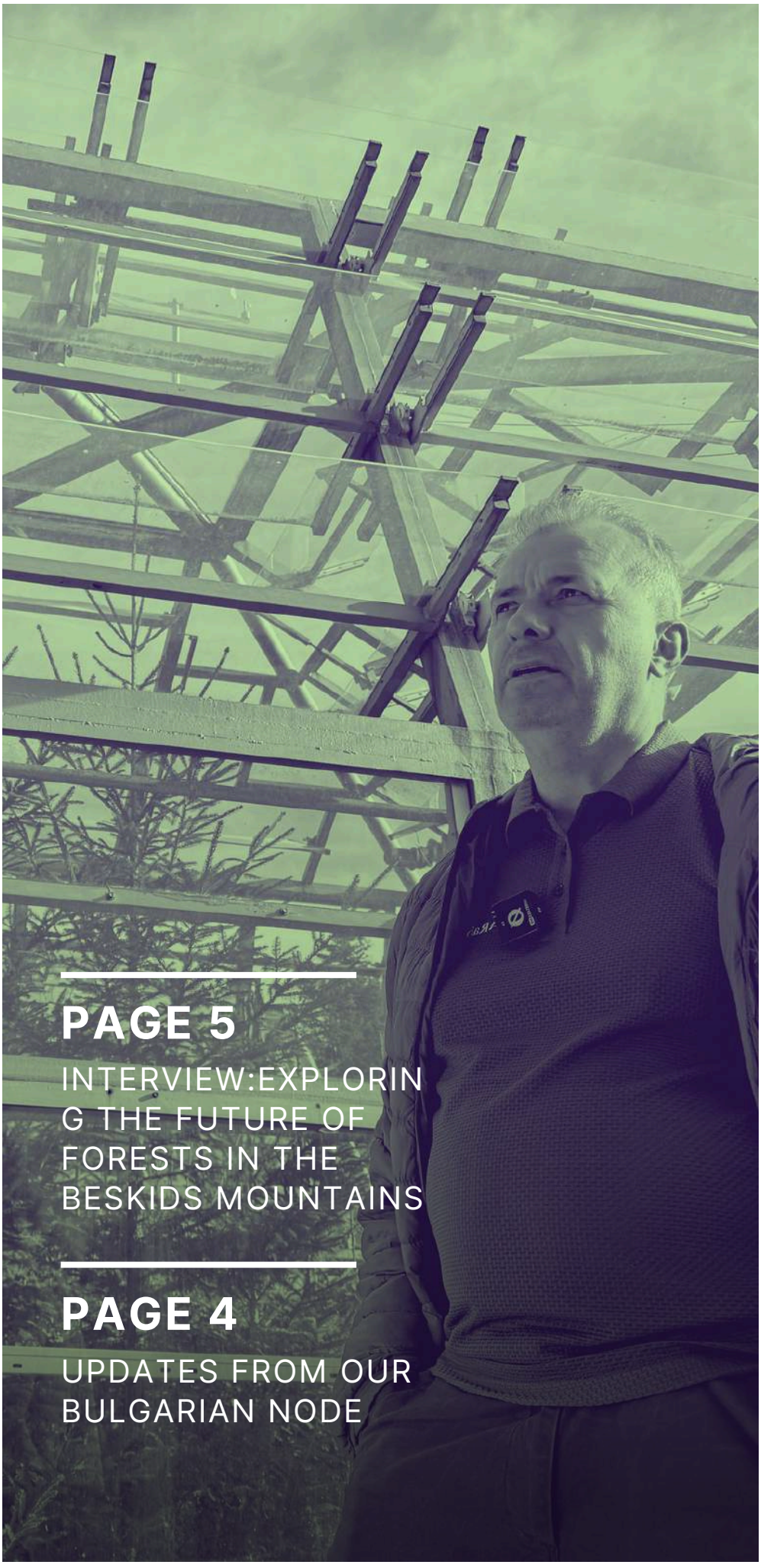
ANAEE-ERIC

NEWSLETTER :: DECEMBER 2025



ABOUT ANAEE-ERIC

Keeping ecosystems healthy is vital for our planet's future, and AnaEE-ERIC (Analysis and Experimentation on Ecosystems) is at the forefront of research to understand and protect them. By experimenting with real ecosystems under conditions like pollution and climate change, we provide crucial insights to help predict and mitigate environmental challenges.

Our work supports researchers, policymakers, industry, and agriculture in developing sustainable strategies to address global environmental issues.

AnaEE-ERIC is a distributed research infrastructure that offers a network of experimental facilities across Europe, equipped with advanced tools for conducting experiments and collecting data on how ecosystems respond to changes like climate change.

We will help society to better understand how it can adapt and which actions are the most impactful in reducing the climate change impact and mitigating changes in ecosystem functioning.

CONTENTS

LOOKING BACK, MOVING FORWARD

Dear reader, welcome to this new issue of our newsletter. AnaEE-ERIC is now almost four years old and is approaching its first five-year evaluation by an independent scientific committee.

The recent Assembly of Members in Bulgaria discussed the evaluation terms and committee composition, while also providing an excellent opportunity to meet our Bulgarian colleagues. We were impressed by the quality and quantity of their research. We thank them for their warm hospitality and in-depth discussions. In this issue, you'll also find an interview with Prof. Karel Klem from CzechGlobe, who represents our Czech node and was instrumental in AnaEE-ERIC's preparatory phase.

Our new website is now online, offering a more informative and accessible platform for both infrastructure and user communities. An extranet for facility managers is coming soon.

Please note the upcoming call for INFRA and [cluster proposals](https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/how-to-participate/reference-documents?programmePeriod=2021-2027). These calls provide opportunities to develop our infrastructure and address scientific and societal challenges. Strong contributions from across the AnaEE network ensure higher quality proposals and better resources for our infrastructure.

Finally, the upcoming evaluation and strategy revision of AnaEE will assess our Research Infrastructure as a whole, and your participation is crucial. Following a bottom-up approach, we've gathered input from working groups throughout 2024 and 2025. By the end of January 2026, we'll release a first draft for community feedback. The strategy of AnaEE-ERIC is a collective exercise requiring endorsement from all our components.

As we approach year's end, I wish you a wonderful holiday season and look forward to exciting collaborations in 2026.

Michel Boër

NEWS AND UPDATES

€14 BILLION HORIZON EUROPE WORK PROGRAMME: KEY OPPORTUNITIES FOR ANAEE

The Horizon Europe Cluster 6 Info Days (January 22-23, 2026, Brussels/online) will present funding opportunities in the 2026 Work Programme covering food, bioeconomy, natural resources, agriculture and environment—topics highly relevant to experimental ecosystem research. Join to learn about upcoming calls, hear success tips, and network at the brokerage event on January 21st to find potential collaborators for AnaEE facilities.

The new Horizon Europe Work Programme 2026–2027 has opened several funding opportunities highly relevant to the AnaEE community. Many of these topics align closely with our strengths in experimental ecosystem research, long-term observations, and integrated approaches to agriculture, biodiversity and climate.

Below, we highlight some of the calls that offer particularly strong potential for collaborations across AnaEE facilities and national nodes. These topics not only reflect EU research priorities, but also showcase how our distributed infrastructure can contribute essential data, experimentation and expertise to high-impact proposals.

- HORIZON-CL6-2026-02-FARM2FORK-06: Advanced innovative solutions for improved competitiveness and sustainability in controlled environment agriculture (CEA). This call focuses on technological, agronomic and environmental innovations in controlled environments.
- HORIZON-CL6-2026-02-COMMUNITIES-01: Boosting sustainable competitiveness in rural areas through innovation. This call focuses on innovation ecosystems and rural sustainability.
- HORIZON-CL6-2026-02-CLIMATE-01: Towards more effective, fair and coherent policies for climate change mitigation and adaptation in agriculture and forestry. This call invites integrated assessments of climate mitigation in agriculture and forestry.

Next steps?

- Register to the info days linked to above and learn more
- Participate to brokerage event January 21 in Brussels
- Explore the whole work programme on the EU website.

ANAEE LAUNCHES BRAND NEW WEBSITE

These are some new features online:

- Events calendar: ecology conferences, open calls, webinars etc.
- Extranet (login: members only)
- Facility map
- Researcher interviews
- Pages for each member

DID YOU MISS THE ANAEE TECHUP WEBINARS OF 2025?

Don't worry, all the presentations are being uploaded to our YouTube channel, and the next session is going to be in January 2026. We welcome input on interesting companies that could be invited. Watch on YouTube

FREE ACCESS TO RESEARCH FACILITIES THROUGH MICROBES 4 CLIMATE OPEN CALL

The project seeks to encourage research tackling the multifaceted challenges presented by Climate Change to terrestrial biodiversity and ecosystems by offering access to advanced Research Infrastructures, training, and assistance. 17 AnaEE-ERIC facilities are available through this call, you may explore them *on this link*. Red more and apply on the M4C website.

AGROSERV CONNECT WEBINAR, DEC. 18

Are you planning your research for 2026? Don't miss the next AgroServ Connect webinar! This time putting the spotlight on the SmartCow infrastructure to show you exactly how the AgroServ application process works in practice. Register on their website.

ANAEE CONFERENCE ATTENDANCE 2026

AnaEE-ERIC will be present during several main ecology and climate change conferences and events in 2026, such as the Nordic Oikos, FORECOMON 2026. We listed conferences like these in our new events calendar on the website. We encourage community members to submit proposals to conferences under the name of AnaEE-ERIC. If you wish to do so - please contact us for presentation templates and guidelines first.

ANAEESC26 CONFERENCE

The conference is set in the beautiful setting of Menton; France.

GET READY FOR THE MAIN EVENT FOR GLOBAL CHANGE ECOLOGISTS: ANAEE SCIENCE CONFERENCE 2026

Discover cutting-edge advances in ecosystem experimentation, from ecotron facilities to digital modeling approaches. Present your research on climate adaptation, biodiversity resilience, and sustainable ecosystem management alongside Europe's top researchers in functional ecology.

The conference spans experimental approaches to global change ecology, forest and agricultural resilience, aquatic-terrestrial interactions, and innovative data integration methods. Join us in Menton for three days of transformative science that will help build the foundation for a resilient future. Registration opens September 2025.

Scientific Sessions

- Session 1: Ecosystem Resilience in a Changing World
- Session 2: Sustainable Agroecology and Soil-Plant Systems
- Session 3: Forest Ecosystems under Pressure
- Session 4: Experimental Approaches to Global Change Ecology
- Session 5: Aquatic-terrestrial and coastal ecosystem interactions
- Session 6: Digital Ecosystems – Data Integration and Modelling

CONNECT WITH THE WHOLE ANAEE COMMUNITY

Key information

- Registration and submissions open January 11, 2026
- Early bird registration closes April 11, 2026
- Submission deadline May 11, 2026
- Registration fee for AnaEE affiliated participant: 195 €
- Registration fee for non AnaEE affiliated participant: 220 €
- Registration fee after early bird: 280€
- See you in Menton on September 29 to October 1, 2026

RISING STAR AWARD

With this conference we are introducing the AnaEE Environmental Rising Star Award, **recognizing exceptional postdoctoral researchers** within four years of PhD completion.

Winners receive a dedicated conference presentation slot, funded research **visit to an AnaEE facility of their choice**, located outside the winner's home country (up to €1,500), conference travel support (€500). Awards for Best Poster and Best Oral Communication will also be presented.

BULGARIA STRENGTHENS ANAEE WITH AGROECOSYSTEM RESEARCH

In November the AnaEE Assembly of Members gathered in Sofia, Bulgaria for its eighth meeting and got to know our Bulgarian colleagues and their activities better.

Since joining AnaEE in 2022, Bulgaria has become a growing contributor to European agroecosystem research through the Institute of Soil Science, Agrotechnologies and Plant Protection "Nikola Pushkarov." The Bulgarian National Node benefits from over 40 years of agricultural research data and advanced open-air platforms. A recent visit by the AnaEE Central Hub to Sofia reinforced collaboration and discussed future research priorities.

Research Platforms & Key Activities

The Bulgarian Node operates two experimental platforms at Bozhurishte (Sofia region) and Tsalapitsa (Plovdiv region), representing different climatic zones. These sites support long-term crop trials, climate monitoring, soil assessments, and greenhouse gas measurements under real farming conditions.

> *AnaEE Bulgaria has long experience of doing research on soil health. Areas with Alluvial-Meadow soil type are identified as high risk due to their soil properties, shallow groundwater and cultivation of crops with intensive fertilization and irrigation.*
>
> *Prof Irena Atanassova*
> *AnaEE Bulgaria, Tsalapitsa facility*

Current research focuses include:

- Greenhouse gas emissions: Measuring CO_2 and N_2O across different tillage systems and fertilisation levels, with 2023–2024 results showing significant impacts from farming practices on emissions
- Sustainable fertilisation: A 2023 postdoctoral project demonstrated that combined organic-mineral fertilisation enhances soil biological activity and maize productivity while reducing environmental impact
- Biochar applications: Investigating this pyrolysis-produced amendment for improving soil properties, microbial activity, crop productivity, and carbon sequestration
- Good Agricultural Practices (2024–2027): A flagship project assessing fertilisation effects, biomass dynamics, soil health, integrated weed control, and greenhouse gas impacts. Early results show combined mineral-organic fertilisation significantly improves crop performance and soil nutrients

Aligned with EU Priorities

Bulgarian research directly supports EU Green Deal goals through reduced mineral fertiliser use, expanded organic amendments and biostimulants, improved crop rotations, soil carbon preservation, and reduced agricultural emissions. The Node is also expanding into emerging challenges like microplastic impacts on agriculture.

Between 2023 and 2025, the team produced multiple peer-reviewed publications on nutrient dynamics, crop productivity, and soil-water-plant interactions, positioning Bulgaria as a valuable contributor to AnaEE's long-term research objectives.

THE INTERVIEW: EXPLORING THE FUTURE OF FORESTS IN THE BESKIDS MOUNTAINS

Text: Amanda Ölander

In the Moravian-Silesian Beskids, the air is crisp and the forest almost silent. A few hikers pass along the trail, unaware of the futuristic structures hidden just beyond the ridge. As we approach, the tree line parts and a series of glass domes emerge—transparent, geometric shapes cutting sharply into this otherwise untouched mountain landscape.

"It's unusually warm for this time of year," Assoc. Prof. Karel Klem says as he steps out of the car. It's a sentence scientists repeat across Europe these days, each season bringing new anomalies, new deviations from what used to be normal. "Something is always unusual with the weather now," he adds, looking up towards the canopy.

This is Bílý Kříž, the Czech node's flagship experimental station, perched nearly 900 meters above sea level. Here, in this quiet corner of the Czech Republic, researchers are simulating the future—literally.

ANAEE CZECH REPUBLIC

Inside the Glass Domes: Testing Tomorrow's Climate

"We are analyzing the impacts of future climate conditions on young forest ecosystems," Karel explains as he leads us toward one of the domes. Inside, young stands of Norway spruce and European beech grow in precisely controlled conditions. Atmospheric CO_2 levels are elevated to 600–700 ppm, the concentration expected at the end of this century.

But it doesn't stop at CO_2.

"Because these domes allow multifactor experiments, we can manipulate water availability, simulate drought, or add nitrogen to mimic atmospheric deposition," he says. "This helps us understand how forests may respond when several stressors happen at once—which is the reality of climate change."

The experiments have been running for almost 30 years, one of the longest continuous CO_2 manipulation studies in Europe.

A Living Laboratory in a Popular Hiking Region

The station's unusual appearance and accessibility also attract curious visitors.

"This trail leads to the highest peak in the Beskids, so many hikers stop to ask about the domes," Karel says. "People want to know what will happen to our forests—whether spruce will decline, which species may dominate, and what the future landscape will look like."

He smiles slightly. "And they are also fascinated by the technology."

Some visitors come not for the science, but for the night sky. "There is almost no light pollution here. Astronomers love it," he adds.

The ICOS tower at the same site gives a lot of possibilities for ex-changes and shared knowledge between ERIC's.

Not Just Studies of the Future — Comparations With the Present

Just beside the dome experiment stands a tall meteorological tower—part of the ICOS ERIC network—measuring carbon fluxes, water vapour, and energy exchanges between the forest and the atmosphere.

> *Because these domes allow multifactor experiments, we can manipulate water availability, simulate drought, or add nitrogen to mimic atmospheric deposition*

"This allows us to compare controlled experiments with real forest conditions," explains Karel. The team monitors light intensity, humidity, tree growth, and more, using dendrometers and extensive sampling analysed at the CzechGlobe laboratories in Brno.

Using isotopic analysis, they can even look back in time. "By analysing individual tree rings, we can understand how trees responded to stress decades ago, and whether they are becoming more vulnerable."

AnaEE-ERIC (Analysis and Experimentation on Ecosystems) is a Landmark European research infrastructure which brings together a series of state-of-the-art experimental, analytical and modeling platforms for ecosystem research throughout Europe.

NATIONAL NODE CONTACTS

MEMBERS

- Bulgaria: Irena Atanassova (ISSAPPNP)
- CIHEAM: Bari, Claudio Bogliotti (CIHEAM)
- Czech Republic: Karel Klem (CzechGlobe)
- Denmark: Klaus Steenberg Larsen (Uni Copenhagen)
- Finland: Säde Virkki (Luke)
- France: Jean-François Le Gaillardia, (CNRS)
- Italy: Elena Paoletti, (CNR)

OBSERVER

- Belgium, Nadia Soudzilovskaia (Uni Hasselt)

ANAEE-ERIC CENTRES

Central Hub, France
Michel Boër
Data and Modelling Centre, Italy
Adriano Palma
Interface and Synthesis Centre, Czech Republic
Biljana Đorđević
Technology Centre, Denmark
Rachel Burns

Contact us: contact (at) anaee.eu