): budget, energy and GIS experts, municipality stuff, technical assistance, external experts. Those ingredients (especially energy experts) are needed to fully implement the action. Resources are mostly the most important to provide In the project to fully satisfy and meet the requirements of target groups.

7. Effectiveness of AP
   All of the AP are successful (without those ongoing projects) – these are good examples to be copied and reproduced, especially in the scope of energy management (BOOSTEE, CityEnGov, energy@school, eCentral projects)

8. Problems and steps taken to encounter or mitigate them
   The problems usually arose as a result of COVID-19 problems, budget problems or reasons beyond the control of PP (participation of residents, selection of the appropriate contractor). Most of them managed to find easy solutions or find mitigation measures. It can be noticed that the financial problems only meant that the measure was not fully implemented, while the remaining elements could be corrected.

9. Ways to improve the activities carried out
   In few PA, there is seen possibility of improving those actions, but it was discovered thanks to good monitoring of activities and knowledge about technical solutions and tools in scope of energy management, energy monitoring and geodata. As is seen in the annex, at the time of the action we have to make sure that we are using cutting-edge technology and the most efficient way of promotion of activities, which always lacks of strength in energy related projects.

All implemented actions show, that it's possible to introduce energy management and energy efficiency actions at local and regional level with good financing and expertise. During TARGET-CE Pilot Actions, guidelines and project pipelines showed in Action Plans, should be recycled and adapted.

The examined scope of the action plans presented above may indicate that they may be the basis for further activities carried out under the TARGET-CE project, whose characteristics and structure are similar to those included in this document. Particular attention should be paid to the guidelines applied and the resources needed to implement them. Although these Action Plans provides different solutions and implement different actions, they can be adapt and used as ones in TARGET-CE.

Despite the fact that most of the action plans were related to different topics, some general principles and lessons can be distinguished from the evaluation carried out:

Thorough research and preparation
Do not overlooked the initial stage of action plan preparation. Deep research e.g. checking changes in legislation can limit the problems and increase the probability of successful action plan development.

Involvement of stakeholders
Adequate stakeholder involvement and envisaged continuous communication at the right stage of the action plan development is very important e.g. the defined measures should be defined by the acting persons themselves with regard to their acceptance and should be finalized together . Additional consultations and feedback can enrich the activities and limited problems.

Monitoring and risk mitigation
It is crucial to monitor implementation of pilot and mitigate any risks that can be met. Act immediately with any obstacles or problems encored.

Good resources allocation
Any relevant problem in the implementation of the pilot required extra effort and working time to, so it is important to have that in mind

Promotion and education aspect

In many cases, this is an underestimated and overlooked part of the pilot but you should always try to incorporate education and promotional activities-it brings attention to your action, underline sustainability and allow potential replication

<u>Be prepared for plan B</u>
It is impossible to predict all the factors that you may encounter during implementation of pilot but try to always have an alternative option for each activities.

In the evaluation of previously implemented action there was also a recommendation that even not full success is still opportunity to learn and draw conclusions. Even if the specific action will not be as successful as hoped, it is important to keep trying to implement such projects to normalize the idea of among citizens and public authorities. and pave a way for future such projects.

5. Guidelines for pilot action development

Each Pilot Action should include the following basic components:
- **What** is your goal – a well-defined ensure that planned activities have been thought through according to a desired end;
- **What** exact actions and steps will you carry out to reach the goal;
- **Who and How** will be responsible for each of the steps and involved in the process, including collaboration with stakeholders who play an important role in action plan development;
- **By when** all the activities will be implemented and finalized (deadlines and milestones);
- **What resources** are needed to carry out these actions (i.e., money, staff, equipment);
- **Monitoring -** measures to evaluate progress;
- **Risk mitigation** to control and react smooth development of pilot;
- **Communication** include both promotion and education, sometimes overlooked but crucial,

The process of any Pilot Action development should follow eight important steps:

Step 1: Set achievable goal
It is the first and the most important step, which should start the process. The goal should meet the main assumptions and be:
- Specific – well-defined and clear
- Measurable – include measurable indicators to track progress
- Attainable – realistic and achievable within the resources you have
- Relevant – important with your scope of work and participant expectations
- Timely – has a finishing date

Step 2: Define steps to be taken
Now when the goal is clear, all activities to achieve it must be listed. It is important to create clear step by step plan with all tasks to be performed, deadlines, milestones and people responsible for implementation.

Step 3: Identify the resources needed
It is crucial to ensure that you have all the necessary resources (e.g. staff, equipment, financing) to complete the tasks. And if they are not currently available, you need to first make a plan to acquire them.

Step 4: Map relevant stakeholders

Mapping and identifying relevant target groups and entities involved in the process of implementing action plan is significant step of every action plan.

Step 5: Coordinate communication
This step contain both internal communication with relevant stakeholders incl. consultancy, evaluation and receiving feedback and also external communication incl. promotion of the action.

Step 6: Develop Action Plan
This document should be easily accessible to everyone and should be editable. It is very important to mention that each developed action plan action should meet very clear three criteria.

- **Completeness** - Does it include all information relevant to achieving the goal? Does it meet expectation of all involved entities?
- **Clearness** - Is it well defined and understandable to all involved?
- **Timeliness** - Does the action plan reflect the current work? Does it anticipate newly emerging opportunities, problems and barriers?

Step 7 Implement
Go through with a pilot action implementation

Step : Assess, evaluate and react
This step contains monitoring of action plan development, evaluating if the planned actions are sufficient and implemented according to predictions and on time and reacting to any obstacles and problems encored.