



## Deliverable D3.2: Capacity Building Programme

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## Acronyms

CETP	Clean Energy Transition Plan
GIS	A GIS (file) is a digital file used to store geographic information system (GIS) data, which includes spatial and attribute data for mapping and spatial analysis
iCD	Intelligent Community Design - A Sketch-up plug-in tool by IES for energy and carbon assessments for portfolios, campuses and cities
iCIM	Intelligent Community Information Model - An online 3D Collaboration and Visualization Platform by IES
iSCAN	An online data management platform by IES
iVN	Intelligent Virtual Network - A Network Modelling desktop tool by IES
KPI	Key Performance Indicator
LEAP	Local Energy Action Plan
LRA	Local and Regional Authority
OSM	Open Street Map

PV	Photovoltaic
SEAP	Sustainable Energy Action Plan
SECAP	Sustainable Energy and Climate Action Plan
T	Task
VE	Virtual Environment - IES' key software using advanced building-physics based engine to model and simulate building performance
VKO	Virtual Knowledge Office
WP	Work Package

## Executive Summary

The present public deliverable **D3.2 – Capacity Building Programme** is a key deliverable under the LIFE22-CET-Step-WISE project, which aims to empower Local Regional Authorities (LRAs) across Europe to design and implement effective Clean Energy Transition Plans (CETPs). The project aligns with EU's ambitious goal of becoming the first climate-neutral continent by 2050, with immediate objectives for 2030, including a 55% reduction in greenhouse gas emissions and 45% share of renewable energy.

Despite the importance of these goals, many National Energy and Climate Plans have been found lacking, particularly in engaging smaller municipalities and rural areas, which often struggle with limited resources and technical expertise. The Step-WISE project seeks to address these challenges through a tailored and dynamic Capacity Building Program (CBP) which brings to LRAs and the organizations that work with them knowledge, training and skills related to a set of software (the Step-WISE digital toolkit documented in Public Deliverable D3.2) for CETP baseline, scenario building and decarbonization strategy planning and an additional set of knowledge and resources related to processes, best practices and other tools available for CETP planning via a Virtual Knowledge Office (VKO).

The CBP, detailed in this deliverable, is designed to enhance the capabilities of LRAs by providing access to a comprehensive training program that combines both technical and non-technical elements. The program is structured around a two-waves cascade approach, ensuring a broad and sustainable impact.

### Two-Waves Cascade Structure:

#### 1. First Wave: Training the Trainers

The first wave of the CBP focuses on equipping consortium partners and using case leaders with the necessary skills and knowledge to develop and monitor CETPs. These participants are intensively trained through a mix of workshops, hands-on activities, and the use of the Step-WISE digital toolkit. By the end of this wave, these trained experts—referred to as Disseminators—are prepared to lead the capacity-building efforts in their respective regions. In particular, this first wave serves as testing and refinement of the CBP through continuous feedback for the Virtual Workshops that will be held for the Replicators.

#### 2. Second Wave: Local and Regional

In the second wave, Disseminators take on the role of trainers, cascading their knowledge and skills to local and regional authorities – referred to as Adopters - within their regions and also to Replicator organizations that may also provide training and consulting services to LRAs. This wave ensures that the expertise gained is transmitted effectively to the ground level, where it is most needed. The cascade structure not only amplifies the program's reach but also promotes the sustainability and replicability of the training model. The trainings will then be replicated through Virtual Webinars to reach a broader audience, including future Adopters - Followers - from geographical areas beyond the original Use Cases.

### Key Components of the CBP:

- **Co-Design via Skill Gaps and Needs Mapping:** The thorough analysis conducted within WP2 identified the specific skills and competencies required by LRAs to carry out the energy transition. This analysis informed the development of customized training modules that were tailored to the varying levels of expertise among trainees.

- **Learning by Doing:** The program emphasizes experiential learning, ensuring participants gain hands-on experience through practical exercises and real-world scenarios.
- **Technical Toolkit:** A central element of the CBP is the Step-WISE technical toolkit, which supports LRAs in modelling and evaluating energy solutions adapted to their local contexts.
- **Accessibility via Knowledge Sharing Platform:** Virtual Knowledge Offices (VKOs) will serve as repositories for resources, supporting ongoing learning and the replication of successful strategies beyond the project's initial scope.
- **Evaluation and Monitoring:** The program includes robust mechanisms for evaluating training effectiveness through key performance indicators (KPIs), feedback tools, and continuous monitoring.

The CBP is structured to ensure that local and regional authorities are not only equipped with the necessary knowledge and tools but are also capable of applying these in their unique contexts, thereby contributing to the EU's broader climate goals. This deliverable outlines the methodology, training activities, and evaluation procedures, concluding with recommendations for ensuring the scalability and sustainability of the Step-WISE approach.

## 1 Introduction

The Step-WISE project aims to enhance the capacity of policymakers and administrations at all sub-national governance levels across the European Union. It focuses on enabling these entities to effectively plan and implement energy transition strategies that increase energy efficiency, adopt sustainable energy practices, reduce carbon emissions, and improve adaptability to climate change. The project supports the EU's goal to become the world's first climate-neutral continent by 2050, with significant milestones set for 2030, including a 55% reduction in greenhouse gas emissions and a 45% share of renewable energy. However, assessments of National Energy and Climate Plans reveal a shortfall in achieving energy reduction and investment targets. Local and regional authorities play a crucial role in addressing this gap but face challenges such as complex governance structures, varying response rates, and a lack of technical skills and resources. This gap hinders their ability to create actionable and sustainable plans. Many smaller municipalities and rural areas lag due to a lack of awareness, expertise, and resources. The Capacity Building Programme (CBP) aims to address these challenges by equipping authorities with the knowledge and tools needed to overcome barriers and facilitate the transition to clean energy.

The Capacity Building Programme (CBP) developed in Task 3.2, and presented in this deliverable, addresses these challenges by empowering local and regional authorities to lead their clean energy strategies. The main objective of the Step-WISE CBP is to enhance the capabilities of local and regional authorities (LRAs) in developing and implementing Climate and Energy Transition Plans (CETPs) effectively. It includes:

- **Two-Wave Training Approach:** training consortium experts and local authorities to develop and monitor energy plans;
- **Use Case-Based Approach:** tailoring plans to local needs and contexts, considering geographical and stakeholder dynamics;
- **Technical Toolkit:** an easy-to-use tool for modelling energy assets, helping stakeholders evaluate solutions adapted to local conditions;
- **Knowledge Sharing Platform:** Virtual Knowledge Offices (VKOs) to collate resources and support CET plan development tailored to each use case;
- **Training Material:** comprehensive training materials and sessions provided by experts to address both technical and non-technical needs.

This program equips authorities with additional skills and tools that are needed to implement effective energy transition plans, contributing to the EU's climate goals.

For the interested reader, the design of the CBP builds upon the work conducted in WP2 (Skills Gap Analysis and Use Case Definitions) whose results are provided in public deliverables D2.1 (Local CET plans framework, including stakeholders mapping and Skills Gap Analysis) and D2.2 (Use Cases identification and characterization and Step-WISE toolkit requirements definition). The capacity building program is specifically designed to deliver and make usable by LRAs the Digital Toolkit documented in D3.1.

In addition, the CPB works hand-in-hand with work carried out in Stakeholder Engagement Strategies conducted in WP4 which work to bring people, LRAs and organizations to the capacity building program and its activities.

### 1.1 Step-WISE terminology

This section briefly outlines the key definitions of the terms used in the context of Step-WISE project. The brief description of the terms and the chart in Figure 1. helps the reader understand the context of the project further.

1. **Use cases** in the project refer to 4 distinct regions of focus for the project: Bulgaria, Spain, Cyprus and Mediterranean islands. The goal of the project is to increase the capacity of local and regional authorities to create and implement Clean Energy Transition Plans. The variety of use cases in Europe provide different political, geographical and socio-economic backgrounds for the project to test the applicability of the toolkit, provide case studies and have impacts spread across different European contexts. (See no. 1 in Figure 1)

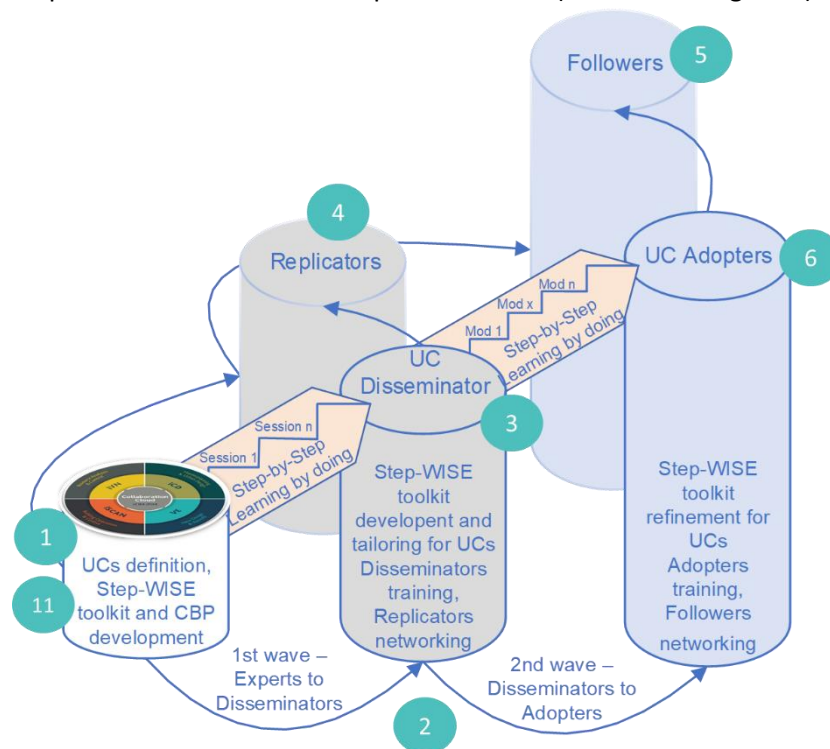


Figure 1 Step-WISE overall concept cross-section explaining main UC based activities, key actors involved, and Step-WISE toolkit use across the process. Numbers added to cross reference from terminology list on the left (From Step-WISE grant agreement)

2. **Wave 1** and **Wave 2** of capacity building in the project refers to two phases of project implementation. In the first wave, the training of using a toolkit (Step-WISE toolkit) will be provided to Use Case leaders, who are part of the consortium. In the second phase or second wave of the project, the trained use case leaders extend this training to local and regional authorities within the use case regions. (See no. 2 in Figure 1)
3. **Disseminators** are the use case leaders in the Step-WISE consortium (See no. 3 in Figure 1). They will receive the training in the Wave 1 of the project action, and provide training to interested local and regional authorities in the Wave 2 of the project (referred as Adopters). The disseminators also engage other entities to replicate their role as trainers of Step-WISE approach (referred as replicators). (SINLOC, EAP, CEA, CERES and linked third party Traza)
4. **Replicators** are the entities outside of the project who are engaged to follow the example of the disseminators and will play the role of replicating the Step-WISE approach and training other local and regional authorities within their regions (LRAs also referred as followers). The replicators can also be seen as future-disseminators, and can be any type of entity. (See no. 4 in Figure 1).

5. **Followers** are the local and regional authorities who are interested in adopting the Step-WISE approach to develop CET plans, or are contacted by Replicators, or Disseminators to engage in creating these after the end of the project (See no. 5 in Figure 1)
6. **Adopters** are the local and regional authorities that are trained by disseminators to use the Step-WISE approach in Wave 2 of the project implementation. They are linked to other local and regional authorities in the use case region, as they can encourage and facilitate these to also adopt the Step-WISE approach as a *follower* after the end of the project. (See no. 6 in Figure 1)
7. **Trainers** or experts are consortium members that are contact points for both the technology provider in the consortium and the use case leaders/ disseminators. These members assist the disseminators to receive and perform the training programme, as well as coordinate with the technology provider with feedback on the toolkit and relevant materials (primarily involved in Wave 1 in Figure 1). (FredU and R2M)
8. **Technology provider** in the project is the member of the consortium that provides the technology that forms the core of the Step-WISE toolkit for CET planning (involved in Wave 1 and Wave 2 in Figure 1) (IES)
9. **Steering group** is a group within the consortium tasked to lead the implementation of the Wave 1 and Wave 2 of the program, and is formed of the disseminator, trainer and technology provider (primarily involved in Wave 1 in Figure 1)
10. **Action plans** are defined as high level plans for the project implementation. These refer to the main items of activities, resources, groups of people – including stakeholders and steering groups in context of Step-WISE, required to execute these activities. These are tailored to each use case, taking into account individual training requirements for the capacity building programmes as well as the local contexts. These activities are mapped against the timeline of the project when the Wave 1 (Training of the trainers/disseminators) and Wave 2 (Training of the adopters) takes place.
11. **Step-WISE toolkit** refers to a digital toolkit that empowers LRAs to develop their own CET plans using a dynamic model, providing key requirements identified through the project to overcome major barriers, facilitating easier and more accurate plan creation. (See no. 11 in Figure 1)
12. **Virtual Knowledge Offices (VKO)** refer to knowledge repositories that will act as amplifiers to increase the sustainability and replicability of the Step-WISE approach across Europe and beyond the identified use case regions.

## 1.2 Deliverable Structure

The deliverable is structured to provide a comprehensive overview of the Capacity Building Programme (CBP) within the Step-WISE project. The structure includes:

- **Chapter 1 - Introduction:** provides the background of the project, the objectives of the CBP developed in this report, summarises the Step-WISE terminology to ease the comprehension of the reader and outlines the structure of the deliverable.
- **Chapter 2 - Methodology/Design of the CBP:** details the approach taken to design the CBP, focusing on skill gaps, training needs, and the adaptive learning environment.
- **Chapter 3 - Training Activities and Materials:** describes the training methods, materials, and activities designed to address the identified skill gaps and facilitate learning.
- **Chapter 4 - Evaluation Procedures:** outlines the methods for assessing the effectiveness of the training, including key performance indicators (KPIs) and feedback mechanisms.
- **Chapter 5 - Conclusion and Next Steps:** summarizes the outcomes of the program and outlines future directions and steps to ensure the scalability and replicability of the Step-WISE approach.

## 2 Methodology / Design of the CBP

The Capacity Building Programme (CBP) within the Step-WISE project is designed to address the diverse and evolving needs of local and regional authorities in their pursuit of Clean Energy Transition Plans (CETPs). The main objective of the CBP is to enhance the skills and capacities of these authorities, enabling them to develop, implement, and monitor ambitious, cross-sectoral energy plans that are tailored to their specific geographical and contextual circumstances. Recognizing the unique challenges and opportunities present in different local and regional contexts, this program aims to provide a flexible and adaptive learning environment.

The methodology employed in this CBP is driven by several key motivations:

1. **Addressing Skill Gaps and Training Needs:** identifying and understanding the specific skills and competencies that are lacking among the target participants is crucial for tailoring the training program effectively. This approach aims to improve participants' ability to develop and implement comprehensive CETPs. Section 2.1, "Skill Gaps and Needs Mapping," summarises the findings from the beneficiaries' skill gaps and needs mapping conducted in WP2.
2. **Ensuring Comprehensive and Tailored Training:** given the diverse needs of different local and regional authorities, the CBP incorporates a variety of training methods and resources. This adaptive approach ensures that the program is flexible enough to meet the specific requirements of different contexts. Section 2.2, "Capacity Building Program Structure," provides a detailed overview of the program's key components, outlining the activities such as participatory workshops, webinars, roundtables, and hands-on sessions, all designed to foster an adaptive learning environment.
3. **Promoting Active Engagement through Experiential Learning:** the "learning by doing" approach is chosen for its effectiveness in promoting active engagement and better knowledge retention. This method provides participants with hands-on experience and practical application of skills, making the learning process more interactive and impactful. Section 2.3, "Learning by Doing Approach," explains the principles and benefits of the experiential learning approach used in the CBP, including practical exercises and real-world scenario simulations that facilitate direct application of skills to participants' specific contexts.

This integrated methodology ensures effective knowledge transfer and the development of essential skills for promoting energy transition at the local and regional levels. By combining a thorough needs assessment, an experiential learning approach, and a well-structured program, the CBP aims to empower local and regional authorities to create, implement, and monitor ambitious energy plans tailored to their unique contexts. This methodology not only addresses immediate training needs but also builds long-term capacity for sustainable energy transitions.

## 2.1 Skill Gaps, Needs, and Desiderata Mapping

The analysis conducted in WP2 has identified several key skill gaps, needs, as well as desiderata among local and regional authorities involved in Clean Energy Transition Plans (CETPs). These findings highlight the areas where targeted interventions are required to enhance the effectiveness of the CBP. The main issues identified are the following:

### 1. Varying Technical Expertise

The mapping activities reveal a broad spectrum in the level of technical expertise among the participants. This variability necessitates a customized approach for training and support. Some Local/Public Authorities and potential Replicators have advanced technical knowledge, while others require foundational training to build their capacity. To address this, the CBP will provide differentiated training modules that cater to various levels of technical expertise. This will ensure that all participants, regardless of their starting point, receive the support they need to effectively develop and implement CETPs. Therefore, different users will receive tailored training based on their initial level of knowledge, on the training requirements and on the level that they want to attain.

For these reasons, users have been clustered in three different groups, according to their initial level of knowledge:

- **Basic Users:** general knowledge, supervised by consultants, not aiming to become experts.
- **Intermediate Users:** more detailed understanding and additional training.
- **Expert Users:** high potential individuals seeking advanced training to become experts.

### 2. Funding and Budgeting

Many municipalities encounter difficulties in translating long-term energy visions into actionable plans due to financial constraints. Effective energy transition requires not only strategic planning but also adequate funding and budget management. The CBP will focus on equipping participants with the skills to identify and secure funding sources, manage budgets, and create financially viable plans. This will include training on financial planning, project management, and accessing funding opportunities at local, national, and EU levels.

### 3. Stakeholder Collaboration

Successful energy transition projects often involve multiple stakeholders, including internal departments, external consultants, and citizens. Effective collaboration among these diverse groups is essential for the successful implementation of CETPs. The CBP will address this need by incorporating training on stakeholder engagement, conflict resolution, and partnership building. Participants will learn strategies for fostering collaborative environments, managing stakeholder expectations, and ensuring inclusive decision-making processes.

### 4. Data Management/Data Collection

Effective energy planning relies heavily on accurate and comprehensive data. However, many authorities face challenges in data collection, analysis, and management, which can impact the quality of their energy plans. To overcome these issues, the CBP will include specific modules about data collection methods, data analysis techniques, and tools for the creation of estimated data when not available. This will help participants to improve their ability to use data to inform and optimize their CETPs.

### 5. Language Barriers

The accessibility of training materials and toolkits is crucial for the success of the CBP, particularly in multilingual contexts. Language barriers can hinder the effective dissemination of information and limit participation. To address this, all training materials and resources will be made available in the language of the UCs. This will facilitate broader access to the programme and ensure that non-English speakers can fully engage with the content.

## 2.2 Capacity Building Program Structure

The program will be structured as a "cascade process", drawing on the capacity building and training experiences of all consortium partners and utilizing the Step-WISE toolkit throughout the entire CET plan lifecycle.

In particular, the project foresees four different phases, subsequent in time to each other:

### 1. **First wave of Step-WISE CBP (T4.3) - Experts to UC Disseminators**

Consortium experts, primarily the Technology Provider and Trainers, will engage with Disseminators representing specific Use Cases (UCs). This will involve a mix of mentoring (for toolkit functionalities) and peer-to-peer methods (to gather improvement feedback). A balanced approach combining IT/distance learning (using the IES training platform) and face-to-face workshops (leveraging project meetings) will ensure practical application through hands-on sessions.

### 2. **Virtual workshop for Step-WISE Replicators (T4.4)**

In the latter half of the project, dedicated online workshops will be held between the first and second training waves. These workshops, possibly organised in collaboration with other LIFE sister projects or past projects on similar topics, will disseminate project progress and initial training outcomes, including live demonstrations of the Step-WISE toolkit. The target audience includes future Replicators (e.g. other Energy Agencies, policy makers, and national authorities), aiming to gather feedback and engage them in replicating the approach post-project. A follow-up event will be organized to update them on the main outcomes, particularly regarding the second training wave.

### 3. **Second wave of Step-WISE CBP (T5.1) - UC Disseminators to Step-WISE Adopters**

Disseminators, alongside Trainers and the Technology Provider, will guide "early Adopters" of the Step-WISE toolkit through a step-by-step process to draft, develop, or update their CETPs. Knowing the local context and the need for tailored learning paths, Disseminators will engage with local and regional authorities, efficiently transferring knowledge through in-depth, guided training sessions. This phase will include interactive online webinars as well as physical workshops, each one addressing a phase of the CETP development process, using a "learning-by-doing" approach to enable local authorities to develop their own CET Plan.

### 4. **Virtual webinar for Step-WISE Followers (T5.3)**

The goal of this task is to collect outcomes from previous tasks and select one or two representative case studies per Use Case based on specific criteria. These case studies will be disseminated in an online webinar to ensure broader dissemination of the project outcomes and engage external local and regional authorities as Step-WISE Followers and toolkit users. Replicators engaged in Task 4.4 will also participate, fostering a comprehensive understanding and broader application of the Step-WISE toolkit.

## 2.3 Learning by doing Approach

"Learning by doing" is an educational approach that emphasizes practical experience as the primary method of learning. This approach is particularly effective for adult education and capacity building, as it allows participants to engage directly with the material, apply concepts in real-world scenarios, and develop practical skills that are immediately relevant to their work.

In the context of CETPs, the "learning by doing" approach ensures that participants:

- **Gain hands-on experience** with digital tools and integrated systems.
- **Develop a deep understanding** of energy transition strategies.
- **Build confidence** in their ability to implement CETPs independently.

To ensure that the training is both engaging as well as effective, the following interactive learning means will be employed:

- **Interactive Webinars:** live demonstrations, Q&A sessions, and real-time feedback.
- **Hands-on Workshops:** practical exercises and simulations to apply learning.
- **Peer-to-Peer Learning:** opportunities for participants to share experiences and best practices.
- **Expert Panels:** sessions with industry experts providing insights and answering questions.
- **Roundtables:** focused discussions on specific topics in detail, encouraging collaborative problem-solving and knowledge exchange.

The "learning by doing" methodology offers numerous benefits for participants:

- **Enhanced Engagement:** active participation in the learning process keeps participants engaged and motivated.
- **Practical Skill Acquisition:** direct application of concepts helps in the development of practical skills that can be immediately used in the workplace.
- **Improved Retention:** experiential learning often leads to better retention of information, as participants are more likely to remember what they have actively practiced.
- **Adaptability and Problem Solving:** By engaging in real-world scenarios, participants learn to adapt to different situations and develop problem-solving skills.

The "learning by doing" approach is integral to the Step-WISE Capacity Building Programme, ensuring that participants not only gain theoretical knowledge but also develop the practical skills necessary to implement CETPs effectively. By combining interactive webinars, hands-on workshops, peer-to-peer learning, expert panels, and roundtables, the program creates a comprehensive and engaging learning experience that equips local and regional authorities with the tools and confidence they need to drive energy transition in their communities.

### 3 Training Activities

The webinars and training activities are designed to address the identified skill gaps, needs, and desiderata of the local and regional authorities involved in Clean Energy Transition Plans (CETPs). Each webinar will focus on specific topics relevant to the CET planning process, ensuring a comprehensive learning experience. The capacity building material, including Guidelines for Use Cases and Step-WISE toolkit miniguide, will be presented in detail in D3.3.

#### 3.1 Webinar Topics and Activities

##### 3.1.1 First wave of Step-WISE CBP - Experts to UC Disseminators

This section provides an overview of the initial training activities planned in the first wave of the Step-WISE CBP. These activities are designed to transfer knowledge from consortium experts to the UC Disseminators within T4.3. The methodological approach for effective stakeholders' engagement will be presented in D4.1. Table 1 below outlines the topics covered in the 9 modules of the CBP First Wave and the key outcomes expected, offering a structured view of the skills that will be developed to prepare the Disseminators for leading capacity-building efforts in their regions in the second wave. All the activities of this wave will be conducted in English.

Table 1 First Wave CBP

	Title	Description	Type	Partner Leader and support
1	<b>What is a CET plan?</b>	<p>A webinar providing a comprehensive overview of CET Plans, including a detailed explanation of their purpose and the various types available. Participants will gain a clear understanding of the distinctions between CETA, SEAP, SECAP, and other related frameworks, enabling them to effectively engage in energy transition initiatives.</p> <p><i>1. Covenant of Mayors</i>  <i>2. what is a SEAP and steps to structure it</i>  <i>- Initiation: definition of the long-term vision and stakeholders engagement</i>  <i>- Planning: BEI (Baseline Emissions Inventory), Action Plan development</i>  <i>- Implementation</i>  <i>- Monitoring</i>  <i>Difference between CETA, SEAP....</i>  <i>3. Examples</i>  <i>4. From SEAP to SECAP</i></p>	Webinar in English (1 hour)	<b>Leader: CEA</b> <b>Support: FredU, EAP</b>
2	<b>General discussion: funding, stakeholder collaboration, energy and climate mitigation and adaptation strategies</b>	Discussion on how to deliver training to Adopters regarding funding and budgets, collaboration with stakeholders, and energy and climate mitigation and adaptation strategies	Webinar in English (1 hour)	<b>Leader: FredU</b> <b>Support: CERES, SINLOC</b>
3	<b>Basic steps to StepWISE Toolkit (iCD + iCIM + PowerBI)</b>	Showcasing the Step-WISE toolkit (exploring the functionalities and applications of the different components (methodological approach). The experts, and in particular the toolkit provider with the support of the planning experts, will train the disseminators on the utilisation of the different tools,	Webinar in English (1 hour)	<b>Leader: IESRD</b> <b>Support: R2M</b>

		identifying the most appropriate according to each specific UC need (Understand based on the UC if also iVN and iSCAN are needed or only iCD is enough).		
4	<b>Toolkit module 1:</b> How to create the baseline	Focus and support on Data collection, how to use excel based Archetypes and geojson/osm for baseline creation, attributes assignment.	Webinar in English (1 hour)	<b>Leader: R2M</b> <b>Support: IESRD</b>
5	<b>Toolkit module 2:</b> How to create and compare scenarios	In addition to creating energy scenarios with the tool, provide training on how they are planned, and how to set targets.	Webinar in English (1 hour)	<b>Leader: R2M</b> <b>Support: IESRD</b>
6	<b>Toolkit module 3:</b> How to visualise and analyse the results, and fill the CETP with the results	Navigation of the dynamic CETP, to demonstrate its flexibility, easiness to use and advantages for tracking the progress and achievement of targets as well as for updating the plans if needed.	Webinar in English (1 hour)	<b>Leader: R2M</b> <b>Support: IESRD</b>
7	<b>Toolkit module 4:</b> Technical Skills Enhancement (connection to iVN, iCIM and iSCAN)	Based on the UC specific needs, training on the other IES tools and more advanced functions of iCD.	Webinar in English (1 hour)	<b>Leader: R2M</b> <b>Support: IESRD</b>
8	<b>"Ask the expert" - Trainings to project partners on StepWISE Toolkit during GA (M12)</b>	An interactive "ask the Experts" module, in which the Disseminator, being aware of the local challenges and needs of their territories, will be able to practice the "learning by doing" approach testing the toolkit functionalities asking for real time support in relation to technical and non-technical queries.	Workshop/ Hands on session in English (2 hours)	<b>Leader: R2M</b> <b>Support: IESRD</b>
9	<b>One-to-one workshops (optional-on request)</b> with the consortium partners	Tailored individual sessions designed to address the specific needs and requests of each disseminator. These workshops offer personalized guidance, ensuring that each participant receives targeted support in utilizing the Step-WISE toolkit and will be then able to support LRAs indeveloping their CETP.	Individual Hands-on session in English (variable duration)	<b>Leader: R2M</b> <b>Support: IESRD</b>

### 3.1.2 Virtual Workshop for Replicators

This section details the activities planned for the virtual workshops aimed at Replicators. These workshops, primarily conducted online, are focused on transferring specific knowledge and enhancing technical skills through a series of advanced modules. Table 2 provides details on the training content, session structure, and expected outcomes. The webinars and the first virtual workshop will be conducted in English to reach a larger audience and to enhance knowledge sharing between the Replicators coming from different geographical areas. Specific workshops will be organised in a second stage by Disseminators in their specific areas to overcome the language barrier.

Table 2 Virtual Workshops for Replicators

	Title	Description	Type	Partner Leader and support
1	<b>Webinar 1:</b> Introduction to CET Planning and Step-WISE Toolkit	This webinar provides an introductory overview of CET Planning, with a specific focus on the Step-WISE toolkit. Participants will learn about the fundamental concepts of CET planning, the different plan types, and	Webinar in English (2 hours)	<b>Leader: R2M</b> <b>Support: FredU, EAP, CEA</b>

		how the Step-WISE toolkit can be applied in practice. The session will lay the groundwork for more advanced training and hands-on applications.		
<b>2</b>	<b>Webinar 2: Technical Skills Enhancement + Modules</b>	Building on the introductory webinar, this session dives into the technical aspects of CET planning. It includes training on advanced functionalities of the Step-WISE toolkit, along with specific modules such as scenario creation, data visualization, and result analysis. Participants will enhance their technical skills, gaining the capability to utilize the toolkit effectively in various planning contexts.	Webinar in English (2 hours)	<b>Leader: R2M</b> <b>Support: IESRD, FredU</b>
<b>3</b>	<b>Virtual Workshops in English</b>	These interactive virtual workshops provide hands-on experience in using the Step-WISE toolkit, conducted entirely in English. Participants will work through practical exercises and real-life case studies to develop their proficiency in CET planning. The workshops offer direct support and feedback, enabling participants to refine their skills and address specific challenges.	Virtual Workshop in English (2 hours)	<b>Leader: R2M</b> <b>Support: IESRD</b>
<b>4</b>	<b>Virtual Workshops in Local Languages</b>	To ensure accessibility and maximize learning, these virtual workshops are conducted in the participants' local languages. They cover the same content as the English workshops, providing tailored guidance to help participants apply the Step-WISE toolkit in their regional contexts. This approach ensures that language barriers do not hinder the effective implementation of CET planning.	Virtual Workshop in UCs language (2 hours)	<b>Leader: Disseminators</b> <b>Support: IESRD, R2M</b>
<b>5</b>	<b>Physical Workshop during GA (M18)</b>	This in-person workshop, held during the General Assembly, offers a unique opportunity for replicators to engage directly with experts and peers. The session will focus on collaborative learning, allowing participants to practice and refine their skills in a supportive environment. Relevant case studies will be presented and the results obtained from the first wave of training showcased to the audience, providing tangible examples of success. Additionally, efforts will be made to involve other LIFE and other EU programs sister projects, fostering cross-collaboration and enhancing the impact of CET planning across different regions.	Hybrid Webinar in English (2 hours)	<b>Leader: R2M</b> <b>Support: IESRD, FredU, EAP, CEA</b>

### 3.1.3 Second wave of Step-WISE CBP - UC Disseminators to Step-WISE Adopters

This section focuses on the second wave of the CBP activities, where the Disseminators will be engaged in training the Step-WISE Adopters. The activity schedule is the result of improvements made to the first wave's program, incorporating feedback from the Project partners and will be replicated by the Disseminators in the various languages of their geographic area of competence. However, for certain

modules, the Disseminators will be supported by the relevant experts from the Step-WISE Consortium. Table 3 below offers an overview of the topics covered, with a particular focus on the "learning by doing" methodologies and the specific tools that will be used to support Adopters in the development and implementation of CETPs.

Table 3 Second wave CBP

	Title	Description	Type	Partner Leader and support
1	<b>What is a CET plan?</b>	<p>A webinar providing a comprehensive overview of CET Plans, including a detailed explanation of their purpose and the various types available. Participants will gain a clear understanding of the distinctions between CETA, SEAP, SECAP, and other related frameworks, enabling them to effectively engage in energy transition initiatives.</p> <p><i>1. Covenant of Mayors</i>  <i>2. what is a SEAP and steps to structure it</i>  <i>- Initiation: definition of the long-term vision and stakeholders engagement</i>  <i>- Planning: BEI (Baseline Emissions Inventory), Action Plan development</i>  <i>- Implementation</i>  <i>- Monitoring</i>  <i>Difference between CETA, SEAP....</i>  <i>3. Examples</i>  <i>4. From SEAP to SECAP</i></p>	Webinar in UCs language (1 hour)	<b>Leader:</b> <b>Disseminators Support: FredU, EAP</b>
2	<b>Funding and Budgeting</b>	Explore financial mechanisms, including grants, subsidies, and public-private partnerships. Provide practical exercises in calculating costs, securing funding, and managing budgets for CETP-related projects.	Webinar in UCs language (1 hour)	<b>Leader:</b> <b>Disseminators Support: SINLOC</b>
3	<b>Stakeholder Collaboration</b>	Provide strategies and methodologies on how to engage participants through the identification of key stakeholders, the development of stakeholder maps, the establishment of collaboration strategies. Discuss methods for effective communication, conflict resolution, and creating synergies among diverse groups.	Webinar in UCs language (1 hour)	<b>Leader:</b> <b>Disseminators Support: CERES</b>
4	<b>Energy and climate mitigation and adaptation strategies</b>	Guide participants in identifying and analyzing climate mitigation and adaptation strategies.	Webinar in UCs language (1 hour)	<b>Leader:</b> <b>Disseminators Support: FredU</b>
5	<b>Introduction to StepWISE Toolkit (iCD + iCIM + PowerBI)</b>	Showcasing the Step-WISE toolkit (exploring the functionalities and applications of the different components (methodological approach). The disseminators with the support of the experts, will train the adopters on the utilisation of the different tools, identifying the most appropriate according to each specific UC need (Understand based on the UC if also	Webinar in UCs language (1 hour)	<b>Leader:</b> <b>Disseminators Support: IESRD, R2M</b>

		ivN and iSCAN are needed or only iCD is enough).		
6	<b>Toolkit module 1:</b> How to create the baseline	Focus and support on Data collection, how to use excel based Archetypes and geojson/osm for baseline creation, attributes assignment.	Webinar in UCs language (1 hour)	<b>Leader:</b> <b>Disseminators</b> <b>Support: R2M, IESRD</b>
7	<b>Toolkit module 2:</b> How to create and compare scenarios	In addition to creating these scenarios with the tool, training on how they are planned, and how to set targets	Webinar in UCs language (1 hour)	<b>Leader:</b> <b>Disseminators</b> <b>Support: R2M, IESRD</b>
8	<b>Toolkit module 3:</b> How to visualise and analyse the results, and fill the CETP with the results	Navigation of the dynamic CETP, to demonstrate its flexibility, easiness to use and advantages for tracking the progress and achievement of targets as well as for updating the plans if needed.	Webinar in UCs language (1 hour)	<b>Leader:</b> <b>Disseminators</b> <b>Support: R2M, IESRD</b>
9	<b>Toolkit module 4:</b> Technical Skills Enhancement (connection to ivN, iCIM and iSCAN)	Based on the UC need, train also on the other IES tools and more advanced functions of iCD	Webinar in UCs language (1 hour)	<b>Leader:</b> <b>Disseminators</b> <b>Support: R2M, IESRD</b>
10	<b>"Ask the expert" - Trainings to adopters on StepWISE Toolkit during GA (M24)</b>	An interactive "ask the Experts" module, in which the Adopters, being aware of the local challenges and needs of their territories, will be able to practice the "learning by doing" approach testing the toolkit functionalities asking for real time support in relation to technical and non-technical queries. To this end, capacity building activities will provide the basis for drafting the CETP	Workshop/ Hands on session in UCs language (2 hours)	<b>Leader:</b> <b>Disseminators</b> <b>Support: backup steering group (IESRD, R2M, FredU)</b>
11	<b>One-to-one workshops (optional-on request) with the adopters</b>	Tailored individual sessions designed to address the specific needs and requests of each Adopter. These workshops offer personalized guidance, ensuring that each participant receives targeted support in utilizing the Step-WISE toolkit and developing their Clean Energy Transition Plan (CETP).	Individual Hands-on session in UCs language (variable duration)	<b>Leader:</b> <b>Disseminators</b>



### 3.3 Level of training Webinar Topics and Activities

This section schematises the different levels of training designed for the various target groups (Disseminators, Replicators, Adopters, and Followers). Table 4 presents a modular structure of webinars and activities, tailored to the diverse skill needs and local contexts, ensuring a flexible and customized training approach. The Gantt chart presented in the previous chapter represents a schedule for the live training sessions, allowing participants to follow the entire program sequentially. After the live sessions, these trainings will be recorded and made available in the Virtual Knowledge Office (VKO) on the project website. Participants registered for the CBP will have the flexibility to access the recordings at their convenience and choose which modules to review based on their specific needs.

Table 4 Training levels

		Disseminators	Replicators		Adopters + Followers		
		Advanced	Intermediate	Advanced	Basic	Intermediate	Advanced
1	What is a CET plan? (CETA, SEAP, SECAP, ecc)	x	x	x	x	x	x
2	Funding and Budgeting	x	x	x	x	x	x
3	Stakeholder Collaboration	x	x	x	x	x	x
4	How to set the targets and outline the long-term vision	x	x	x	x	x	x
5	Basic steps to StepWISE Toolkit (iCD + iCIM + PowerBI)	x	x	x	x	x	x
6	<b>Specific module 1:</b> How to create the baseline	x	x	x		x	x
7	<b>Specific module 2:</b> How to create and compare scenarios	x	x	x		x	x
8	<b>Specific module 3:</b> how to visualize, analyse the results and fill the CETP with the results	x	x	x		x	x
9	<b>Specific module 4:</b> Technical Skills Enhancement (connection to iVN, iCIM, iSCAN)	x	x	x		x	x
10	"Ask the expert" - Trainings on StepWISE Toolkit and feedback collection	x	x	x		x	x
11	<b>One-to-one workshop</b>	x		x			x

## 4 Procedure for Training Effectiveness Evaluation

Evaluating the effectiveness of the Capacity Building Programme (CBP) is crucial to ensure that the training objectives are met and that participants gain the desired skills and knowledge. This chapter outlines the methodology for monitoring and evaluating the training effectiveness, detailing the key performance indicators (KPIs), feedback mechanisms, self-assessment tools, and the overall monitoring and assessment framework.

### 4.1 KPIs for Monitoring

Key Performance Indicators (KPIs) are essential for measuring the success of the CBP. These indicators will provide quantifiable measures to track progress, performance, and outcomes. The KPIs will be developed for each wave of training and will cover various aspects, including participant engagement, knowledge acquisition, and skill development.

- **Participant Engagement:** Number of participants, attendance rates, and participation in discussions and activities.
- **Knowledge Acquisition:** Pre- and post-training assessments to measure knowledge gains.
- **Skill Development:** Practical tests and assignments to evaluate the application of learned skills.
- **Satisfaction Levels:** Participant satisfaction surveys to gauge their experience and feedback on the training modules.
- **Long-term Impact:** Follow-up surveys to assess the application of knowledge and skills in real-world scenarios and their impact on CETP development.

### 4.2 Feedback Mechanisms (questionnaires, surveys, interviews)

Feedback mechanisms are critical for the continuous improvement of the CBP. These mechanisms will gather input from participants at various stages of the training process to ensure that the program meets their needs and expectations.

- **Questionnaires:** Distributed at the end of each training session to gather immediate feedback on the content, delivery, and overall experience.
- **Surveys:** Conducted periodically to collect comprehensive feedback on the training program's effectiveness and areas for improvement.
- **Interviews:** One-on-one or group interviews with participants to gain in-depth insights into their experiences and suggestions for enhancement.
- **Focus Groups:** Facilitated discussions with a subset of participants to explore specific aspects of the training in more detail.

### 4.3 Self-Assessment Forms/Questionnaires

Self-assessment forms and questionnaires will be used to allow participants to reflect on their learning and identify areas where they need further development. These tools will help participants evaluate their own progress and provide trainers with valuable data to tailor future training sessions.

- **Pre-Training Self-Assessment:** Participants assess their initial knowledge and skills related to CETP development.
- **Post-Training Self-Assessment:** Participants evaluate their progress and identify any remaining gaps in knowledge or skills.
- **Ongoing Self-Assessment:** Regular self-assessment exercises throughout the training program to monitor continuous improvement and adaptation of the training content.

#### 4.4 Monitoring and Assessment Framework

The monitoring and assessment framework will provide a structured approach to evaluate the CBP's overall effectiveness. This framework will integrate the KPIs, feedback mechanisms, and self-assessment tools to create a comprehensive evaluation system.

- **Baseline Assessment:** Initial assessment of participants' knowledge and skills to establish a benchmark for measuring progress.
- **Continuous Monitoring:** Ongoing tracking of KPIs, feedback, and self-assessment results to identify trends and areas for improvement.
- **Periodic Reviews:** Regular reviews of the training program to assess its effectiveness and make necessary adjustments.
- **Final Evaluation:** Comprehensive evaluation at the end of the CBP to measure overall success, identify lessons learned, and develop recommendations for future training initiatives.

In conclusion, the effectiveness evaluation of the Capacity Building Programme is a multi-faceted process that involves setting clear KPIs, gathering continuous feedback, enabling self-assessment, and following a robust monitoring and assessment framework. These efforts will ensure that the CBP achieves its objectives and provides local and regional authorities with the skills and knowledge necessary to effectively develop and implement CETPs. Final Reports and the main outputs of the first and second waves of training activities implemented will be presented respectively in D4.2 and D5.1.

Moving forward, the next steps will involve refining these evaluation methods based on initial feedback and pilot results, ensuring continuous improvement, and scaling up successful strategies to maximize the program's impact across all participating regions and municipalities.

## 5 Conclusion and Next Steps

The Step-WISE Capacity Building Program is designed to address the specific needs and skill gaps identified through the mapping activities conducted in WP2. By providing tailored training, interactive learning opportunities, and comprehensive support, the program aims to empower LRAs to effectively develop and implement their CET plans.

The two-waves cascade structure of the Step-WISE Capacity Building Program (CBP) represents a strategic approach to empowering Local and Regional Authorities (LRAs) in developing and implementing Clean Energy Transition Plans (CETPs). The effectiveness of the CBP hinges on a dynamic, adaptive learning environment that evolves based on continuous feedback, monitoring, and evaluation. The first wave of training, focusing on the dissemination of knowledge from experts to UC Disseminators, lays the foundation for a robust transfer of skills and methodologies. The second wave, which extends training from UC Disseminators to Step-WISE Adopters, ensures that the acquired knowledge is further propagated and adapted to specific local contexts, promoting scalability and replicability. This training programme will be delivered through participatory workshops, webinars, peer-to-peer learning and hands on sessions, all designed to foster an adaptive learning environment.

The integration of a monitoring and assessment framework, which includes Key Performance Indicators (KPIs), self-assessment forms, and feedback mechanisms, is crucial for tracking progress and ensuring that the CBP meets its objectives. This framework not only provides a structured approach to evaluate the program's overall effectiveness but also facilitates continuous improvement through regular reviews and adjustments based on pilot results and ongoing feedback.

### Implementation Plan

- **Phase 1:** Develop and refine training materials and toolkits based on feedback from initial sessions.
- **Phase 2:** Conduct webinars and workshops, gather feedback, and adjust the program as needed.
- **Phase 3:** Ongoing support through the VKOs, additional training sessions, and updates to the toolkit.

### Next Steps

1. **Final Development of Module content and Materials:** With instructors identified and modules outlined, the completion of course content.
2. **Implementation of Training and Capacity Building Activities:** With dates and trainees identified for Wave 1, implementation of training activities.
3. **Refinement and Feedback Integration:** The initial implementation phases will involve gathering detailed feedback from participants to refine training materials and methodologies. This feedback will be crucial for enhancing the effectiveness of subsequent training sessions and ensuring that the program remains responsive to the evolving needs of participants.
4. **Ongoing Support and Adaptation:** Continuous support will be provided through Virtual Knowledge Offices (VKOs) and additional training sessions. The adaptability of the CBP will be maintained by updating toolkits and training materials based on participant feedback and emerging best practices.
5. **Scaling and Replicating Success:** Successful strategies and methodologies developed during the CBP will be scaled up and replicated in other regions and contexts. This will involve identifying key elements that can be standardized while allowing for contextual adaptations to address the specific needs of different LRAs.

6. **Long-term Monitoring and Evaluation:** To ensure the sustainability of the CBP's outcomes, long-term monitoring and evaluation mechanisms will be established. These will track the progress of CETP implementation across participating regions and assess the long-term impact of the CBP on local and regional energy transition efforts.

By following these steps, the Step-WISE CBP aims to create a lasting impact, empowering LRAs to take the lead in their clean energy transitions, and setting the path for the replicability for similar initiatives in the future.