ENERGee Watch

Peer Review Report (Deliverable 3.6)

August 2023

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The ENERGee Watch project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 892089.

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Preface

The ENERGee Watch project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 892089.

The overall aim of ENERGee Watch is to launch an easy and replicable peer-to-peer learning program to enable regional and local authorities to timely and accurately define, monitor, and verify their sustainable actions. The learning focuses on regional/provincial authorities and their agencies that are responsible for collecting and overseeing the monitoring of mitigation and adaptation measure indicators in order to empower them to make use of best practices. The learning programme is structured into four (4) courses: i) data collection, ii) monitoring & verification, iii) indicators for adaptation to climate change, iv) data display, dissemination, and validation by final users. ENERGee Watch launched 3 learning cycles between 2020-2023 offering these 4 courses (twelve in total) to a total of 70 participating mentees. The learning program entailed tools such as mentoring, site visits, tailored guidebooks and guided practice exchanges to enable the proper matching of peer groups and proper knowledge replication.

No	Participant Name	Short Name	Country Code	Logo
1	Institute for European Energy and Climate Policy (IEECP)	NETHERLANDS	NL	
2	European Federation of Regions and Agencies for Energy and the Environment (FEDARENE)	BELGIUM	BE	
3	Technoeconomics of Energy and Environmental Systems Laboratory – University of Piraeus (UPRC – Teeslab)	GREECE	GR	
4	Auvergne-Rhône Alpes Energy Environment (AURA-EE)	FRANCE	FR	
5	Energy Agency of Savinjska, Šaleška and Koroška region (KSSENA)	SLOVENIA	SI	
6	Ile de France Regional Energy and Climate Agency (IAU IDF)	FRANCE	FR	
7	South East Energy Agency (SEEA)	IRELAND	IE	
8	Energy Agency of Plovdiv (EAP)	BULGARIA	BG	
9	Alba Local Energy Agency (ALEA)	ROMANIA	RO	
10	Cyprus Energy Agency (CEA)	CYPRUS	CY	

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Executive Summary

The ENERGee Watch Action Plan Workshops provided a comprehensive platform for municipalities and energy agencies to reflect on the learnings of the courses they attended and how it has affected their organisations planning and actions in the interim period. The three Learning Cycles (LCs) were brought together (by cycle) 6 months after their courses ended to share diverse insights, strategies, and challenges, shaping a collective vision for impactful energy management and climate adaptation.

The Workshop for the first Learning Cycle took place in October 2022. Mentees from Learning Cycle 2 were invited to get inspiration from their peers that were further along with their projects/Action Plans. From the course 1 mentees. Alliance for Energy Efficiency and Renewables (AEER) in Moldova will use the lessons learned around data collection and to seek funding for installing PV systems on public (100 kW) and private (200 kW) buildings, alongside afforestation to mitigate flooding. Meanwhile Alba Local Energy Agency (ALEA) will use their already acquired data to supplement plans for substantial investments in PV, transport, and energy efficiency. Course 2 learnings highlight the need to present energy targets and transparency, to have a good quality SECAP with clear and understandable actions to attract and involve different stakeholder groups. The course 3 mentees discussed a range of initiatives in their regions related to how they' re adapting to climate change and the mentor reiterated the importance of linking adaptation and mitigation. Finally, learning from course 4 reinforces the importance of data visualisation and keeping the message simple.

The Workshop for the second Learning Cycle took place shortly after the first in October 2022 and similarly mentees from Learning Cycle 1 were invited to learn from their peers. The Course 1 content focused on data collection is exemplified by Energaia in Portugal who developed an online platform for regional data display, emphasizing energy efficiency improvements in buildings and water recovery due to water drought. Course 2 delved into data monitoring, reporting, and verification. Servelect from Romania highlighted gains including the business canvas tool for feasibility checks and methods to attract funding. Certain difficulties in adaptation to climate change were noted by Course 3 mentees. Liguria Regional Energy Agency found it difficult to have a transversal approach between mitigation and adaptation. Meanwhile, the North-West Croatia Regional Energy Agency found that the current energy crisis makes it difficult to address the issues with climate and climate change adaptation as parties are focused on energy efficiency principles and fighting energy poverty. To close the day, Course 4 highlighted data display and dissemination, noting the value of sending concise data with an option for deeper exploration. Mentees recognized the significance of sharing data on platforms like websites and social media.

The third and final Learning Cycle cohort came together in May 2023 to discuss their progress since the ENERGee Watch courses. Unfortunately, mentees from Course 1 and Course 4 were unable to join for various reasons. The observer of Course 1 was able to report that one mentee had used the learnings of Course 1 to collect data via risk assessment and identified that river flooding is the main risk in the area, alongside sea level rise and coastal erosion. The Course 2 mentee, PE engineering from North Macedonia was happy to report as a result of their learnings from ENERGee Watch they had developed a n action plan that was in the process of being adopted in their region. This plan aims to reduce air pollution in the municipality. Course 3 mentees report their adaptation plans are in various stages of development/implementation with notable challenges being monitoring the action plan (specifically how to formulate the indicators) and securing financing or projects. Finally, the Course 4 mentor in

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absence of feedback from their mentees discussed how a past mentee was working on a digital twin cities project in their region and how this concept (digital twin cities) could be an interesting area for future data dissemination and display efforts.

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1 ENERGee Watch Learning Cycles 1 and 2 Action Plan Workshop – October 2022

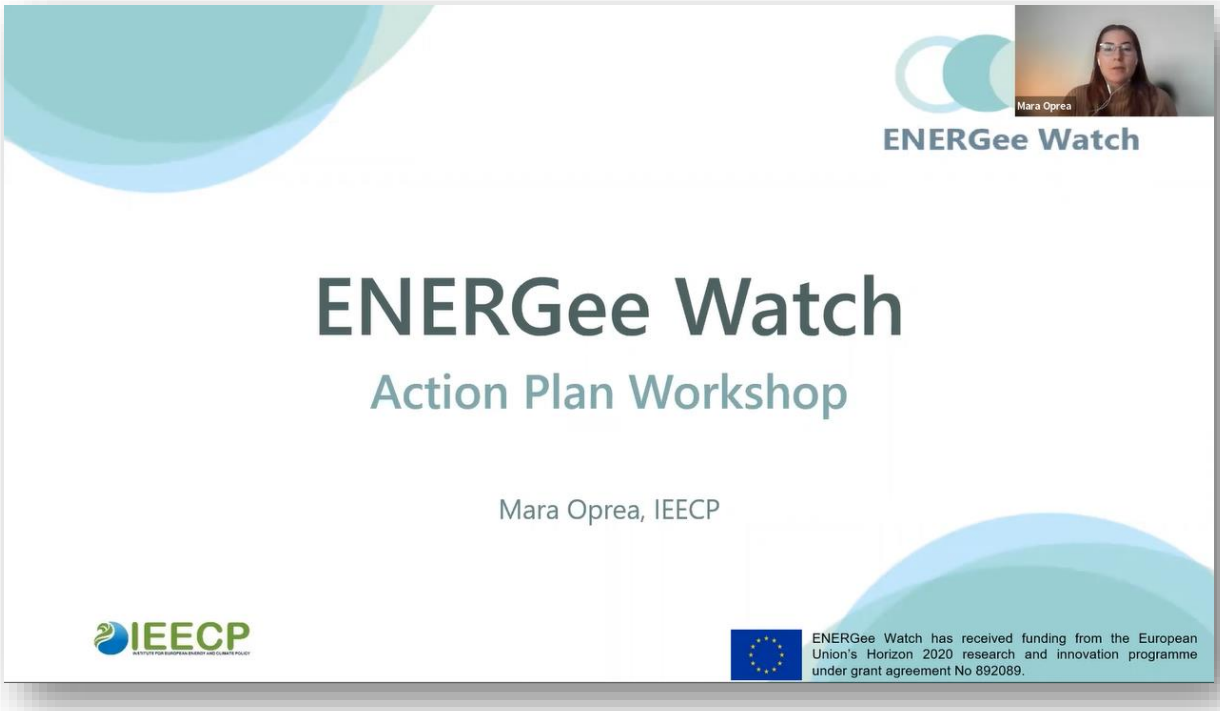

Figure 1: ENERGee Watch Learning Cycle 1 Action Plan

The first ENERGee Watch action plan peer-review session was conducted online through Zoom on October 20, 2022, covering two sessions: Learning Cycle 1 (LC1) in the morning and Learning Cycle 2 (LC2) in the afternoon. The workshop consisted of an action plan survey presentation by IEECP, breakout groups to discuss progress of MRV practices following participation in the ENERGee Watch learning programme (LP) based-on courses, action plan presentations from mentees and observers, a discussion with mentors in breakout groups, a summary presentation from each course, and a summary of lessons learned.

1.1 Agenda for Learning Cycle 1 Action Plan Workshop

Date: 20/10/2022 (*Times in Central European Time)*

11:00 – 11:15 Action plan survey LC1 presentation by project coordinator Mara Oprea, IEECP

11:15 – 12:00 Breakout Groups (course-based) moderated by the 4 Course Mentors

11:15 – 11:45 Action plan presentations (Max 5 mins each with 2-3 slides per mentee) by Mentees and Observers

11:45- 12:00 Discussion with mentees by Mentor

12:00 – 12:30 Return to main Zoom moderated by SEEA

12:00 – 12:15 Presentation of main progress points from each course by 1 Course Representative

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12:15 – 12:30 Summary of lessons learned and takeaways by Mentors

12:30 End of Workshop

1.2 Key Takeaways from Learning Cycle 1 Action Plan Workshop

1.2.1 Course 1 - Data collection (acquisition and treatment)

- Alliance for Energy Efficiency and Renewables (AEER), Moldova
    - Aim to put PV on public buildings (100kW PV) and private buildings (200kWH PV).
    - Will plant forests to help combat flooding.
    - Will receive most funding from the municipality and national subsidies but will also seek funding from the public.
    - Data collection methods presented in this course will help with the above-mentioned processes.
- Alba Local Energy Agency, Romania
    - Have very good data on municipality consumption (public building, lighting, and municipality vehicles) through energy observers, yet the course was still insightful for potential data expansions.
    - Plan on making huge investments into placing PV on public buildings, investing into transport (10-15 million), and making changes to energy efficiency and renewable policy.
    - This data tells them how much they can expect to save and when.
- Mentor's Summary: When a political commitment in favour of action is present, issues can be solved easier. Buy-in is required from both the /supplying side and the demand side. This connection between the two should be strong to receive all of the data necessary for the analysis on consumption. It is recommended to prepare adequate measures that are feasible and can be implemented in a reasonable amount of time for the municipality. Additionally, decision makers need to understand what a Sustainable Energy Action Plan (SEAP) and/or Sustainable Energy and Climate Action Plan (SECAP) is and entails. It was also learned through the implementation of the course takeaways that mentees should not add extra measures that are not technical or financially feasible within these plans.
- Both mentees present intend to seek funding for their projects post-ENERGee Watch. The learnings from the courses will help them present strong cases for this funding by being able to collect and resource data gained.

1.2.2 Course 2 - Data monitoring, reporting, verification

- Plovdiv Energy Agency, Bulgaria & Alliance for Energy Efficiency and Renewables, Moldova

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- There is a need to have a clear methodology and approach to help municipalities achieve their targets using climate data. It is important to know how to involve different stakeholder groups. Energy targets and transparency are needed when approaching stakeholders. A good quality SECAP is also needed to attract funds. Funding from all areas is needed to implement SECAPs and good data that has been appropriately monitored and reported is needed to attract this investment.

- Mentor's Summary: There is a constant need for capacity building. Key persons don't understand the importance of improving knowledge within an organisation, therefore it is important to present actions that will attract funds, meaning mentees must present clear and understandable actions to these key people and course 2 offered this guidance.

1.2.3 Course 3 - Indicators for adaptation to climate change

- Local Energy Agency of Gorenjska, Slovenia
  - Focus on Smart Neighbourhoods to accelerate digitization of city.
  - Air quality measurement will include the installation of devices and the presentation of data to the community.
  - Found the course useful in helping to opening new horizons and collaborations under the topc of adaptation to climate change.
- Energiaklub Climate Policy Institute, Hungary.
  - Presentation focused on the municipality of Budapest, where mentee was able to make a map from RVA analysis. From this map they were able to make a list of actions to implement in the community.
  - Mentee also found it good to increase outreach to main stakeholders.
  - Not all municipalities are ready to participate in climate adaptation planning.
- Center for Renewable Energy Sources, Greece.
  - Mentee works with the municipality to develop a SECAP from a CAP, as the municipality wanted to achieve their 2030 and 2050 climate goals.
  - Municipality found it difficult to relate to climate challenges.
  - The mentee made cooperation between departments and other institutions and tried to establish an energy community to link to other municipalities.
  - Main outcome of climate analysis: One of the most pressing issues for the community was heatwaves, therefore several discussions have now taken place to find solutions to this.
  - Problem that is still encountered includes securing funding for sustainable actions.
- Mentor's Summary: It is very important to establish an adaptation strategy regarding the main stakes of mitigation. Mentees must keep in mind the link between adaptation and mitigation. The implication of the collaboration with the main stakeholders is important to establish a vision of risk on the territory.

1.2.4 Course 4 - Data display, dissemination and validation by local authorities

- Pesaro Council, Italy

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  - Mentee's focus lies on a specific project to develop 2 public schools with more sustainable buildings and minimise their CO_2 emissions.
  - Found a need to engage with stakeholders and develop a platform for communicating data (energy and emissions on projects) and benefits of these projects to push more project developments in clean buildings.
- Energy Agency Province of Cádiz, Spain
  - Preparing to develop SECAP in 3 phases:
    - Identification of needs in their area.
    - Understanding of what must be implemented to meet these needs.
    - Develop a strategy for implementation of SECAP.
  - Have had 22 meetings with 120 stakeholders to understand who the stakeholders are. Needed data and messaging to be simple to reach their wide range of stakeholders.
  - Identified that a data visualisation platform that allows data to be used and accessed is the next step in development.
- Alba Local Energy Agency, Romania
  - Will refresh visualisation of data (ANERGO observatory) and work on SECAPs in the region.
  - Improve standing and visualisation of reports to help communicate their messages.
  - Refresh communication strategy by improving website and social media coverage.

- Mentor's Summary: Interesting to hear that the mentees agree with the importance of data visualisation and keeping the message simple. Typically, stakeholders aren't experts on sustainability-related matters. Therefore, data needs more effort and reflection on mentee's side. Secondly, the conclusion was made unanimously that the ENERGee Watch Learning Programme is a great platform for exchange.

1.3 Agenda for Learning Cycle 2 Action Plan Workshop

Date: 20/10/2022 (*Times in Central European Time)*

14:00 – 14:15 Action plan survey LC2 presentation by project coordinator Mara Oprea, IEECP

14:15 – 15:00 Breakout Groups (course-based) moderated by the 4 Course Mentors

14:15 – 14:45 Action plan presentations (Max 5 mins each with 2-3 slides per mentee) by Mentees and Observers

14:45- 15:00 Discussion and feedback with mentees by Mentor

15:00 – 15:30 Return to main Zoom moderated by SEEA

15:00 – 15:15 Presentation of main progress points from each course by 1 Course Representative

15:15 – 15:30 Summary of lessons learned and takeaways by Mentors

15:30 End of Workshop

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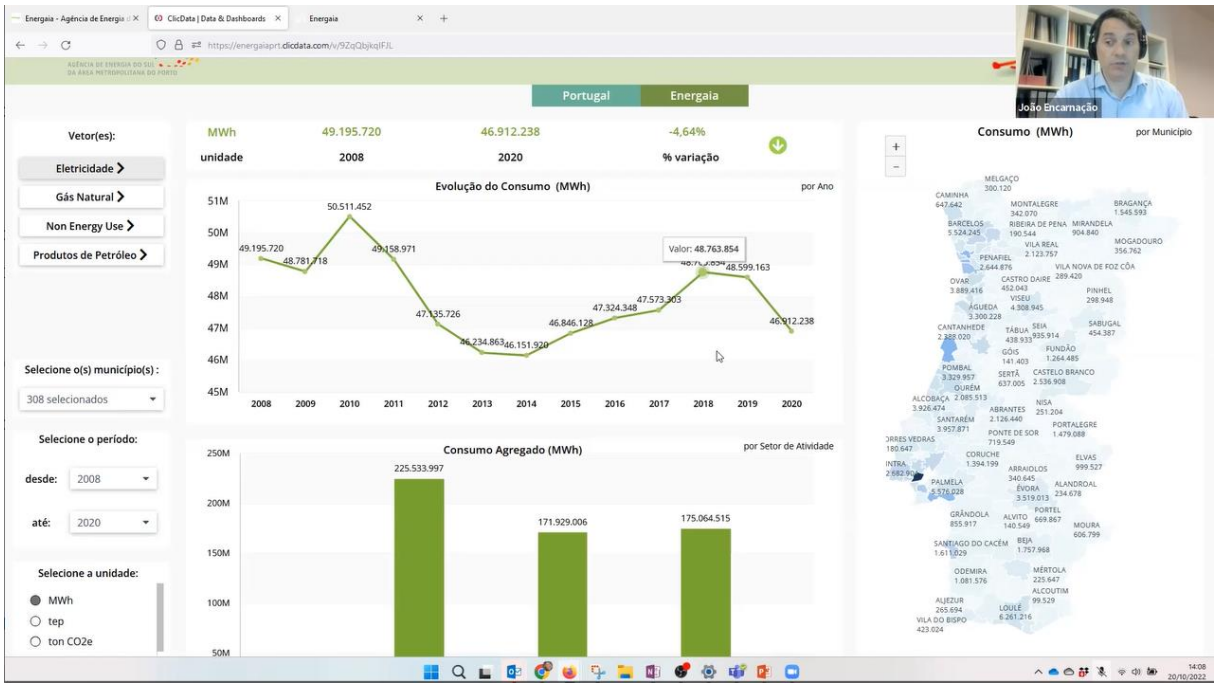

Figure 2: Joao Encarnacao shows the Energaia platform in the ENERGee Watch Learning Cycle 2 Action Plan Workshop

1.4 Key Takeaways for Learning Cycle 2 Action Plan Workshop

1.4.1 Course 1 - Data collection (acquisition and treatment)

- Energaia, Portugal
    - Developed online platform that shows data for region which can be downloaded and displayed in various ways.
    - For buildings in the region (public and private) there is a need to improve HVAC systems, optimise interior lighting, improve façade of buildings, and install PV (in residential homes and 100% public buildings with PVs).
    - Water drought is a big problem in Portugal; therefore, mentee intends to work with private companies and municipality for water recovery.
- Mentor's Summary: Getting energy data is a complex process, but this is made easier with political commitment. In order to get this, a lot of technical expertise and a professional team is needed. Unfortunately, municipalities can lack capacity, resources, and financial capability to get data themselves. However, having access to this data allows the municipality to invest in the correct actions.

1.4.2 Course 2 - Data monitoring, reporting, verification

- Servelect, Romania
    - What they have gained:

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        - Business canvas tool for checking feasibility.
        - How to monitor after many years the progress of SECAP
        - How to attract funding (increase financial capacity) to implement SECAP actions.
    - Tools presented during training course were useful for municipalities as they make data clearer.
    - Municipalities want to reduce CO_2 related to transportation and are taking key actions around awareness-raising at the citizen level.
    - Lessons learned: There is a huge problem finding reliable data as well as a problem developing baseline emissions. Municipalities need a monitoring step when making a SECAP since a plan has been put in place but no monitoring framework exists. Before doing anything, municipalities must establish a strong energy and climate team consisting of experts (energy, environment, financial, legal). Therefore, stakeholder engagement is very important.
    - Training sessions from the ENERGee Watch Learning Programme wre very appreciated, and mentee would like more tailored discussions and solutions during future training sessions to aid in resolving future issues.
- Mentor's Summary: Important to not just create another strategy that will not be followed but to create something useful. In order to have a strong action plan, it is important to have a vision, a strong target, a strong team, and monitoring. Additionally, mentees must consult other stakeholders and citizens, and then involve them in the actions.

1.4.3 Course 3 - Indicators for adaptation to climate change

- Liguria Regional Energy Agency, Italy
    - Difficulty of having a transversal approach between mitigation and adaptation. Different departments work on similar subjects (Energy Plan and Adaptation Plan) without enough overlap.
- North-West Croatia Regional Energy Agency, Croatia
    - EU-Funding is an option for the participants, but this isn't well understood by the municipalities in Croatia. In general, the current issues of the energy crisis make it difficult to address the issues with climate and climate change adaptation as parties are focused on energy efficiency principles and fighting energy poverty.
- Mentor's Summary: The transversal approach of mitigation and adaptation strategy is necessary as it is not enough to have an adaptation policy. Mentees need to have a global approach to be able to sustain long-term actions in different departments. Mitigation and adaptation therefore need to be worked on together and across the municipality.

1.4.4 Course 4 - Data display, dissemination and validation by local authorities

No Mentees were able to attend this session as so instead below is mentor Thomas Knight summarising some of the key learnings from his course.

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- Sometimes it is better to send less data with an option to view more data should the recipient want to go deeper.
- As a mentee, being able to publish data on your website and social medias is important.
- Mentees would like to work on specific examples in the course to practice different tools and methods.
- Financing for certain projects isn't always clear, therefore connecting with different types of stakeholders to see what financing is available is advised.

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2 ENERGee Watch Learning Cycle 3 Action Plan Workshop – May 2023

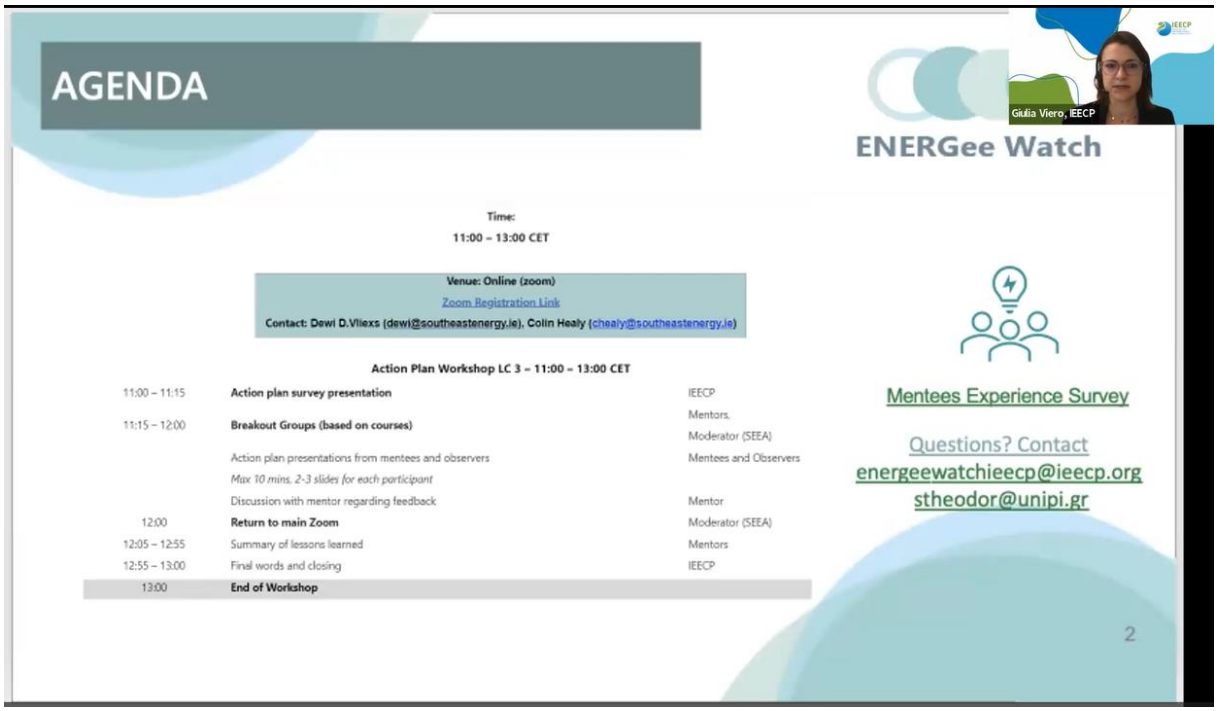

Figure 3: ENERGee Watch Action Plan Workshop for Learning Cycle 3

2.1 Agenda for Learning Cycle 3 Action Plan Workshop

11:00 – 11:15 Action plan survey LC3 presentation by Giulia Viero, IEECP

11:15 – 12:00

- Breakout Groups (based on courses) moderated by the 4 Course Mentors
- Action plan presentations (Max 5 mins each with 2-3 slides per mentee) by Mentees and Observers
- Discussion and feedback with mentees by Mentor

12:00 Return to main Zoom moderated by SEEA

12:05 – 12:55 Summary of lessons learned and takeaways by Mentors

12:55 – 13:00 Final words and closing by IEECP

13:00 End of Workshop

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2.2 Key Takeaways for Learning Cycle 3 Action Plan Workshop

2.2.1 Course 1 - Data collection (acquisition and treatment)

- Institute of Energy Agency for Savinijka, Šaleška and Koroška (Mentor), Slovenia
    - Mentees unable to attend but received feedback from the South East Energy Agency (Observer) on their progress implementing a Sustainable Energy and Climate Action Plan in Kilkenny, Ireland.
    - From data collection and analysis in the form of a risk assessment, the observer gathered that agriculture results in the highest production of emissions. They also identified that river flooding is the main risk in the area, alongside sea level rise and coastal erosion.

2.2.2 Course 2 - Data monitoring, reporting, verification

- PE Engineering, North Macedonia
    - Significant progress has been made in the adoption of their plan. The plan aims to reduce air pollution in the municipality. The main proposal will monitor traffic and waste treatment.
    - The ENERGee Watch training has assisted in putting together this plan.

2.2.3 Course 3 - Indicators for adaptation to climate change

- Institut Paris Region (Mentor), France
    - Different municipalities have different approaches. Some had strategies and action plans specific to mitigation.
    - Comunidade Intermunicipal do Ave: Adaptation strategy adopted a few years ago and is now being revised. How to carry out stakeholder involvement and fix indicators and objectives for new strategy.
    - Region of Western Greece: Action plan of adaptation that has been adopted and needs to be implemented.
    - Cugir Town Hall: Action plan is in proposal, not approved yet.
    - Some municipalities still working on strategies focused on mitigation in the building sector. For example, thermal comfort in summer (decrease heat exposure).
    - Obstacles shared include:
        - Monitoring of the action plan, and more specifically, how to formulate the indicators.
        - Securing financing for projects

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2.2.4 Course 4 - Data display, dissemination, and validation by local authorities

No Mentees were able to attend this session so instead below is mentor Etienne Vienot (AURA EE) summarising some of the key learnings from his course.

- One of the mentees from previous cycles is currently working on Digital Twin Cities.
- "*Should regional agencies go deeper with their data through things like Digital Twin Cities*" is a question worth considering. The role of digital cities could be important in future of energy agencies. This gives another way to visualise data from a territory/city but requires the agency to go much deeper into their data gathering and visualisation than they maybe can.
- Digital cities have often been used with wind turbines equipped with sensors giving data on performance.

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3 Conclusion

Across these cycles, a holistic picture emerged. The workshops touched on many key aspects surrounding Energy Action Plans including political commitment, stakeholder engagement, data accessibility, and innovative approaches in shaping energy policies. The ENERGee Watch Learning Programme provided a valuable platform for participants to share experiences, learn from mentors, and evolve their energy action plans. These workshops illustrated the transformative potential of combining data-driven insights, stakeholder collaboration, and forward-thinking strategies to drive impactful change in the realm of energy management and climate adaptation. Although there were many conditions that lead to some mentees being unable to give their feedback at these workshops, the feedback gained shows a clear implementation of ENERGee Watch learnings in the mentees Action Plans. It is clear that the expertise from the mentors, along with the shared experience of their peers has had an impact on the mentees' regions.

As participants continue to refine their action plans and implement strategies, the knowledge gleaned from the ENERGee Watch workshops stands to catalyse a sustainable energy future. The lessons learned, challenges identified, and innovative solutions explored in these workshops pave the way for resilient, adaptive, and effective energy practices that address the pressing challenges of our time.

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