Research paper conducted by
Tartu Environmental Education Centre Foundation
and Helsinki Metropolitan Area Reuse Centre Ltd
*(unit Environmental School Polku)*

# A COMPARISON OF THE ESTONIAN AND FINNISH NATIONAL QUALITY ASSURANCE TOOLS

## for environmental education providers in non-formal education

ERASMUS+ project
"Together Towards Improved Quality
of Environmental Education"

31.12.2024

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## Chapter 1

## Why is it necessary to create a national quality assurance system for organizations providing non-formal environmental education?

1. It helps to **establish consistent standards and benchmarks** for environmental education across the country. This ensures that all learners receive high-quality education regardless of where they are or which organization they engage with.

2. It **enhances the credibility and trust** in the programs offered by different organizations. When stakeholders, including learners, educators, and funders, see that programs meet national standards, they are more likely to trust and support them. It also ensures clarity and consistency when discussing environmental education. This transparency helps teachers and educators understand what to expect when participating in E.D. programs with children and young people.

3. It ensures that educational programs meet certain quality standards, and the overall effectiveness of environmental education is likely to improve. This can **lead to better learning outcomes**, greater awareness, and more effective action towards environmental sustainability.

4. It helps in the **optimal use of resources** by identifying and promoting best practices. It can help organizations avoid duplicating efforts and instead focus on innovative and effective approaches to environmental education.

5. It can provide a framework for the **professional development of educators and facilitators** involved in non-formal environmental education. This can help improve their skills, knowledge, and teaching methods, ultimately benefiting learners.

6. It introduces a mechanism for **accountability**, ensuring that organizations adhere to agreed-upon standards and practices. **Transparency** in the quality of education being provided can be maintained, which is essential for continuous improvement and stakeholder confidence. Then it also becomes easier for organizations to **collaborate and form partnerships**. They can be assured of each other's quality and can work together on joint initiatives more effectively.

7. It may help to get more support from governments and funding bodies, who are more likely to invest in environmental education programs that are part of a recognized quality assurance system. This can lead to **increased funding and policy support** for environmental education initiatives.

8. It can help organizations adapt to changing environmental challenges and educational needs. By regularly reviewing and updating standards, the system ensures that **education programs remain relevant and effective**.

9. It helps in producing knowledgeable and skilled individuals who can **contribute to global environmental goals**. In order for a country to be competitive on a global scale, especially in areas related to sustainability and environmental stewardship, having a robust system for quality assurance in environmental education is essential.

## Chapter 2

## What were the planned activities within the “QualitE: Together Towards Improved Quality of Environmental Education” project?

**The objectives of the QualitE (2023-2-EE01-KA210-SCH-000185260) project:**

1. To create an overview of quality assessment systems and tools in environmental education in Estonia and Finland, in order to learn from each other's experiences.
2. To raise the quality of environmental education provided by the project partners by introducing jointly tested and improved versions of teaching programmes, feedback forms and self-analysis tools in institutions.
3. Develop a new interdisciplinary curriculum to promote circular economy principles and sustainable practices in support of the Estonian national curriculum.
4. Provide training opportunities to strengthen the cooperation between Estonian and Finnish partners and to share the results of the project at European level.

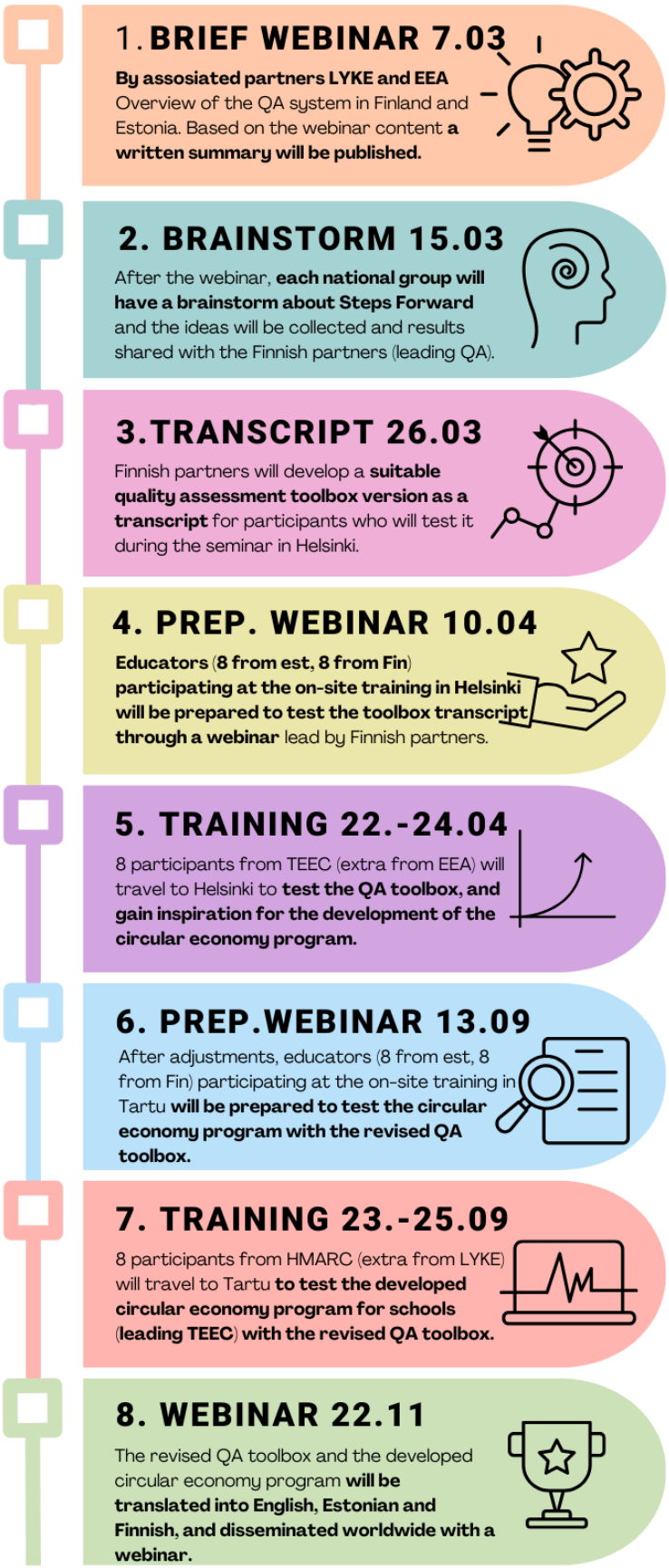
**We achieved the project objectives through the following activities:**

1. We prepared this overview of environmental education quality systems and tools being developed in Estonia and Finland, involving national environmental education associations (EKHÜ from Estonia and LYKE from Finland) in the process.
2. We developed two new circular economy curricula (one for grades 7-9 and one for grades 10-12), which can be found on the Mappa.fi and Keskkonnaharidus.ee education platforms.

3. We organised two training trips (one in Helsinki and one in Tartu) for environmental education promoters from TKHK, HMARC and shared the results of the project at a webinar in the framework of the European Week for Waste Reduction and the LearningPlanet Festival.

All the materials produced by the project are available in Estonian, English and Finnish on the Tartu Nature House website. Everyone is allowed to use and modify the materials for educational purposes (Creative Commons CC BY-NC-SA) with reference to the aforementioned QualitE project.

**Planned timeline of the QualitE project activities was:**



## Chapter 3
## Overview of the Estonian quality assurance system for environmental education

One of the most important goals of the Estonian Environmental Education Association (EEEA) is to promote environmental education and awareness in society and to ensure the quality of environmental education. This association is one of the partners in the establishment and development of the national environmental education quality system.

The creation of the environmental education quality system is part of the Estonian Environmental Education and Awareness Action Plan 2019-2022, based on which a new environmental education and awareness action plan for 2023-2025 was approved in early 2023. The goal is to achieve a consistent level of environmental education in centers with different backgrounds and to ensure high-quality and reliable access to environmental education throughout Estonia, in line with the principles of sustainable development. The quality system in Estonia (will) consists of three parts.

**1. The first part of the quality system focuses on the public descriptions of environmental education programs,** which are assessed based on **predetermined criteria (Annex 1).** The program description is a written commitment from the organization providing the service regarding what will be learned and how, including the application of the principles of sustainable development. Awareness enables behavioral change when we understand nature as the basis of our culture and economy. The topics covered in the educational programs are integrated with national curricula, and non-formal education providers also contribute to their implementation.

The assessment of the quality of educational programs in Estonia began with the assessment of the quality of environmental education program descriptions in March 2020. The basis for quality assessment is the criteria developed by Estonian environmental education experts.

The description of the educational program provides a comprehensive overview of the program's topic, activities, and developed values. It is a commitment to the program's client. A well-thought-out program description provides a clear overview of how the set learning outcomes will be achieved. Each program's themes, objectives, and active learning methodology must be tailored to the learner's age and in line with the national curriculum. At the heart of education supporting sustainable development is the understanding that there must be a balance between environmental use and protection. Addressing these principles in the program helps students understand the possibilities and consequences of every individual's actions, including their own. This develops critical thinking and helps raise awareness of how our decisions and actions shape the future. Understanding that life on Earth depends, for example, on biodiversity, does not arise spontaneously. Therefore, integrating sustainable development principles is important for every topic covered. Understanding the connection between consumption habits and the fate of the natural environment helps to cultivate a sense of responsibility and make choices that are more environmentally sustainable. A quality program can be given **the quality label** (based on the written description) which will provide some benefits as a service provider **(Annex 2).** For example, the Environmental Investment Centre (EIC) takes the label into account when funding programmes. KIK funds a wide range of environmental activities (including educational programmes).

The "Well-designed program" label is awarded to a description of an environmental education program that meets the quality criteria developed by Estonian environmental education experts. The awarding of the label is organized by the Estonian Environmental Education Association. This awarding is decided by a panel of external evaluators convened by the Association, who analyze the descriptions of the educational program on the basis of the criteria. Application for and use of the label is voluntary for environmental education providers. A program description submitted for evaluation that does not meet the requirements can be resubmitted for evaluation after a minimum of one year.

The label must correspond to the template on the Association's website, a black and white image may also be used. The numbered badge is only valid in conjunction with the corresponding program. The mark shall be added to the description of the program in such a way as to distinguish it from other program descriptions. The label is valid for 5 years.

The holder of the mark shall be entitled to use the label to promote the program, to publish the label on the Environmental Education Portal together with the relevant program. The Environmental Investment Centre (KIK) that provides funding for different activities, and also to schools for ordering environmental education programs, has actually requested from the applicant schools that they should choose at least 50% of the programs with the quality label.

During the QualitE project, two new circular economy study programs were created and sent for evaluation to see if they would get the Cloudberry label. They did! The first one, titled **"Our Footwear Leaves A Footprint: Let's Talk About The Circular Economy"** for students in grades 7-9, received the certification of a high quality program number 802.

And the second one, titled **“Could the circular economy be the solution?”** for students in grades 10-12, received the Cloudberry label number 801.

We were extremely happy and shared the content of the created programs during a webinar dedicated for the European Week for Waste Reduction. The recording of the webinar can be seen on the Tartu Nature House’s YouTube channel.

**2. The second part of the quality system focuses on the development of facilitators of environmental education programs, and, for that, a competency model, a prototype of self-analysis, and supporting learning materials have been created (Estonian national process ends in 2025).**

The development of the competency model for facilitators of environmental education programs began in October 2021. Various competency models were analyzed, and suitable inputs were selected, followed by the development of the Estonian competency model which we translated in English and in Finnish with this QualitE project.


**Based on the competency model, a prototype for a self-analysis tool has been made.** The prototype of the self-analysis tool for facilitators of environmental education programs has been developed based on the competency model for facilitators of environmental education programs and is intended to support facilitators' self-development and learning. The self-analysis tool directs thinking towards aspects that support learning - the facilitator can find out whether and to what extent they currently consider these aspects in their work and can guide their own development. The tool is structured around scenarios, most of which have actually occurred. Experts offer various options for action in these situations, allowing the facilitator to assess both how they would typically act and what they consider most effective. It takes time to perform this analysis. The process is most beneficial when the facilitator considers their possible future actions before moving on to the multiple-choice answers. Moving forward, they can learn about the expert's assessment of different choice options and the extent to which their and the expert's assessments are aligned. It is possible to add comments to each option, which can be used for learning later on. The development of the corresponding web solution is currently based on the prototype and will be completed in the next stage by the EEEA.

**In addition, the experts are developing competency-supporting educational materials** where, for each competency, a module will be created consisting of a set of appropriate learning resources, including online learning objects, learning-support materials, observation sheets, articles, etc. The creation and testing of the learning materials will be carried out in a collaborative way, through joint seminars, discussions and field trips between environmental education specialists and representatives from different centers. Closer links and more effective cooperation in environmental education will be established. The creation of educational materials based on the competency model for facilitators of environmental education programs began in October 2022.

A self-development planning session and guidance on how program facilitators can reflect on feedback received, identify competencies, and set goals for professional development based on the Estonian model and the importance of creating actionable plans with specific objectives and timelines where the subjects in the agenda of the QualitE project training in Tartu, Estonia, in September 2024 **(Annex 9)**.

**3. The third part of the quality system is related to organizations providing environmental education, giving instructions for peer review and audits. However, this part is yet to be developed in Estonia. Luckily, this part has a successful example from Finland.**

This is where we start to describe the quality assurance system used by Helsinki Metropolitan Area Reuse Centre Ltd (HMARC, unit: Environmental School Polku), since this part is fully developed in Finland. The Finnish system differs from the Estonian system as there are no evaluations of public program descriptions used or certain self-evaluation tools provided for the environmental educators or program facilitators in Finland. Instead, in HMARC, each program has a written program guideline for facilitators, helping to keep the program quality high among different facilitators. For self-evaluation or self-auditing purposes, the Centre uses a self-evaluation and audit system and ready-made evaluation/audit form from LYKE Network, as it is one of the criteria to fulfill in order to become a LYKE Network member. The evaluation/audit focuses on a different level than the Estonian system:

in Finland the Environmental Education Centeres are evaluated but not individual programs or educators, although individual programs can be used as examples in the audit process. This is very good from a cooperation point of view: We can see that the Finnish and Estonian systems complement each other in a very interesting way and enable mutual and enriching learning between the systems.

One of the goals of this ERASMUS+ project “Together Towards Improved Quality of Environmental Education” is to collaborate with project partners and associated partners to revise the already existing quality assurance tools so that we can make recommendations to improve and give samples of possible solutions in these **three dimensions of the quality of environmental education:**

1) Quality of educators and program facilitators.
2) Quality of the programs and activities provided.
3) Quality of the organization, environmental education units.

The next chapter will provide an overview of the Finnish system.

## Chapter 4
## Overview of the Finnish quality assurance system for environmental education

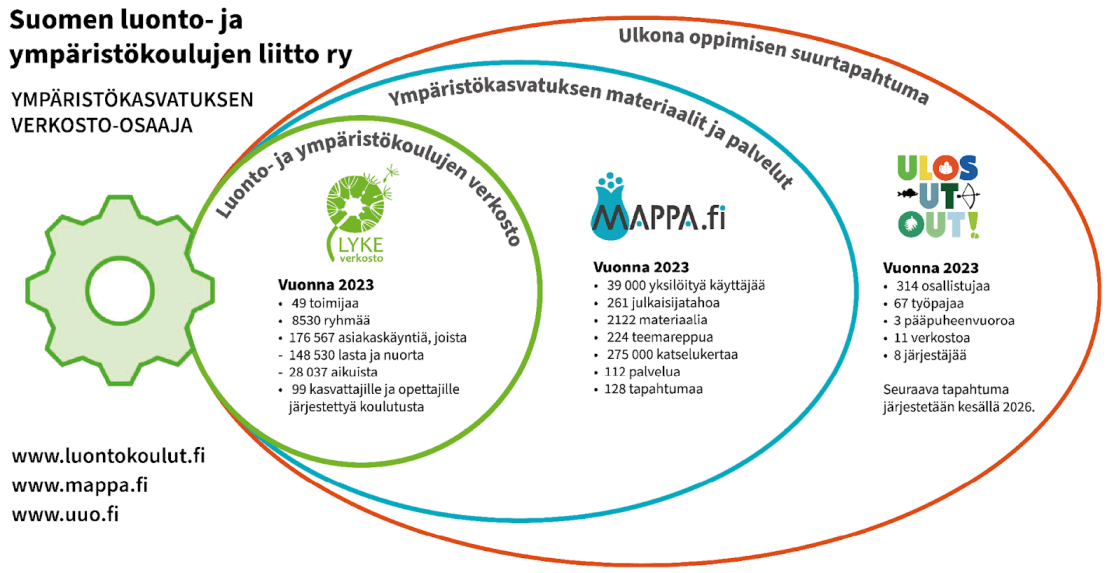
The Finnish Association of Nature and Environment Schools (Suomen luonto- ja ympäristökoulujen liitto ry, LYKE) aims to promote nature and environment school activities and environmental education. Founded in 2007, the association's vision is an ecologically sustainable future, which it aims to achieve by supporting children and young people in strengthening their relationship with nature and learning sustainable lifestyles.

The LYKE association organizes training for the network, carries out communication and lobbying activities to promote nature and environment education & environmental education. It coordinates and develops the national LYKE network, which consists of 50 nature and environmental centers.

**LYKE develops the quality of nature and environmental education activities through a certification and audit system.** It maintains and develops nationwide operating models to support environmental education for children and young people, such as the MAPPA.fi material bank and the ULOS-UT-OUT major outdoor learning event.

LYKE is a national youth service organization that receives a general grant from the Ministry of Education and Culture. It also carries out and develops its own fundraising activities, creates new partnerships and applies for project grants.

To find out more you can read: Action Plan 2024, Strategy 2023-2025, Annual Report 2022




The association's local activities take place in **the LYKE Network centers**, which offer nature and environmental education activities for groups of children and young people, as well as training for teachers and educators. The LYKE Network brings together more than 50 actors from all over Finland. It consists of diverse schools, centers or sites: Nature and Environment Schools, Visitor Centers of National Parks, Youth Centers, Camp School Centers, Museums, Zoos. The network provides nature and environmental education activities and support for sustainability education in schools, early childhood education and youth work. It also organizes training for teachers and educators.

**The network's centers are certified as either Activity Centers (“toimintakeskus”) or Development Centers (“kehittämiskeskus”),** whose quality is regularly verified through peer audits. There are also some trial members aiming to meet the certification criteria, in order to reach the action center or development center level.

**The LYKE maintains and develops quality criteria (Annex 3)** for nature and environment school activities. All the LYKE Centers offer high quality nature and environmental education activities, which are actively developed through quality work. **The objective of the certification system is to improve the quality of environmental education services of the network.**

**In the LYKE system, there are three levels:**

1) **Trial member.** A new member center which develops its functions to meet the criteria. Trial member period is two years.

2) **LYKE Activity Centre is the basic level of certification.** There are 9 criteria to fulfill. All the LYKE centers must meet the quality criteria of the Activity Centre.

3) **LYKE Development Centre** is the highest level of certification, which requires the center to promote and develop a wide range of environmental education activities in its area of competence. In addition to the basic level criteria, the center must meet the criteria of a Development Centre (3 additional criteria). HMARC (Finnish partner in this ERASMUS + project) is a Development Centre.


Regular peer audits are carried out to ensure that the certification criteria are met. The purpose of the LYKE network audit is to support and diversify the work of the network's centers and to maintain the quality requirements of the LYKE certificate. The certificate is valid for three years at a time and is renewed by a peer audit, which is recommended every two years. At the same time, they receive feedback on their activities and share their good practices. They have prepared audit guidelines (Annex 4) and audit forms (Annex 5) to be used on the spot during the peer review.

**The audit form consists of three steps:**

**1) Self-evaluation (audit form, section A)**

Self-evaluation is done in advance by the center to be audited.

*Tasks in this step are:*

1. To complete the self-assessment form. The fulfillment of the criteria is evaluated.
2. To describe the program and goals of the teaching on the auditing day.
3. To list any special wishes or development areas related to auditing.

**2) Peer-auditing (audit form, section B)**

The auditor visits the center for a whole day to observe and gets to look at the observations in the self-evaluation form.

***Tasks in this step are:***

1. To observe the teaching situation. The group's teacher is notified in advance about the audit. The auditors are introduced to the teachers and students.
2. The auditors monitor the teaching situation discreetly from the side. The nature school day proceeds as normal as usual on the audit day.

**3) Joint discussion with the pair-center**

This takes about two hours, it can be held remotely if necessary.

***Tasks in this step are:***

1. Auditors answer the questions clarifying the certification criteria based on the observations they have made during the day and by asking the staff of the audited center about the activities of the center.
2. To evaluate the fulfillment of the criteria by discussing together and writing down the conclusion. If not all the criteria are met, discuss the necessary development actions together, write them down and also the center's wishes for the support needed and inform the LYKE network's office.

The LYKE association office can take part in the process, if needed. The objective is joint development and peer support. The auditing form will be sent to LYKE where they are revised and, if not all the criteria are met, then the site has one year to develop its activities to meet the criteria.

# Chapter 5
# Preparations for a peer review day

Before entering the process with the project team we drafted what the possible objectives are for a peer review at an organization providing environmental education:

1. **Assessing organizational effectiveness:** Evaluate the overall effectiveness of the environmental education center in fulfilling its mission, goals, and objectives related to environmental education and outreach.

2. **Evaluating program quality:** Assess the quality, relevance, and impact of the educational programs offered by the organization to schools and other stakeholders. This includes evaluating the curriculum, teaching methods, engagement with students, and alignment with educational standards.

3. **Providing constructive feedback:** Offer constructive feedback to program facilitators and organizational staff based on the peer-review findings. Highlight strengths and areas for improvement in both organizational practices and educational programs. The QualitE team provided knowledge **on how to give constructive feedback** (**Annex 6**) for the participants of the training.

4. **Supporting self-development:** Facilitate the professional development of program facilitators by identifying their competencies, strengths, and areas for growth. Encourage reflection, goal-setting, and the development of action plans for ongoing improvement.

5. **Enhancing stakeholder engagement:** Promote stakeholder engagement and collaboration by involving a diverse group of reviewers, including internal staff members, external experts, educators, environmentalists, and community members.

6. **Fostering continuous improvement:** Establish a framework for continuous improvement within the organization by providing actionable recommendations and encouraging the implementation of best practices identified during the peer-review process.

We then created **a checklist** (**Annex 7**) for ourselves to follow as we enter the collaboration between Estonia and Finland. This checklist guided us in evaluating each other's work and providing feedback.

## Chapter 6
## Project findings and recommendations for an improved quality assessment system in environmental education

The first project training visit took place in Helsinki from 22nd April to 24th April 2024, the program of which can be found in Annex 8. The second project training visit took place in Tartu from 25th September to 27th September 2024, the program of which can be found in Annex 9.

In preparation for both training trips, the participants were introduced to a webinar presentation (recorded on Tartu Nature House YouTube channel), which gave them an overview of the different approaches to quality systems in environmental education in Estonia and Finland and an overview of the activities of the project partners in the environmental education landscape. The participants also evaluated the educational programs presented during the training trip on the basis of their descriptions, using the "Thorough program" criteria in Estonia. During the training visits, the educational programs were inspected to check their compliance with the descriptions, and the centres visited were evaluated according to the LYKE audit form. Participants shared feedback, drew conclusions and made recommendations for possible improvements. These observations are now listed below in this document.

After the recommendations were written and the results of the project were discussed, the QualitE project team presented the results of the project at an international webinar "Understanding circular economy through quality assurance in environmental education", which can be watched on the Tartu Nature House YouTube channel as well.

## *6.1. Regarding the webpages*

### 6.1.1. Finnish webpages

**The Helsinki Region Environmental Service (HSY)** offers free environmental education programs to kindergartens and schools in Helsinki, run by the Environmental School Polku (a unit under HMARC). Bookings for the programs, based on general descriptions, can be made via the HSY **website**. The website of the Polku Environmental School directs subscribers to the HSY website for booking. This booking system has caused confusion and can seem complicated.

**Recommendations:**

1. Finland should take the Estonian quality criteria for program descriptions as a model. By making the descriptions on the website clearer, HSY and Polku Environmental School can help new customers to better understand the links between the national curriculum and the program content.
2. At the end of the program description, some additional activities could be described, which would allow us to recall and consolidate what has been learnt later in the classroom or at home with parents. This recommendation is intended to complement educational programs in both Estonia and Finland.
3. In order to improve the booking system for free programs in Finland, one could try to analyse the customer flow to save time for teachers and bring more customers to one website or for example to the Mappa.fi platform.

### 6.1.2. Estonian webpages

TEEC showcases the program descriptions on their webpage along with a descriptive picture. When clicking on it, a more precise description will appear and the program that has a Cloudberry label will be seen clearly. All TEEC's programs are also added to the Keskkonnaharidus.ee portal and the ones with a Cloudberry label are also seen quite clearly for the "customers".

**Recommendations:**

1. Every year, in addition to the quality assessment process of the Estonian Environmental Education Association, update the descriptions on the Tartu Nature House website and the Environmental Education.ee portal.
2. Make an English description for each educational program on the website, even if the program cannot be ordered in English. This will raise the visibility of Tartu Nature House as a provider of quality environmental education in Europe.

## *6.2. Regarding the Circular Economy Programs*

### 6.2.1. Program manuscripts used in Finland

Environmental School Polku creates written guidelines for each educational program, providing instructors with detailed descriptions of methodology, materials, their locations at the center, activities, and schedules for delivering specific content. This internal document ensures high-quality programs and supports the thorough preparation of new environmental education instructors. Links to additional materials are included at the end of the guide. These guidelines are not shared with teachers who order the programs. Participants from Tartu Nature House who attended a training trip in Helsinki found them highly useful and expressed interest in developing similar guides for their own programs. The guide would function as a dynamic working document, updated as needed after each program session.

**Recommendations:**

1. The tutor's guide for the "ABC of Circular Economy" program, tested in Finland, could also meet the criteria of the Estonian “Cloudberry label".
2. Key details, such as the location of materials within the center or the quantity needed for different group sizes, could be highlighted using colors or borders. This would help instructors focus on either content or technical details as needed.

3. References to additional materials included at the end of the guide could be emailed to teachers who order the program, either as preparation or follow-up. This would help them better prepare their class, deepen topic understanding, or assist with summaries.

### 6.2.2. Environmental School Polku's Educational Programs on Circular Economy

The "Circular Economy ABC" educational program, demonstrated in Helsinki on April 23, 2024, focused on sustainable lifestyles, offering students concrete and relevant examples of actions they can take at home to promote sustainability. The classroom teacher played a supportive role in delivering the program, actively participating, asking additional questions, and rephrasing content to enhance student understanding.

Environmental School Polku primarily conducts mobile outdoor learning activities, visiting schools directly as they do not have their own classroom. All materials fit into a single bag, which can be transported by one person using public transportation across Helsinki. During the training trip, participants observed a program held in a park near Environmental School Polku. Due to an unexpected snowstorm, the session took place in a less ideal setting (a parking lot), but being outdoors still provided students with valuable benefits. The program was highly engaging and inclusive.

**Recommendations:**

1. The instructor could assign a take-home task for students, encouraging parental involvement in discussions (similar to HMARC's educational sticker initiative).
2. After the program, a follow-up activity (such as a quiz, challenge, or game using platforms like Kahoot or Seppo) could be sent to participants.
3. Before developing new programs, teachers should be consulted to assess their current needs for teaching this topic. Since needs evolve over time, regular evaluations help improve program quality. For example, when the Circular Economy ABC program was created, sorting plastic packaging was a

key issue, but now in Finland, bio-waste or textile waste sorting may be more relevant. Additionally, adults and students process this information differently. Ensuring students grasp the big picture of waste sorting—understanding how specific examples fit into the larger framework—remains essential. Conducting student surveys could help map their expectations.

4. For program development, students could be more involved in certain aspects, such as choosing colors to form groups, rather than having the instructor assign them.

The picture below was taken when the Estonian participants were testing the “Case cellphone” program in Finland.

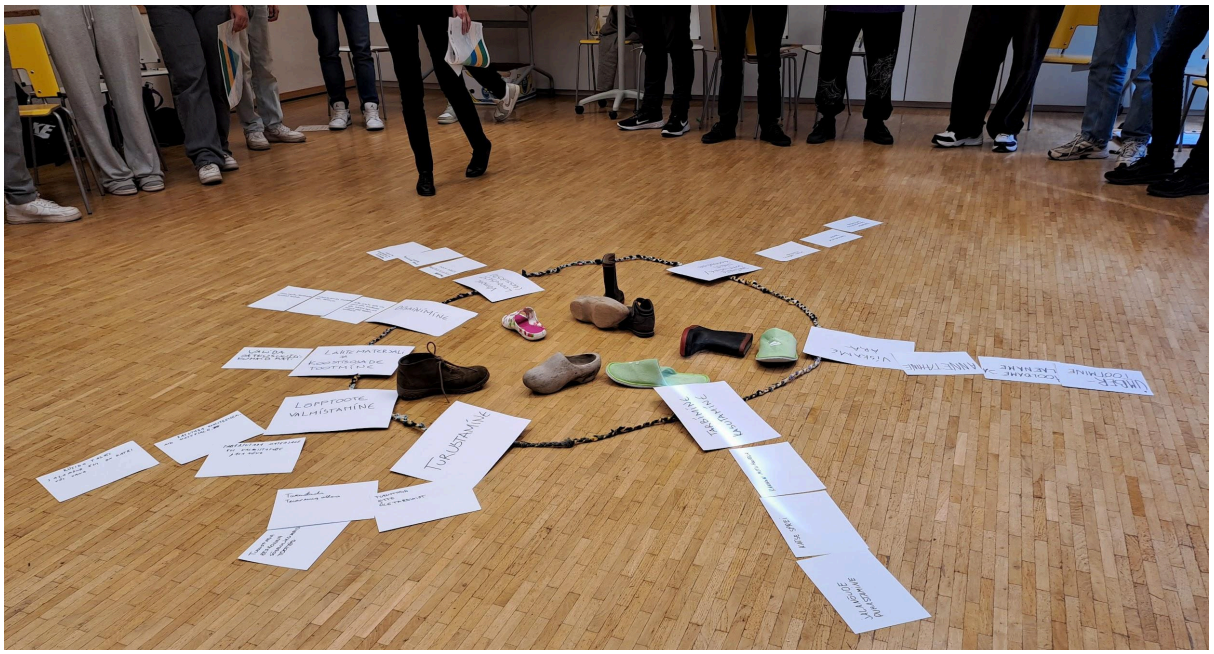
### 6.2.3. Circular Economy Educational Programs at Tartu Nature House

The “Our Shoes Leave a Footprint: Let’s Talk About Circular Economy” educational program for 7th–9th grade students was piloted in Tartu on September 26, 2024. Participants first evaluated the program through a SurveyMonkey questionnaire,

followed by a group discussion where each evaluator could share observations and comments verbally.

The instructor introduced students to the principles of circular economy, focusing on their own shoes. The discussion covered topics such as the sourcing of different shoe materials, extending product lifespan, maintenance, reuse, and recycling options. The instructor used a calm tone and showed enthusiasm to engage and motivate students to listen and participate actively.

The photo below was taken during the pilot session at Tartu Nature House.




**Recommendations:**

1. Although the program description received the “Cloudberry Label”, most evaluators would not have recommended it to their colleagues because the instructor did not use enough active learning methods to engage students. It was suggested that the program be further developed by incorporating more interactive and action-oriented learning techniques.

Tartu Nature House implemented this recommendation in November 2024, enhancing the program with more engaging methods and re-piloting it with a larger group of students.

The “Could Circular Economy Be the Solution?” educational program for 10th–12th grade students, observed in Tartu on September 26, 2024, was piloted with 30 students in a highly professional, calm, and empathetic manner. The initial evaluation was conducted through a SurveyMonkey questionnaire, followed by a group discussion. Most evaluators considered the instructor’s work outstanding, and all would recommend the program to their colleagues even after this first pilot.

The photo below was taken during the pilot session at Tartu Nature House.

**Recommendations:**

1. Adjust the learning materials provided to students—revise texts and replace some blurry photos with clearer ones.

These recommendations were implemented before the project ended, and the updated materials were already in use by November 2024.

### *6.3. Regarding LYKE certification criteria*

Finland's environmental education quality system enables centers to develop progressively - starting as a candidate member, advancing to an activity center, and eventually becoming a development center. The system outlines specific criteria that centers must meet at each certification level. This clarity helps centers understand expectations and work effectively toward meeting them. The criteria comprehensively cover various aspects of environmental education, from sustainable development goals to experiential learning methods and environmentally friendly practices.

**Recommendations:**

1. For activity center certification, the following criteria could be added:

- *"Safety guidelines have been established for all activities."*
- *"There is collaboration with local communities or educational institutions."*

2. For development center certification, the following criteria could be added:

- *"Measures participants' growth in environmental awareness or acquisition of outdoor learning skills."*
- *"Introduces innovative practices to network members or develops educational programs through international collaboration."*
- *"Regularly assesses the center's environmental impact."*

This approach would help ensure that centers not only promote sustainability but also implement sustainable practices themselves, reducing their own environmental footprint and sharing insights from practical experience.

3. To enhance the effectiveness of the criteria, it is essential to distinguish between general operational aspects of a center and specific educational program requirements. The criteria should include key questions aimed at identifying strengths and areas for development.

## *6.4. Regarding LYKE audit*

In Finland, regular peer audits play a key role in maintaining and improving the quality of environmental education. Audits provide an opportunity for external evaluation and constructive feedback, which are essential for ongoing development.

The process focuses more on collaborative discussion and learning rather than supervision or control, making the system both effective and positive. The LYKE auditing system considers both program content and its practical implementation, offering a comprehensive overview. Overall performance is assessed based on a single program and a one-day visit, with flexibility to conduct a two-hour follow-up discussion online after the visit.

The inclusion of self-assessment (Part A) encourages centers to reflect on their practices and identify areas for improvement, fostering self-awareness and continuous growth. Both the audit guidelines and forms emphasize collaboration and mutual support among centers. This approach strengthens networking, allowing centers to share best practices and support each other in meeting quality standards.

**Recommendations:**

1. Integrate feedback loops at every stage of the audit process. This would involve gathering feedback from the audited center, auditors, and the LYKE association office after each audit to identify areas for improvement and refine the process over time.
2. Adapt the audit system to accommodate mobile education centers. For example, Environmental School Polku, which primarily visits schools rather than hosting programs on-site, requires tailored evaluation criteria to reflect this unique operational model.
3. Use digital tools and platforms to streamline self-assessment and the audit process, making them less resource-intensive and more accessible for all types of centers.
4. Enhance post-certification monitoring and support, ensuring that centers receive ongoing guidance to maintain and improve the quality of their services.

5. Promote transparency and accountability by sharing audit results and improvement plans within the broader LYKE network, encouraging peer learning and a culture of collaboration.
6. Provide continuous professional development opportunities for staff within the LYKE network to keep them updated on best practices and emerging trends in environmental education. Estonia's competency model and self-assessment tool could serve as a useful reference for developing such training programs.

### *6.5. Regarding the Cloudberry quality label for program descriptions in Estonia*

Estonia's quality label provides an effective framework for evaluating existing educational program descriptions and can also serve as a checklist for developing new programs.

**Recommendations:**

1. The evaluation currently focuses only on program descriptions, assessing planning rather than real-world execution. The third component of Estonia's national quality assessment (organizational audits, expert evaluations) should include at least one expert review of facilitated programs.
2. The quality label criteria used in Estonia could serve as a valuable tool worldwide for designing new programs, offering guidance for effective and persuasive client communication.
3. Finland's audit system could incorporate educational program-related self-assessment questions, inspired by Estonia's quality model—potentially in the form of a checklist within the self-evaluation form.

## *6.6. Regarding the Competency model and self-analysis tool in Estonia*

Estonia's competency model and self-assessment tool prototype support the professional development of educators by providing a structured framework. This allows them to evaluate their competencies in environmental education, set personal development goals, and outline paths to achieving them.

**Recommendations:**

1. Self-assessment can be time-consuming and complex without proper guidance, leading to the risk of it being overlooked or misused. To maximize its impact, organizations should allocate dedicated work hours for reflection, supported by an expert or mentor. This structured approach ensures meaningful insights and fosters behavioral changes that enhance both individual and team performance.
2. Finland has not yet developed a similar initiative, but there is strong interest in the Estonian model. Once the prototype is fully operational, it could be translated into Finnish for potential future use in Finland.

## SUMMARY

This document has been prepared by Tartu Nature House and Helsinki Environmental School Polku in cooperation with the Estonian Environmental Education Association and the Finnish Association of Nature and Environmental Schools. The document was prepared in the framework of the ERASMUS+ project "Together towards improving the quality of environmental education " (2023-2-EE01-KA210-SCH-000185260) in 2024. The project was co-funded by the European Union.

The main objective of this document is to provide an overview of the quality systems of non-formal environmental education in both partner countries and to present the learning tools and findings of the project to different stakeholders.

All materials and this overview will be published on the project partners' websites and can be downloaded for further use. For example, from the Tartu Nature House website.

# ANNEXES

## Annex 1

## Predetermined quality criteria for the description of a good environmental education program in Estonia

### 1. Name, brief description and general information about the program of study

The name of the learning program, a brief description and general information provide all interested parties - both the teacher (who decides whether the learning program is suitable for his/her students) and for participating students and their parents - with a clear overview of the program.

**General information criteria:**

1.1. The name of the program provides a clear overview of the subject;

1.2. The short description of the learning program is given in clear terms;

1.3. The target group of the program is described: school level, age of participants, language of instruction, recommended group size;

1.4. The duration of the program and a suitable season/times for the program are indicated;

1.5. The place where the learning program will take place (center, school, hiking trail, etc.) is indicated;

1.6. Where appropriate, the specific characteristics of the learning environment (narrow stairs, boardwalk, hilly terrain, marshy area, etc.) are indicated;

1.7. The necessary equipment (rubber boots, writing utensils, personal water bottle, etc.) that students will need on the field trip is listed.

**2. Objectives of the learning program.** Learner-centered and clearly formulated objectives should make it possible to judge whether the program activities meet the objectives set and allow for a subsequent evaluation of the achievement of the results. **Objectives' criteria:**

2.1. The learning outcomes to be achieved by the end of the program are listed: knowledge, skills and attitudes according to the target group;

2.2. The links with the national curriculum (curricula, generic competences, transversal themes, integration of subjects, etc.) are clearly indicated;

2.3. The links with sustainable development (addressing the natural, cultural, social and economic environment in a coherent way).

**3. Content and methodology of the learning program.** The description of the program content and methods forms the main part of the program document, and its thorough design will ensure the smooth implementation of the whole program and the achievement of the results described in the objectives.

**Criteria:**

3.1. The main themes of the program form a coherent whole and will ensure that the objectives are met;

3.2. The chosen methodology is fit for the purpose and target group; the activities are meaningful and purposeful;

3.3. Active learning methods are used, which are inclusive and varied;

3.4. The materials and resources used are appropriate to the methodology, relevant and age-appropriate, and available in sufficient quantities for the number of students;

3.5. The content of the program contributes to the development of environmentally responsible values and behaviors; the links between humans and the natural environment are addressed in the context of the program theme;

3.6. The content is science-based;

3.7. The program ends with a summary to make sure that the learning outcomes described in the objectives have been achieved.

**4. Learning environment (place of delivery).** The place where the program is carried out must support the achievement of the programs' objectives. A field trip is justified if a learning environment other than the usual school environment and its surroundings is needed to achieve the objectives of the program.

**Criteria:**

4.1. The learning environment and its specificities support and are necessary for the achievement of the outcomes described in the objectives;

4.2. The learning environment is safe. Measures to ensure safety are generally outlined in the program or refer to general rules agreed upon at the center and presented to participants at the beginning of the program.

4.3. The program provides information on the opportunities or lack of opportunities for students with special needs to participate in a learning program. Specific arrangements will be specified if necessary.

**5. Supervisors.** The facilitator plays a key role in the success of the learning day. The prerequisites are often difficult to describe. The teacher deciding on the choice of program should know in advance who will be in charge of the program and deliver on the promises made in the description. The qualification of a supervisor is one of the necessary prerequisites for the implementation of a science-based program. The teacher is aware of his/her own role in both the preparation and the implementation of the program.

**Criteria:**

5.1. The name(s), educational background, competence and experience of the person(s) implementing the program in the context of this program are indicated;

5.2. The program provider's expectations of the accompanying teacher in terms of his/her role and contribution before and during the learning program are set out.

**6. Evaluation and feedback.** The quality cycle starts with setting objectives and ends with evaluating results. The feedback given by the teacher to the program contributes to the cooperation between the kindergarten/school and the center.

**Criteria:**

6.1. The description of the program will indicate whether and how the center will cooperate with the nursery/school (prior agreements, prior specification of the program, pre-selection of pupils, etc.). Whether, when and how feedback on the overall quality of the learning program will be sought from the commissioning teacher.

## Annex 2

## "A well-thought-out program" quality label used in Estonia

The label "A well-thought-out program" is awarded to a description of an environmental education program that meets the quality criteria developed by Estonian environmental education experts.

**Awarding the label:**

1. The award of the label is organized by the Estonian Environmental Education Association. The awarding of the label is decided by a panel of external evaluators convened by the Association, who analyze the descriptions of the educational program on the basis of the criteria.
2. Application for and use of the label is voluntary for environmental education providers.
3. A program description submitted for evaluation that does not meet the requirements can be resubmitted for evaluation after a minimum of one year.

**Use of the label:**

1. The label must correspond to the template on the Association's website, a black-and-white image may also be used.
2. The numbered badge is only valid in conjunction with the corresponding program. The mark shall be added to the description of the program in such a way as to distinguish it from other program descriptions.
3. The label is valid for 5 years.

**The holder of the mark shall be entitled to:**

1. Use the label to promote the program.
2. Publish the label on the Environmental Education Portal (www.keskkonnaharidus.ee) together with the relevant program.

## Annex 3

## LYKE certificate criteria.

A member of the LYKE network must be certified as an activity center or development center. When a site joins the LYKE network, it fills in a certification form, which allows it to be certified as a development center or activity center if the criteria are met. Certification is always approved by the Board of the Finnish Association of Nature and Environment Schools. If the answers do not yet allow certification, the center is asked for further information and/or informed how it should develop its activities in order to reach the certification level. Peer audits ensure quality and increase peer support. **All sites must meet criteria 1-9 for activity centers. Development centers must also meet at least two of criteria 10-12 for development centers.**

## *CERTIFICATION CRITERIA: LYKE OPERATIONS CENTRE (CRITERIA 1-9):*

**1. The site has regular annual nature or environmental education activities for groups of children and young people.**

*"Nature or environmental education activities" means a set of programs offered to early childhood education groups and/or schools with the aim of promoting an ecologically sustainable future. These programs last for at least one hour, most commonly several hours at a time. They are open to public application, booking or enrolment, i.e. they are aimed at a wider area than, for example, a single school." (Rules of the Finnish Association of Nature and Environment Schools) The principles of nature and environment school activities are reflected in all LYKE-certified activities.*

**2. The activities of the site support the implementation of the sustainable development education objectives of the curricula and/or early childhood education and care plans.**

*The need for a sustainable lifestyle is at the heart of the value base of the curricula and early childhood education and care. The staff at the site have familiarized themselves with the ECEC curricula and have taken them into account when planning their teaching and activities.*

**3. The site supports their group with activities involving the teacher/educator to implement environmental education and sustainable development goals in their own work.**

*Each visit to a LYKE site is also an in-service training session for the teacher participating in the program with their group. Teachers and educators are provided with methodologies and ready-to-use teaching tips, as well as examples and practices from the site to show how to implement the SD education goals in school teaching and practice. Teaching tips and materials will be added to the MAPPA material bank.*

**4. The teaching methods are based on experiential, experiential and/or investigative learning.**

*Teaching methods are participatory and pedagogically based. The programs on offer include functional, investigative, experiential and/or experiential elements. The teacher will take into account the different target groups, the different starting points of the groups and the different types of learners. The programs develop the inclusion of children and young people.*

**5. The learning environment of the site is nature or other environments that enable functional environmental education.**

*The learning environment is nature or other environments that enable functional environmental education (e.g. a museum or nature center). The site may have a fixed establishment where the teaching takes place in a natural environment. In the case of a traveling site, the learning environment is chosen on the basis of the location of the site visited.*

**6. The activities of the site are in line with a sustainable lifestyle. Clients are encouraged to act sustainably in their daily lives.**

*For example, sustainable lifestyle activities are reflected in the sites in the following ways:*

- *Attention to waste prevention and waste sorting*
- *Attention to electricity and heat consumption*

• *Attention to water consumption*

• *Thinking about procurement from a sustainability perspective (e.g. long-lasting and reusable equipment, avoiding single-use products, favoring services, eco-labelled products)*

• *Clients are encouraged to make sustainable food choices regarding snacks or other food related to the programprogramme*

• *Customers are encouraged to use light and public transport*

• *During the visit, the site will explain its sustainable practices to customers and encourage them to act sustainably in their daily lives.*

**7. The site has permanent, year-round staff and at least one member of staff has an environmental educator qualification or equivalent.**

*Training suitable for the job of an environmental educator includes, for example:*

• *a university degree in education with a combination of studies in environmental science, natural sciences and environmental education*

• *a university degree in environmental or natural sciences combined with pedagogical skills*

• *a specialized vocational qualification in environmental education.*

*If you want more details, please visit this webpage.*

**8. The site staff develop environmental education skills by participating in regularly attending in-service training.**

*The training can, for example, be LYKE network training meetings organized by the Finnish Association of Nature and Environment Schools. The twice-yearly meetings promote cooperation between LYKE network members.*

**9. Children and young people are involved in the development of activities. Feedback on the activities is collected and used in the development work.**

*Feedback is collected from children and young people in the visiting groups as well as from teachers. This feedback is genuinely taken into account in the development of activities.*

## *CERTIFICATION CRITERIA: LYKE DEVELOPMENT CENTRE (CRITERIA 10-12):*

The LYKE development centers develop and promote environmental education in a variety of ways in their regions. In addition to certification criteria 1-9, the development center must meet **at least two of the following:**

10. It actively participates in the environmental education network in its region.
11. Supports and promotes the Green Flag or other sustainable development programs in schools and kindergartens in its area.
12. Provides training for educators and teachers in environmental education and sustainable development objectives.

# Annex 4

# Audit guidelines of the LYKE network.

## *ABOUT THE PROCESS*

The purpose of the LYKE network audit is to support and diversify the work of the network's branches and to maintain the quality requirements of the LYKE certificate. The certificate is valid for three years at a time and is renewed by a peer audit, which is recommended every two years. The audit assesses the fulfillment of the certification criteria from the point of view of the overall operation of the LYKE site, based on an interview and observations of the program. At the same time, the sites receive feedback on their activities and share their good practices.

Audit partners are selected in the office, taking into account the wishes of the offices. The audit partners will contact each other in advance to agree on the date and time of the audit and the persons who will attend the audit. One day is set aside for the audit, during which the auditors arrive to observe the teaching of the site to be audited. Two forms **(Annex 5)** are filled in during the audit, form A to be completed by the auditee in advance and form B to be completed by the auditee on the day of the audit. At the end of the day or at another agreed time, a joint discussion session is held.

## *GUIDANCE FOR THE AUDITEE*

### Before the audit day:

Complete form A in advance and submit it to the auditors at least one week before the audit. The form is used by the site to assess compliance with the certification criteria (A1), describe the program and objectives of the audit day (A2) and indicate any specific requests or areas for development in relation to the audit (A3). Please also inform the group teacher in advance of the audit.

### In the teaching situation on the day of the audit:

Introduce the auditors to the teachers and pupils in the group, so that everyone knows why there are so many adults in the group. The program for the audit day

will then proceed according to the normal activities of the site. The auditors unobtrusively observe the teaching situation from the sidelines.

## *GUIDANCE FOR AUDITORS*

### Before the audit day:

Please consult form A provided by the auditee in advance, which describes the program and objectives of the audit day (A2) and your wishes for the audit day (A3). The self-assessment (A1) carried out in advance by the auditee is an important basis for the evaluation on the day of the audit. Form A is sent to the auditors about a week before the audit day.

### In the teaching situation on the day of the audit:

Look at the questions on form B, follow the day with the group and make observations and notes. Observations are made unobtrusively, as you watch from the sidelines. Tip: If you wish, you can also document the program by video or photography, if this suits everyone involved. Form B will be filled in after the teaching session in a joint discussion session.

## *GUIDELINES FOR A JOINT DISCUSSION*

After the group has left or at another agreed time, a joint discussion session will be held for about 2 hours. If necessary, the discussion can be held remotely. A pre-completed audit form A is required for the discussion session. Form B will be completed at this session (using word processing software, i.e. Word). If there are many auditors, a chairperson and a secretary will be chosen. The chairperson will ensure that all the necessary points are covered and the secretary will take notes and complete form B. The discussion session will proceed as follows:

1. Fill in section B1: The auditors will answer questions on the certification criteria on the basis of their observations during the day and by asking the staff of the auditee about the operation of the site.

2. Together, we will discuss and assess the fulfillment of the certification criteria using sections A1 and B1 of the form.

3. An assessment of the fulfillment of the certification criteria is recorded under B2. If not all criteria are fulfilled, the necessary development measures are discussed together. Under B2, the necessary development measures are recorded, together with the wishes of the site for the necessary support to be sent to the LYKE office for information.

## *RETURN OF FORMS*

The completed forms (A and B) will be sent as an email attachment (in Word or PDF format) to three parties: the two sites that participated in the audit and the LYKE network office (maija.ihantola@luontokoulut.fi).

A summary of the forms is made at the office. The summary will be discussed at a meeting of the Board of the Finnish Association of Nature and Environment Schools and will be used to help develop the LYKE network. Aside from the shortcomings of the certification criteria, individual responses are not assessed by the Board or the Bureau.

## *WHAT IF NOT ALL CERTIFICATION CRITERIA ARE MET?*

If not all the certification criteria are met, the site has one year to develop its activities to meet the criteria. Support for this development is available from the office. The fulfillment of the criteria to be developed will be verified in a short action description sent to the LYKE office or during the next audit. If the criteria are still not met at this next audit, the site will be moved to a pilot member.

## Annex 5

## Audit forms of the LYKE network

**SECTION A - To be filled in by the auditee in advance!**

*Date:*

*The name of the auditee and the person who completed the form:*

**ACTIVITY AS A MEMBER OF THE LYKE NETWORK. Mark x if true.**

☐ The site responds to an annual customer survey.

☐ The site participates in a training session or event organized by the LYKE network (e.g. LYKE meeting, ULOS-UT-OUT, distance meetings).

☐ It participates in the statutory meetings of the Finnish Association of Nature and Environment Schools (spring and autumn meetings).

☐ The LYKE certificate (certified LYKE activity center/development center) is displayed on the website of the branch.

☐ The site has updated its information on MAPPA.fi.

☐ The site has added content (materials, training or services) to MAPPA.fi.

☐ The employees of the branch follow the union's WhatsApp group "LYKE-parviäly".

**A1. EVALUATE THE FULFILLMENT OF THE CERTIFICATION CRITERIA IN YOUR ESTABLISHMENT. Mark x if the criterion is met.**

**CRITERIA FOR THE ACTIVITY CENTRE (ALL SITES):**

☐ 1. The site has regular annual nature or environmental education activities for groups of children and young people.

☐ 2. The activities of the establishment support the implementation of the sustainable development education objectives of the curricula and/or early childhood education and care plans.

☐ 3. The site supports the teacher/educator participating in the activity with his/her team to implement environmental education and sustainable development goals in his/her work.

☐ 4. The teaching methods are based on experimental, experiential and/or investigative learning. Teaching methods are participatory and pedagogically based.

☐ 5. The learning environment of the site is nature or other environments that enable functional environmental education.

☐ 6. The site's own activities are in line with sustainable lifestyles and are communicated to customers.

☐ 7. The site has permanent, year-round staff and at least one member of staff has a qualification or equivalent training as an environmental educator.

☐ 8. The Agency's staff develop their environmental education skills by regularly attending in-service training courses.

☐ 9. The center collects feedback and develops its activities with the involvement of children and young people.

**DEVELOPMENT CENTRE CRITERIA (DEVELOPMENT CENTERS ONLY):**

It acts as a development center for its region, developing and promoting environmental education in its area in a variety of ways. The site must meet at least 2 of the following criteria:

☐ 10. The Agency actively participates in the environmental education network in its region.

☐ 11. Supporting and promoting the Green Flag or other sustainable development programs in schools and kindergartens in its area.

☐ 12. Providing training for educators and teachers in support of environmental education and sustainable development objectives.

**A2. AUDIT DAY PROGRAM, PART 1. Fill in a table showing the course of the program, the time spent, the tools, methods and objectives. Alternatively, you can attach a program implementation plan or provide similar information in another format.**

| Schedule (When will it be done?) | Content (What to do?) | Working methods and procedures (How to do it?) | Materials and equipment (What do you need?) | Objectives (knowledge, skills, experience, experiential) (Why do it?) |
|---|---|---|---|---|
| | | | | |
| | | | | |

**A2. AUDIT DAY PROGRAM, PART 2. Finally, please assess the achievement of the environmental education objectives of the program:**

- What are the main environmental education objectives of the program?
- Will the achievement of the objectives be evaluated after the program? If so, how?
- How does the program strengthen children's/youth participation?

**A3. THE AGENCY'S OWN WISHES FOR THE FOCUS OF THE AUDIT DAY.**

- What are the areas for improvement?
- What in particular would you like to see audited?

**SECTION B - To be filled in by the auditor after the teaching situation!**

*Date:*

*Name of the site to be audited and those present:*

*The auditors, i.e. the persons who completed the form and the name of the site:*

## B1. ANSWER THE FOLLOWING QUESTIONS RELATED TO THE CERTIFICATION CRITERIA.

Observe the teaching situation, interview the staff of the audited site and answer questions based on your observations and the interview. The certification criteria are attached. Please note that the audit assesses the performance of the site as a whole; the program observed on the day of the audit does not have to meet each criterion on its own, but the fulfillment of each criterion will be verified by means of supplementary questions in form B.

**Criterion 1:**

1. What are the main customer groups in the branch?
2. How are groups selected?

**Criterion 2:**

The OPS and VASU's value base is based on the need for a sustainable lifestyle.

1. Please give examples of how the education and programs at your site provide guidance on sustainable lifestyles.

**Criterion 3:**

1. How is the group teacher involved in the program?
2. How can teachers be supported to continue environmental education and outdoor learning in their work?

**Criterion 4:**

1. How do teaching methods support the inclusion of children and young people?
2. How does the teacher foster a sense of community in the group and take into account different learners?

**Criterion 5:**

1. How does the learning environment support the learning objectives?

**Criterion 6:**

Describe how sustainable living is taken into account in the branch's own activities.

1. How is sustainable living reflected in the daily life of the branch and how are customers encouraged to act sustainably in their daily lives?

**Criterion 7:**

1. How could continuity be strengthened (if necessary)?

**Criterion 8:**

1. How often and what kind of training opportunities have staff attended?
2. What kind of further training would be needed in the branch?

**Criterion 9:**

1. Who is feedback collected from?
2. How are ideas and wishes for improvement collected from children and young people?
3. How is feedback taken into account in the development of activities?

**If the audited site is a development center, in addition to the above Criteria 10-12:**

By acting as a development center for the LYKE network, it develops and promotes environmental education in its area in a variety of ways. Describe the role of the site in developing environmental education in the region (please give concrete examples to illustrate criteria 10-12).

## B2: MEETING THE CERTIFICATION CRITERIA

Assess whether the criteria are met (using A1 and B1)? Mark x.

☐ YES

☐ NO

**If the criteria are not met:**

1. Which criteria need improvement (criteria numbers)?
2. Think together and write down suggestions for improvement actions for each of the criteria that are lacking.
3. Does the branch have any requests for support to improve its activities?

## Annex 6

## How do you provide constructive feedback to a colleague in the field of environmental education?

Providing constructive feedback to a colleague whose work you have just peer reviewed is essential for their professional growth and the improvement of their work. Here are some guidelines to help you give effective feedback:

1. **Start with positive aspects:** Begin by highlighting the strengths and positive aspects of their work. This sets a positive tone for the feedback session and helps the colleague feel valued. Acknowledge their efforts and any successful elements of their work.
2. **Be specific:** Provide specific examples to support your feedback. Instead of saying, "The report needs improvement," say, "The introduction was well-written and engaging, but the data analysis section could benefit from more detailed explanations."
3. **Focus on improvement:** Frame your feedback in terms of improvement rather than criticism. Use phrases like "Consider revising..." or "One suggestion for enhancement is..." This encourages your colleague to see your feedback as an opportunity for growth rather than as a critique of their abilities.
4. **Be objective:** Keep your feedback objective and focused on the work itself, rather than on the individual. Avoid personal attacks or making assumptions about their intentions. Stick to observations and specific points related to the work.
5. **Offer solutions or suggestions:** If you identify areas for improvement, offer constructive suggestions or solutions. This could include providing examples, recommending resources for further learning, or offering to provide assistance if needed.
6. **Encourage dialogue:** Invite your colleague to ask questions or seek clarification on any feedback you provide. Encourage open communication and be receptive to their perspective. This helps foster a collaborative environment and shows that you value their input.

7. **Set clear expectations:** Clearly communicate your expectations for any revisions or changes based on your feedback. Provide deadlines if necessary and offer to provide ongoing support or guidance as they work on improving their work.
8. **End on a positive note:** Conclude the feedback session with words of encouragement and support. Reiterate your confidence in their abilities and express appreciation for their willingness to receive feedback. This helps maintain a positive relationship and encourages your colleague to continue to seek feedback in the future.

Remember, the goal of providing feedback is to help your colleague grow and improve, so approach the process with empathy, respect, and a genuine desire to support their development.

## Annex 7

## The peer review checklist

**Introduction to peer review process (both for the school class and the reviewers)**

- ☐ Overview of the purpose and objectives of the peer review.
- ☐ Importance of peer review in assessing organizational effectiveness and program quality.
- ☐ Explanation of the peer review timeline and process.

**Reviewer roles and responsibilities**

- ☐ Description of reviewer roles and expectations.
- ☐ Emphasis on professionalism, confidentiality, and impartiality.
- ☐ Importance of active participation and collaboration.

**Observation guidelines**

- ☐ Instructions for observing program sessions, interactions, and activities.
- ☐ Guidance on what aspects to focus on, including curriculum delivery, student engagement, and program effectiveness.
- ☐ Reminder to take detailed notes and gather evidence to support findings.

**Data collection methods**

- ☐ Overview of data collection methods, including documentation review, participant observation, and interviews.
- ☐ Instructions for documenting observations, collecting feedback from participants, and recording relevant data.

**Discussion and analysis**

- ☐ Guidelines for the group discussion session, including how to share observations, analyze findings, and identify strengths and areas for improvement.
- ☐ Emphasis on open dialogue, active listening, and respectful communication.

**Providing feedback**

- ☐ Strategies for providing constructive feedback to program facilitators and organizational staff.
- ☐ Tips for highlighting strengths, addressing weaknesses, and offering

actionable recommendations.

**Self-development planning**

- ☐ Explanation of the self-development planning session.
- ☐ Guidance on how program facilitators can reflect on feedback received, identify competencies, and set goals for professional development (Estonian model**).**
- ☐ Importance of creating actionable plans with specific objectives and timelines.

**Documentation and follow-up**

- ☐ Overview of the documentation process, including recording peer review findings, feedback provided, and action plans developed.
- ☐ Importance of follow-up and ongoing support to ensure the implementation of recommendations and continuous improvement.

## Annex 8

## The training program in Helsinki for the QualitE project implementation

| | |
|---|---|
| **Name of the activity:** | Quality assurance training in Helsinki,<br>22.-24.04.2024 |
| **Project title:** | Together Towards Improved Quality of Environmental Education (QualitE) |
| **Project code:** | 2023-2-EE01-KA210-SCH-000185260 |
| **Place:** | Helsinki, Finland |
| **Purpose of the activity:** | To test and refine quality assurance tools used in Finland and Estonia with 8 participants from each partner organization with additional experts from associated partners: the Estonian Environmental Education Association (EEA) and the Network of the Finnish Association of Nature and Environment Schools (LYKE).) Also to get familiar with the Finnish best practices, and conduct a peer review for a native circular economy program and give feedback to tool and study program enhancements. |
| **Date(s):** | 22.-24.04.2024 |

**Monday 22.04**

**06.13** Train from Tartu

**10.30** Ship from Tallinn

**13-14** Vegetarian/vegan lunch at the Pantry

**14.30** Welcome to HMARC Hakaniemi Office (Siltasaarenkatu 11 C 42-45, 2. floor): Short introduction round and program, general introduction to our work

**15.30** Showcasing of Study Programs: Case Cellphone outside in the park with Hannele Parviainen, Circular Economy Mobile Game inside

**17.00** Sharing experiences, questions, comments

**18.30** Check-in to Helka hotel (Pohjoinen Rautatiekatu 23, Helsinki)

**Tuesday 23.04**

**7.30** Breakfast at hotel

**8.30** Metro from Kamppi to Hakaniemi Office (Siltasaarenkatu 11 C 42-45, Helsinki)

**9-10.00** Preparing in the office before following the programprogramme and peer review: LYKE audit instructions and forms recap

**10-11.00** Circular economy programs peer review: Going through the audit process for the study program *ABC to Circular Economy* with Elena Lehtimäki and the 6th grade of Käpylä primary school

**11-12.00** First reactions, reflections, feedback (group divided into pairs, as a walking meeting)

**12-13.00** Lunch at Kaisaniemi Park Cafe Viola

**13-16.00** Workshop at Hakaniemi Office: Filling up the LYKE audit forms, Discussions on reactions, reflections, feedback, program description evaluation: Results of the evaluation by Estonians, and follow-up discussion

**Group work:** Quality Assurance (QA) Tools development: Strengths and weaknesses of the LYKE system and Estonian system. What could be improved? Lessons learned for the whole QualitE Project, Division into groups.

**Conclusions of the Group work**

**17.30** Dinner Restaurant at Nolla (Zero) (Fredrikinkatu 22)

**Wednesday 24.04**

**7.00** Breakfast at hotel and check-out

**8.00** Bus 213 from Kamppi Bus Station to Nihtisilta, Espoo

**9.15** Circular economy visit to Nihtisilta Reuse Centre: Tour of the backstage of the recycling center, Clothes' journey animation workshop; Project management meeting

**12.00** Lunch at Knitters (Kutojantie 6, Espoo)

**13.00** Train U to Rautatientori or bus 280 to Kamppi

**14.45** Tram 7 or 9 to Länsiterminaali 2 (harbor)

**16.30** Ship from Helsinki

**19.54-22.56** Train from Tallinn to Tartu

## Annex 9

## The training program in Tartu for the QualitE project implementation

| | |
|---|---|
| **Name of the activity:** | Quality assurance training in Tartu, 25.-27.09.2024 |
| **Project title:** | Together Towards Improved Quality of Environmental Education (QualitE) |
| **Project code:** | 2023-2-EE01-KA210-SCH-000185260 |
| **Place:** | Tallinn, Estonia |
| **Purpose of the activity:** | To test and refine quality assurance tools used in Finland and Estonia with 8 participants from each partner organization with additional experts from associated partners. |
| **Date(s):** | 25.-27.09.2024 |

**Wednesday 25.09**

**09.00-11.15** Eckerö Line ship M/s Finlandia from Helsinki to Tallinn

- Group work on the ship. Please divide into two groups and read those two program descriptions:
    - Circular economy program for 7.-9.th graders (Aili Elts)
    - Circular economy program for 10.-12.th graders (Liina Niinemägi)

Each group will then use the Estonian program quality assessment form to assess whether this program description provides all necessary information. Mark x in the box (more right is better than more left). Each group will take notes on the printed evaluation forms and will be ready to give feedback on the pre-evaluation on Thursday the 26th of September.

**12.00-14.25** Lux Express bus to Tartu-final stop

**Wednesday 25.09**

**15.00 Welcoming to Tartu Nature House** (Lille 10, Tartu)

- Welcoming words and short presentation about TEEC's work (15 min, Janika Ruusmaa)
- Short introduction to the program (20 min, Gedy Matisen)
- House tour (50 min, Gedy Matisen)

**16.30 Showcasing TEEC study programs:**

- 45-minute demo of the program **"**Packaging green bingo" for 4.–6. graders (Aili Elts)
- 45-minute demo of the "Energy-efficient house" for the 10.–12. graders (Maris Mägi)

**18.00** Check-in to Lydia hotel

**19.00** Joint dinner to reflect on the showcased programs.

**Thursday 26.09**

**8.45** Gathering at Tartu Nature House (Lille 10)

**9.00-9.30 Pre-evaluation of the program quality**

- Feedback from the Finnish guests on the program descriptions evaluation pre-work based on the Estonian Cloudberry criteria, 30 minutes (lead by Annelie Ehlvest)
- Preparations and division in groups for the peer review (Gedy Matisen)

**09.45/10-11.15/11.30 Piloting circular economy programs - peer review in two groups**

- Circular economy program for 7.-9.th graders (Aili Elts)
- Circular economy program for 10.-12.th graders (Liina Niinemägi)

NB! Prepare to participate inside and outside (check weather forecast).

**11.30** First reactions, reflections, feedback entered individually via Survey Monkey questionnaires:

7th to 9th graders program

10th to 12th graders program

**12–13.00** Lunch at Spargel

**13–14.00 Giving constructive feedback, collecting suggestions for improvement**

- Looking at the results from the Survey Monkey summaries, asking comments and getting more concrete recommendations for improvements for circular economy programs.

**14.00–15.30 Work in groups:** What should a complete quality assurance system for environmental education look like? What will need improvements in Finland, what in Estonia? (Gedy leading)

**15.30 Eco snacks, coffee and tea available**

**16.00** Activity with our hobby school classes (each choose one, max 3 people in one class):

1. "Art in Nature" by Annika Pakk
2. "Crafters" by Liisgren Pärnsalu
3. "Animal friends" by Aire Orula
4. "Little scientists" by Mai-Liis Vähi

**17:00** Back to the hotel if needed to change clothes etc.

**18.00** Joint dinner at Aparaaditehas

**Friday 27.09**

**8.30–10.15**

- Overview of the developments done for the Estonian national environmental education quality system (Gedy)
- Introduction of the Estonian competency model for the environmental educators and how it works regarding psychology (Grete Arro, PhD educational psychology)
- Practical introduction to self-development tool for program facilitators (Grete Arro)

**10.15–10.30** Overview of the developments in creating the necessary supporting learning materials for program facilitators for their self-development (Aili Saluveer, EEA)

**10.30** Eco snacks, coffee and tea available

**10.45** Transportation to Kalda tee 24 with city bus for the ones going to the tour

**11.00–12.00** Tour for participants at Tartu Reuse Centre / Project meeting in Tartu Nature House for the project team

**12.30–13.00** Finishing the seminar. Whole group discussion in Tartu Nature House about the outcomes of this study trip and this project overall, next possible steps together.

**13.00–14.00** Joint lunch at Dorpat buffet

**14.30–17.00** Lux Express bus to Tallinn

**18.30–21.00** Eckerö Line M/S Finlandia

## Web resources used


The Network of the Finnish Association of Nature and Environment Schools homepage (May, December 2024).

The Estonian Environmental Education Association's homepage (May, December 2024).

Tartu Nature House homepage (May, December 2024).

Environmental School Polku homepage (May, December 2024).