

Training Materials Package

Deliverable 4.1. of the LEEAN-CET project

Responsible partner: EECU

Authors: Andriy Kyrchiv

Version: 1.0

Date: 23.06.2026

Co-funded by the European Union

This project has received funding from the European Union's LIFE programme under Grant Agreement № 101214119.

The sole responsibility for the content of this publication lies with the authors. It does not necessarily reflect the opinion of the European Union. Neither the CINEA nor the European Commission are responsible for any use that may be made of the information contained therein.

Table of Contents

Executive Summary **3**

1. Introduction **4**

2. Background and Methodology **4**

2.1 Starting Point: Existing Training Resources 4

2.2 Update Process 5

3. Structure of the Training Programme **5**

3.1 General Training Concept 5

3.2 Training Modules 6

4. Training Materials Developed **9**

4.1 Text-Based Learning Materials 9

4.2 Presentation Materials 9

4.3 Reference Documents and Practical Resources 10

4.4 Case Studies and Examples 10

4.5 Self-Learning and Assessment Resources 10

5. Online Learning Environment **10**

5.1 Moodle Approach 10

5.2 Ukrainian Platform as Reference Model 11

5.3 National Implementation, Translation and Adaptation 13

6. Conclusions and Next Steps **18**

Appendix: Lectures in National Languages **19**

List of figures

Figure 1. Ukrainian platform 11

Figure 2. Ukrainian platform 12

Figure 3. Ukrainian platform 13

Figure 4. Croatian platform 14

Figure 5. Hungarian platform 15

Figure 6. Slovenian platform 16

Figure 7. Bulgarian platform 17

Figure 8. Ukrainian platform 18

Executive Summary

This document presents the updated training materials and online learning environment developed to support the implementation of the European Energy Award methodology in the participating countries. Its purpose is to describe the training framework, the learning resources prepared and adapted within the project, and the digital platforms established to support flexible capacity-building activities for municipalities, energy experts and other local stakeholders.

The training programme builds upon educational resources developed in previous European initiatives and updates them to reflect recent policy developments, practical implementation needs and the growing role of municipalities in the clean energy transition. The programme is organised into three thematic blocks: introductory training on the European Energy Award, training on the seven impact areas of the methodology, and practical implementation topics such as financing, stakeholder engagement and energy communities.

The main contribution of the training package is the development and adaptation of structured text-based learning materials, which provide the core content for the online learning environments. These materials are complemented by presentation resources, reference documents, practical examples, self-learning resources and assessment elements. Together, they form a coherent package that can be used both for independent learning and for facilitated training activities.

The document also describes the online learning approach adopted by the project, with particular attention to Moodle as a flexible learning management system. The Ukrainian platform operated by Energy Efficient Cities of Ukraine served as the main reference model, demonstrating the use of modular course structures, self-paced learning, tests, quizzes and certificate generation. National partners have adapted the common content to their own legal, institutional and practical contexts and have selected appropriate hosting solutions for their countries.

The training materials and platforms described in this report create the basis for the next phase of capacity-building activities. Further work will focus on completing the remaining thematic modules on financing, stakeholder engagement and energy communities, refining the content based on user feedback, and delivering national training activities in the pilot municipalities and beyond.

1. Introduction

The successful implementation of local energy and climate policies depends not only on the availability of technical solutions and financial resources, but also on the capacity of local authorities and stakeholders to plan, coordinate and deliver the required actions. Many municipalities across Europe continue to face significant challenges related to limited administrative capacity, rapidly evolving policy requirements and the increasing complexity of energy transition processes.

To address these challenges, the project supports the development of a comprehensive training programme aimed at strengthening the knowledge and practical skills of municipal staff, energy experts and other relevant stakeholders involved in local energy and climate governance. The training programme builds upon the experience and educational resources developed in previous initiatives, while incorporating recent developments in European legislation, policy frameworks and implementation practices.

Particular attention is given to the practical application of the European Energy Award (eea) methodology and its integration with other widely used frameworks and initiatives supporting local climate action. The training materials are designed to support both introductory learning and more advanced implementation activities, covering topics ranging from municipal organisation and strategic planning to financing, stakeholder engagement and climate adaptation.

In parallel with the preparation of the learning materials, a common online learning approach has been established to facilitate broad access to the training content and support flexible, self-paced learning. The training resources have been translated and adapted to the national context of the participating countries in order to ensure their relevance and practical applicability.

This document presents the structure of the training programme, the learning materials developed and updated within the project, the national adaptation process, and the online learning environments established to support capacity-building activities in the participating countries.

2. Background and Methodology

2.1 Starting Point: Existing Training Resources

The development of the training programme built upon the substantial body of educational resources previously created within the EXCITE project. These materials were originally developed to support the implementation of the European Energy Award (eea) methodology and covered the core principles of municipal energy management, local governance, stakeholder engagement and the practical application of the eea assessment system.

The existing training package provided a solid foundation for further development, including presentation materials, guidance documents and online learning content already tested in practical training activities. In particular, the online learning environment developed and operated by the Energy Efficient Cities of Ukraine (EECU) served as an important reference point for the preparation of a common approach to digital learning within the project.

Rather than creating an entirely new training programme, the project focused on reviewing, updating and expanding the available resources to reflect current policy developments, practical implementation needs and the evolving role of municipalities in the clean energy transition. This approach ensured continuity with previous capacity-building efforts while reducing duplication of work and making efficient use of existing knowledge and experience.

2.2 Update Process

The update process was carried out through a collaborative effort involving all project partners and consisted of four main stages.

The first stage focused on the review of the existing learning materials developed under previous initiatives. Partners assessed the relevance, accuracy and completeness of the available content, identifying sections that required revision, updating or expansion. Particular attention was paid to the practical applicability of the materials and their suitability for use in different national contexts.

The second stage involved the integration of recent European policy and legislative developments relevant to local energy and climate governance. The revised training content reflects the changing policy landscape and incorporates references to major European initiatives supporting municipal climate action, including developments related to the European Green Deal, the Fit-for-55 package, the revised Energy Efficiency Directive, the revised Renewable Energy Directive, and the recast Energy Performance of Buildings Directive. Relevant support mechanisms and initiatives targeting local authorities, such as NetZeroCities, the European City Facility and the ELENA technical assistance facility, were also incorporated where appropriate.

The third stage focused on expanding the thematic scope of the training programme. In addition to updating existing modules, new content was introduced in areas that have gained increasing importance for municipalities in recent years. Particular attention was given to climate adaptation, stakeholder engagement, community-based energy initiatives and the integration of different planning and reporting frameworks. These additions reflect both the evolution of European policy priorities and the practical needs identified by participating municipalities.

Finally, the learning materials were adapted for online delivery. Existing resources were reviewed and reorganised into a modular structure suitable for self-paced learning and integration into Moodle-based learning environments. Where necessary, supporting text materials, learning resources and assessment elements were prepared or updated to facilitate online participation and improve accessibility for users across the participating countries.

3. Structure of the Training Programme

3.1 General Training Concept

The training programme has been designed to provide municipalities and local stakeholders with a structured learning pathway covering both the principles of the European Energy Award (eea) methodology and the practical aspects of planning and implementing local energy and climate actions. The programme combines strategic,

technical and organisational topics, enabling participants to progressively build the knowledge and skills required to support the clean energy transition at local level.

To ensure a logical progression of learning, the programme is organised into three thematic blocks.

The first block provides an introduction to the European Energy Award methodology and its relationship with wider European and national energy and climate frameworks. It focuses on the establishment of effective municipal governance structures and introduces the key principles, processes and benefits associated with eea implementation.

The second block addresses the seven impact areas of the eea assessment framework. These modules provide a detailed overview of the thematic areas in which municipalities can plan and implement actions, ranging from spatial planning and mobility to organisational processes and climate adaptation.

The third block focuses on the practical implementation of local energy and climate initiatives. It covers financing mechanisms, stakeholder engagement approaches and energy community models, helping participants translate strategic objectives into concrete projects and investments.

Together, these three thematic blocks provide a comprehensive training package supporting municipalities throughout the entire process of planning, managing and implementing local energy and climate actions.

3.2 Training Modules

Module	Title	Main Topic	Format
1	eea Goals, Areas and Benefits	Introduction to the eea methodology and certification process	Presentations, online learning materials
2	Municipal Team and Governance	Roles, responsibilities and municipal coordination mechanisms	Presentations, online learning materials
3	eea, Covenant of Mayors and Reporting	Integration with planning and reporting frameworks	Presentations, online learning materials
4	Development and Spatial Planning	Sustainable urban development and land-use planning	Presentations, online learning materials
5	Mobility	Sustainable urban mobility and transport measures	Presentations, online learning materials
6	Municipal Buildings and Facilities	Energy management and renovation of municipal assets	Presentations, online learning materials

7	Supply and Disposal	Energy supply systems, utilities and infrastructure	Presentations, online learning materials
8	Internal Organisation	Municipal management processes and governance	Presentations, online learning materials
9	Communication and Cooperation	Stakeholder communication and collaboration	Presentations, online learning materials
10	Climate Adaptation	Assessment and management of climate risks	Presentations, online learning materials
11	Financing	Funding mechanisms and project financing	Presentations, online learning materials
12	Stakeholder Engagement	Citizen participation and community involvement	Presentations, online learning materials
13	Energy Communities	Energy community models and implementation approaches	Presentations, online learning materials

Module 1 – eea Goals, Areas and Benefits

This module introduces the European Energy Award methodology, its objectives, governance structure and certification process. Participants become familiar with the six traditional impact areas and the additional climate adaptation area, as well as the benefits of adopting a structured approach to municipal energy and climate management.

Module 2 – Municipal Team and Governance

The module focuses on the organisational structures required for successful implementation of the eea methodology. Particular attention is given to the formation of municipal teams, distribution of responsibilities, internal communication and political commitment.

Module 3 – eea, Covenant of Mayors and Reporting

This module explores the links between the European Energy Award, the Covenant of Mayors and national planning and reporting requirements. It demonstrates how municipalities can align different frameworks and reduce duplication of effort through integrated governance approaches.

Module 4 – Development and Spatial Planning

The module presents the role of spatial planning in supporting sustainable development and climate neutrality. It covers land-use planning, urban development principles and the integration of energy and climate considerations into local planning processes.

Module 5 – Mobility

Participants are introduced to sustainable mobility planning and the role of transport in achieving local climate objectives. The module discusses different mobility measures, planning approaches and opportunities for reducing transport-related emissions.

Module 6 – Municipal Buildings and Facilities

This module focuses on energy performance improvements in public buildings and municipal infrastructure. Topics include energy management, building renovation, energy monitoring and the identification of investment opportunities.

Module 7 – Supply and Disposal

The module examines municipal energy supply systems and related infrastructure. It covers renewable energy integration, district energy systems, utilities management and approaches for improving the sustainability of local energy services.

Module 8 – Internal Organisation

This module addresses the organisational processes necessary for effective energy and climate governance. Participants learn about management systems, internal procedures, monitoring mechanisms and continuous improvement approaches.

Module 9 – Communication and Cooperation

The module highlights the importance of communication in the implementation of local energy and climate policies. It presents methods for engaging stakeholders, building partnerships and promoting cooperation among different actors.

Module 10 – Climate Adaptation

This module introduces the assessment of climate risks and the development of adaptation measures at local level. Particular attention is given to the integration of adaptation considerations into municipal planning and decision-making.

Module 11 – Financing

The module provides an overview of financing opportunities available to municipalities. It introduces European and national funding mechanisms, project preparation requirements and approaches for developing bankable investment projects.

Module 12 – Stakeholder Engagement

This module focuses on methods for involving citizens, businesses and local organisations in energy transition processes. It presents practical approaches for consultation, participation and co-creation of local initiatives.

Module 13 – Energy Communities

The final module introduces the concept of energy communities and their potential contribution to local energy transitions. It addresses regulatory frameworks, organisational models, technological options and key factors for long-term sustainability.

4. Training Materials Developed

The training package developed within the project combines comprehensive text-based learning materials, presentation resources and supporting reference documents into a coherent educational framework supporting local energy and climate governance. Particular emphasis was placed on the development and adaptation of learning content suitable for online delivery and self-paced learning.

4.1 Text-Based Learning Materials

The core component of the training package consists of a structured collection of text-based learning materials developed specifically for online learning environments. These materials provide the primary knowledge base for the training programme and form the backbone of the Moodle learning platforms established within the project.

The learning materials are organised into thematic modules corresponding to the structure of the training programme and provide participants with detailed explanations of key concepts, methodologies and implementation approaches. Compared to conventional presentation-based training, the text modules allow learners to study independently, revisit specific topics when needed and progress through the programme at their own pace.

The content covers both introductory and advanced topics related to the European Energy Award methodology and local energy transition governance. The materials address themes such as the fundamentals of the European Energy Award, integration with the Covenant of Mayors framework, quality management and certification procedures, use of assessment tools, sustainable mobility, climate adaptation and project management. Additional emphasis is placed on the practical application of the acquired knowledge in municipal planning and decision-making processes.

The modular structure enables flexible learning pathways and facilitates future updates and additions. It also allows individual modules to be reused in different training formats, including webinars, workshops, self-learning courses and blended-learning programmes.

4.2 Presentation Materials

The text-based materials are complemented by a comprehensive set of presentation resources supporting instructor-led training activities. These presentations provide a structured overview of the key concepts, methodologies and practical examples covered by the programme and are intended for use during workshops, seminars and online training sessions.

Many of the presentation materials build upon resources previously developed within the European Energy Award network and have been reviewed and updated to reflect recent policy developments and implementation experience. In order to maximise their relevance for local audiences, participating countries have adapted the presentations to their national context, including references to national legislation, institutional arrangements, funding opportunities and practical examples.

This approach provides a common methodological basis across all participating countries while maintaining sufficient flexibility to address specific national circumstances and learning needs.

4.3 Reference Documents and Practical Resources

The training package includes a range of supporting reference materials intended to facilitate practical implementation. These resources include methodological guidance, assessment criteria, examples of planning tools, reporting procedures and references to relevant European and national policy frameworks.

Particular attention has been given to practical applicability, ensuring that participants can directly connect the learning content with their daily work and municipal responsibilities.

4.4 Case Studies and Examples

Practical examples and implementation experience are integrated throughout the learning materials in order to illustrate how the presented concepts can be applied in real-life situations. The examples draw on the experience of municipalities participating in the European Energy Award programme and related European initiatives.

These case studies support peer learning and help participants understand both the opportunities and challenges associated with implementing local energy and climate actions.

4.5 Self-Learning and Assessment Resources

The learning materials have been prepared in a format suitable for online delivery and independent study. Participants are able to access individual modules, review content at their own pace and revisit specific topics whenever required.

The online learning environments additionally support knowledge verification through quizzes, tests and other assessment tools. These features help learners monitor their own progress while providing trainers with mechanisms for evaluating learning outcomes and course completion.

All training materials developed and updated within the project are provided as annexes to this report and have been uploaded to the respective online learning platforms established by the participating countries.

5. Online Learning Environment

5.1 Moodle Approach

To ensure broad accessibility and long-term usability of the training programme, the learning materials have been integrated into Moodle-based online learning environments. Moodle was selected as the preferred learning management system due to its widespread use in educational and professional training activities, its flexibility, and its ability to support different learning formats and user groups.

The platform enables the organisation of training content into structured modules and provides a consistent framework for delivering educational materials across different countries. It supports both instructor-led and self-paced learning, allowing participants to access the content according to their own schedules and learning needs. This flexibility is particularly important for municipal staff and local stakeholders, who often

have limited opportunities to participate in traditional classroom-based training programmes.

Another important advantage of Moodle is its ability to combine different types of learning resources within a single environment. Text-based materials, presentations, reference documents, videos, quizzes and assessment tools can be integrated into a coherent learning pathway, providing participants with a more engaging and effective learning experience. The platform also facilitates future updates of the training content and allows additional modules to be incorporated as new policy priorities and implementation needs emerge.

The use of a common Moodle-based approach across the participating countries contributes to the consistency of the training programme while allowing national partners to adapt the content and delivery methods to their specific circumstances. It therefore provides a practical and scalable solution for supporting capacity-building activities beyond the lifetime of the project.

5.2 Ukrainian Platform as Reference Model

The online learning environment developed and operated by Energy Efficient Cities of Ukraine (EECU) served as the primary reference model for the development of the learning platforms established within the project. The platform was originally created to support training activities related to municipal energy management and the European Energy Award methodology and has been successfully used in previous capacity-building initiatives.



Figure 1. Ukrainian platform

The Ukrainian platform demonstrates how a comprehensive learning programme can be organised within a digital environment while maintaining accessibility and ease of use for participants with different levels of experience. The platform is structured around thematic modules corresponding to the training programme and provides a clear and intuitive navigation system for learners.

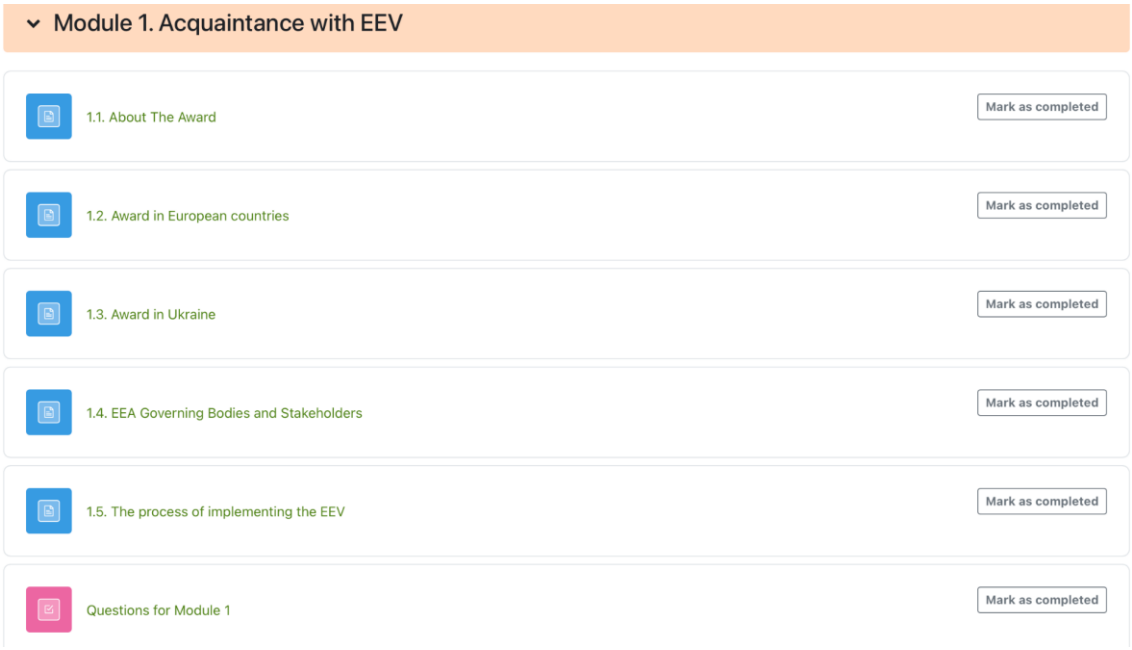


Figure 2. Ukrainian platform

A key feature of the platform is its modular architecture. Individual training topics are organised into separate learning units, allowing participants to progress through the programme in a logical sequence or focus on specific subjects according to their needs. This structure facilitates both introductory learning and more specialised training activities.

The platform supports self-paced learning, enabling participants to access the materials independently and complete the modules according to their own schedules. This approach significantly increases the accessibility of the training programme and allows municipalities from different regions and with different levels of capacity to participate on equal terms.



Figure 3. Ukrainian platform

To support knowledge verification and learner engagement, the platform incorporates various assessment mechanisms, including quizzes, tests and other interactive elements. These tools help participants evaluate their understanding of the learning materials and provide trainers with a mechanism for monitoring progress.

An additional feature of the platform is the possibility to generate certificates upon successful completion of training modules and assessment activities. This functionality provides formal recognition of learning achievements and can support the wider dissemination and institutionalisation of training activities in the participating countries.

The experience gained through the development and operation of the Ukrainian platform provided valuable practical guidance for the adaptation of Moodle-based learning environments within the project and demonstrated the feasibility of delivering structured online training programmes for local energy and climate governance at scale.

5.3 National Implementation, Translation and Adaptation

While the project established a common training framework and a shared core set of learning materials, each participating country adapted the content and delivery approach to its national circumstances. This process included translation of the English-language materials, integration of national legislation and policy frameworks, incorporation of country-specific examples, and selection of the most appropriate hosting solution for the online learning environment.

Croatia

In Croatia, the learning materials were translated and adapted to reflect the national regulatory framework and practical conditions for municipal energy management. The online learning environment was established as a Moodle-based platform structured around the thematic modules of the training programme. The platform supports self-paced learning and combines learning materials, practical examples and assessment elements. Additional content related to national regulatory requirements is planned to further strengthen the connection between the European Energy Award methodology and Croatian public-sector obligations.

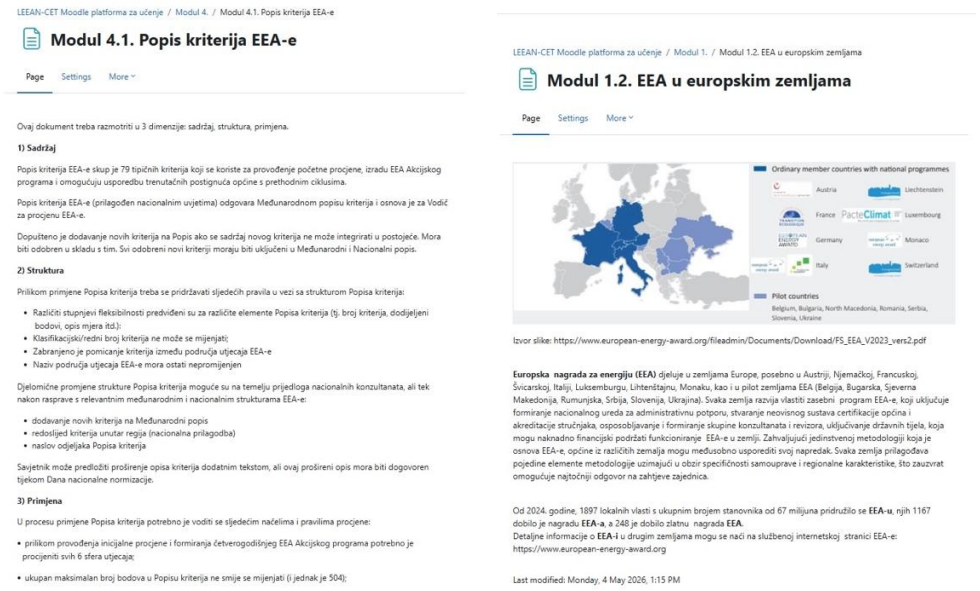
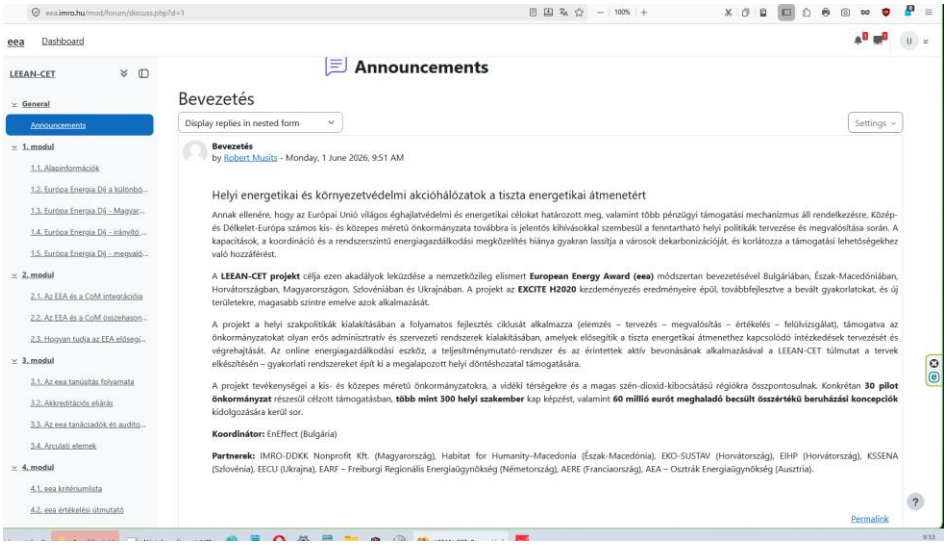


Figure 4. Croatian platform

Hungary

The Hungarian partner translated the common learning materials into Hungarian and adapted the content to national legislation, institutional arrangements and implementation practices. A Moodle-based learning platform was established within the national eea website, providing access to all training modules in Hungarian. The platform allows users to complete the training independently and serves as a repository of learning resources supporting future capacity-building activities. Further development is envisaged based on user feedback and practical implementation experience.



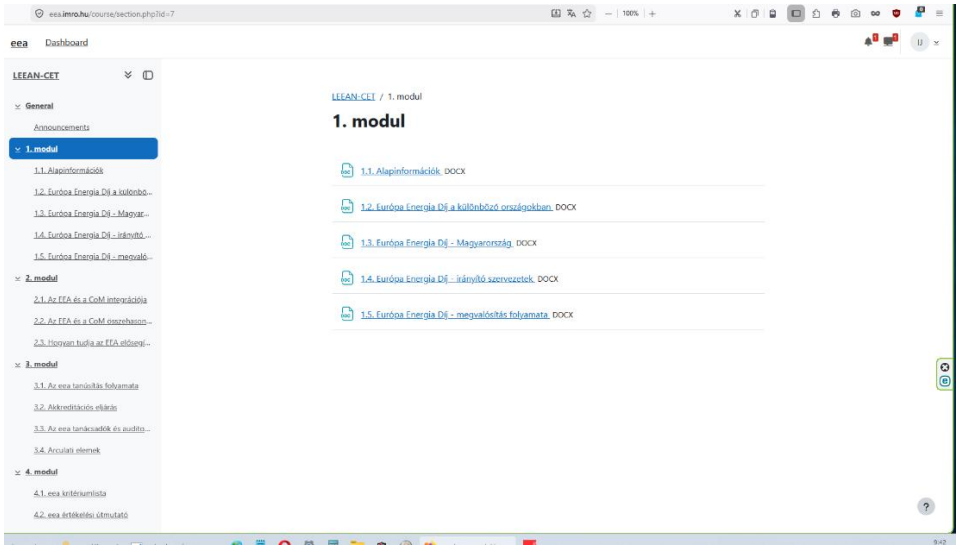


Figure 5. Hungarian platform

Slovenia

In Slovenia, particular emphasis was placed on adapting the learning materials and assessment guidance to the national regulatory environment. The work focused on ensuring consistency with Slovenian legislation, administrative procedures and municipal implementation practices. Rather than creating a dedicated Moodle platform, the Slovenian partner opted to integrate the learning resources into the nationally recognised Borzen platform, which already serves as a widely used source of information and guidance for municipalities and energy stakeholders. This approach is expected to maximise visibility, accessibility and long-term sustainability of the learning content.

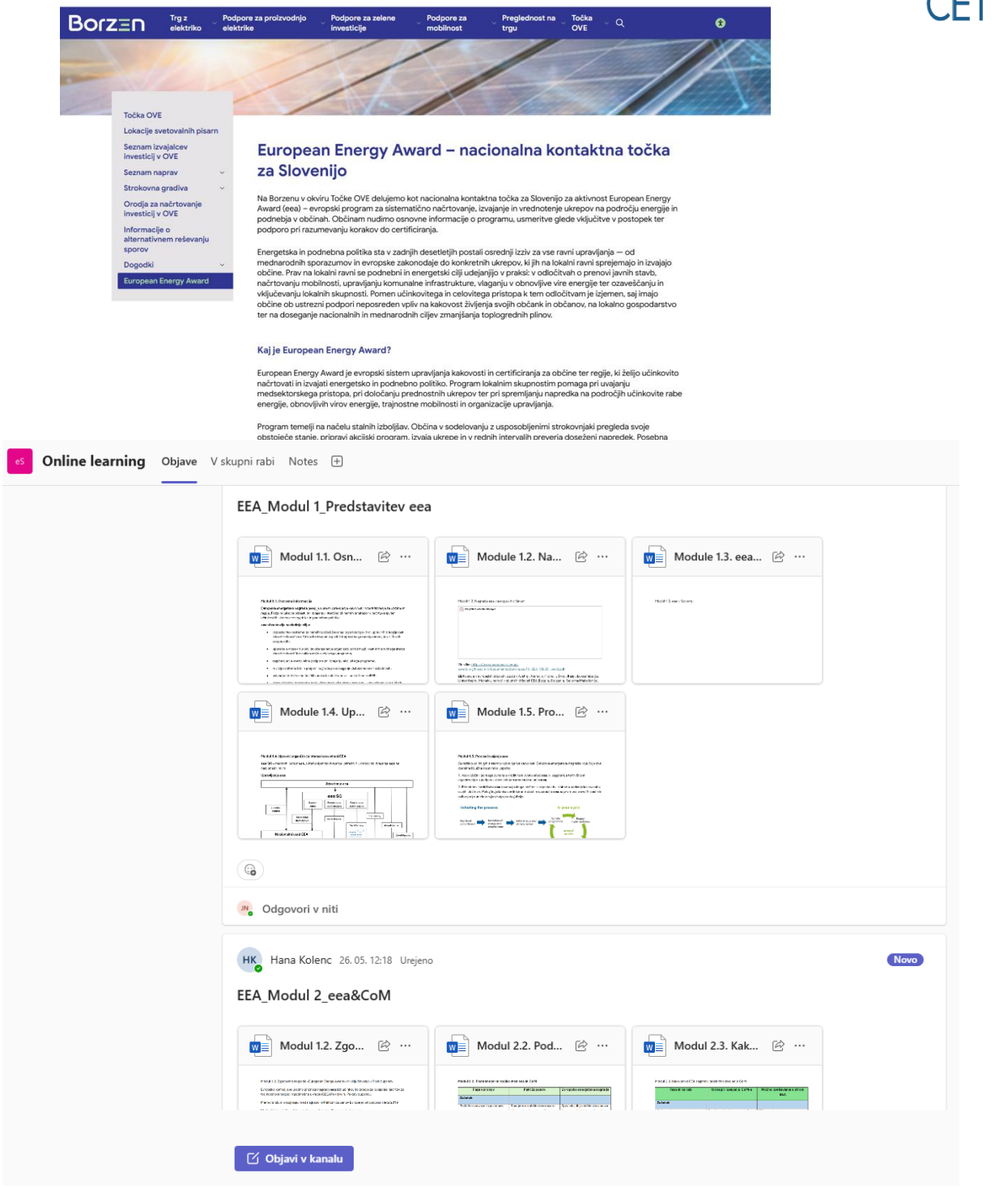


Figure 6. Slovenian platform

Bulgaria

In Bulgaria, the common learning materials were translated and adapted to reflect national legislation, policy developments and practical implementation experience. Particular attention was given to the integration of the European Energy Award methodology with existing municipal planning frameworks, including Sustainable Energy and Climate Action Plans and emerging climate neutrality initiatives. The learning content was incorporated into a Moodle-based online learning platform

operated by EnEffect and organised according to the common project training structure. The platform combines text-based learning materials, presentations, reference documents and assessment elements, providing a flexible environment for both self-learning and facilitated training activities.

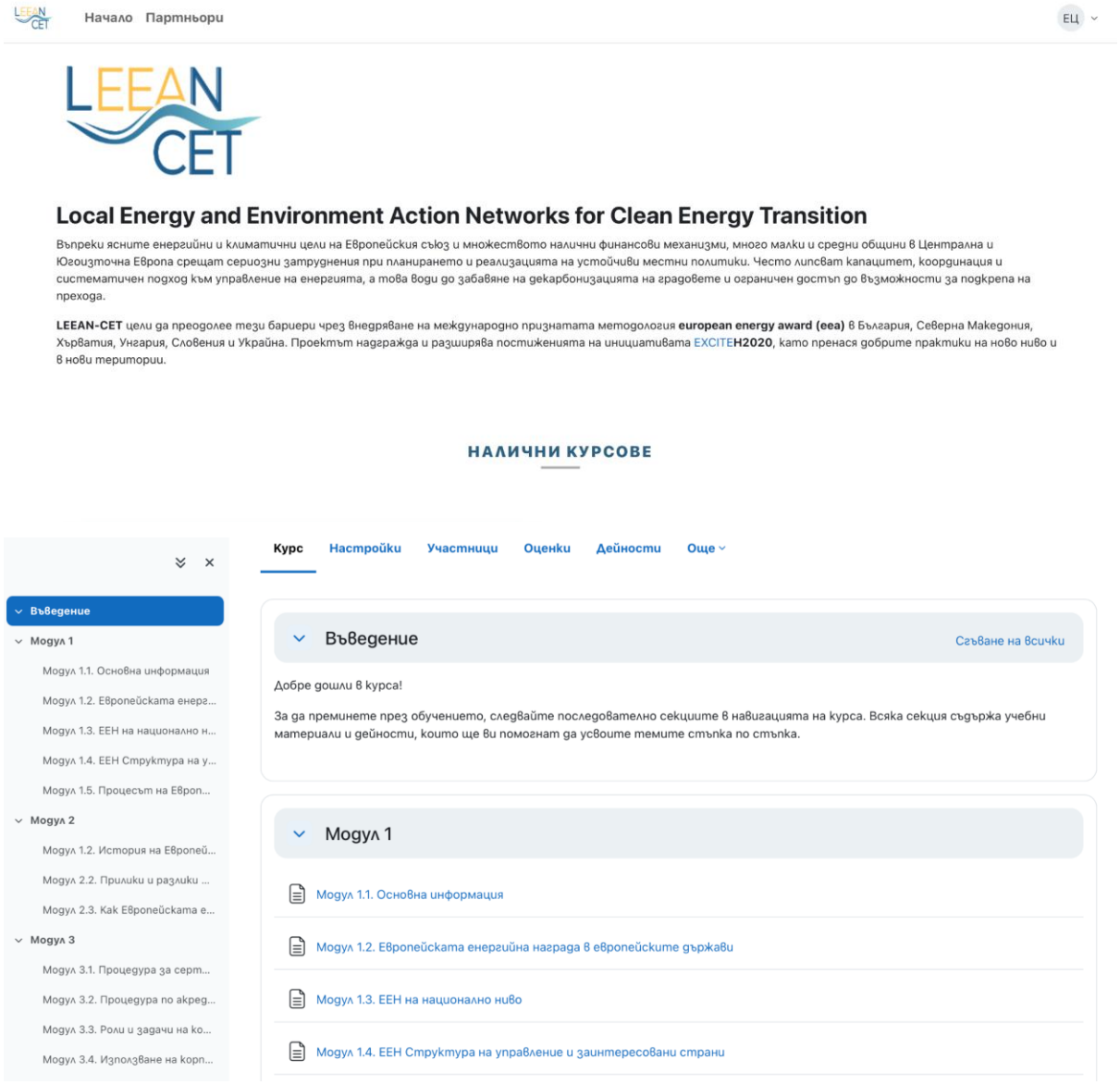


Figure 7. Bulgarian platform

Ukraine

Ukraine provided the original reference model for the development of the online learning environments. The existing Moodle platform operated by Energy Efficient Cities of Ukraine was further updated and expanded to reflect the revised training programme and the latest developments in the European Energy Award methodology. The platform contains comprehensive text-based learning modules, supporting materials, tests and certification functionalities, and continues to serve as a practical demonstration of how large-scale online capacity-building activities can be delivered effectively. The experience accumulated through its operation has provided valuable

guidance for the implementation of similar learning environments in the other participating countries.



Figure 8. Ukrainian platform

6. Conclusions and Next Steps

The work carried out so far has established a solid foundation for the capacity-building activities foreseen within the project. A comprehensive training framework has been developed, building upon existing educational resources while incorporating recent developments in European energy and climate policy, the European Energy Award methodology and related implementation practices. The resulting training package combines text-based learning materials, presentation resources, reference documents and online learning tools into a coherent educational system capable of supporting municipalities throughout their clean energy transition journey.

A common programme structure has been established across all participating countries, while allowing sufficient flexibility for national adaptation and contextualisation. The training materials have been translated and integrated into national learning environments, ensuring accessibility for local users and supporting long-term sustainability beyond the duration of the project. The deployment of Moodle-based learning platforms and the adaptation of existing national knowledge-sharing infrastructures have further expanded the opportunities for flexible, self-paced learning and wider dissemination of knowledge.

At the time of preparation of this report, most of the core training content has been developed and made available through the respective national platforms. However, the final thematic block of the programme remains under development. In particular, the modules dedicated to financing, stakeholder engagement and energy communities will be further elaborated during the next implementation period, drawing upon the results, methodologies and practical experience generated through other project activities. This approach will ensure consistency between the training programme and the broader project outcomes while providing participants with up-to-date and practically relevant learning content.

The next phase of work will focus on the final refinement of the training materials and their continuous improvement based on user feedback and implementation experience. Particular attention will be given to completing the remaining modules,

enriching the learning resources with additional practical examples and strengthening the assessment elements available through the online learning environments.

The training programme is now entering its implementation phase. Pilot municipalities in the participating countries will progressively begin using the developed materials and online platforms as part of their capacity-building activities. In several countries, initial training activities have already commenced, providing valuable feedback for the further optimisation of the learning content and delivery methods.

Further activities will include the preparation and delivery of train-the-trainer activities, aimed at creating a network of qualified national trainers capable of supporting municipalities and stakeholders beyond the project consortium. In parallel, national training sessions will be organised to ensure broad dissemination of the developed knowledge and to support the practical implementation of the European Energy Award methodology and related local energy and climate governance processes.

Appendix: Lectures in National Languages

© LEEAN-CET, JUNE 2026