

# RESPONSIBLE AND SUSTAINABLE VOCATIONAL EDUCATION AND TRAINING IN 2030

Programme paper of the national  
sustainability roadmap



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## **RESPONSIBLE AND SUSTAINABLE VOCATIONAL EDUCATION AND TRAINING IN 2030**

**Programme paper of the  
national sustainability roadmap**

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# A sustainable future together

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**T**he sustainability roadmap for vocational education and training describes how the providers of vocational education and training can, in their work, build a transition towards sustainable society, business and industry. This transition is necessary because our current unsustainable lifestyle undermines not only the pre-conditions for the wellbeing of humans but many other species as well. The consequences of human actions are already evident as serious disturbances in the natural systems that humans and other species depend on. The urgent need for a sustainability transition has been identified at international, national and regional levels.

To safeguard conditions that support the life of current and future generations, current operating models must be renewed to be more sustainable within education and through education. The sustainability roadmap points the way towards vocational education and training that supports the green transition and builds a **society that operates within the carrying capacity of nature.**

The objective of the roadmap is that, by 2030, actors involved in vocational education and training will have fully integrated the operating methods required by sustainable development and the green transition into their operations. Another objective is carbon neutrality by 2035. The vision of the roadmap is vocational education and training whose mission, role and value base build a sustainable future and lifestyle.

**The roadmap work is based on Finland's commitments to international sustainability efforts,** more precisely the Paris Agreement on Climate Change, the UN Convention on Biological Diversity and the 2030 Agenda for Sustainable Development. The measures in the roadmap have been created with consideration to the objective of a carbon neutral Finland by 2035, as set out in the Climate Change Act.



## Background of the roadmap work

**The sustainability roadmap has been prepared in the two-year VASKI project on responsible and sustainable vocational education and training, funded by the Finnish National Agency for Education.**

The VASKI project is part of a broader development programme for sustainable development and green transition in vocational education and training. The project aims to support the implementation of the global Agenda 2030 goals in vocational education and training and to respond to the challenges posed by climate change and biodiversity loss. **The objective of the programme is for actors involved in vocational education and training to be carbon neutral by 2035 and to have fully integrated the operating methods required by sustainable development and the green transition into their operations.**

The sustainability roadmap is the result of the programme for sustainable development and green transition in vocational education and training. The roadmap was created during the VASKI project as a result of network activities among vocational institutions, and it summarises the vision and objectives of sustainability work in vocational

education and training. It also describes the focus areas and measures of sustainability work in vocational education and training. The sustainability roadmap is fully available for anyone to read and use.

Participants of the VASKI project included 61 vocational institutions, and the other projects of the same development programme were also actively involved in working towards the shared objectives. This means that more than half of Finnish providers of vocational education and training participated in drawing up the roadmap. In addition to educational institutions, different stakeholders from various sectors participated in the sustainability work and the planning process of the roadmap during the project. The steering group – a comprehensive representation of actors – monitored, commented and furthered the roadmap work throughout the project. The sustainability roadmap was presented while the work was still ongoing, which resulted in new ideas and development proposals that had a genuine impact. All in all, it can be said that the roadmap was prepared through an extensive collaborative process.

The main coordinator of the VASKI project was Sataedu, with partial coordinators Perho Culinary, Tourism & Business College, SYKLI Environmental College, Optima, Southwest Häme educational federation of municipalities LHKK and Luovi Vocational College.



## Structure of the roadmap and how to use it

The sustainability roadmap includes the following sections:

### 1. Shared vision of the future and objectives for sustainability

**work:** The future vision describes the role, task and value base of vocational education and training in 2030. Developed through cooperation, the vision and objectives guide actors of vocational education and training in building a sustainable future.

### 2. Descriptions of the focus areas of sustainability work and the

related jointly agreed measures for the following areas of operation in educational institutions:

- a. Leadership and operating culture
- b. Pedagogical solutions and learning environments
- c. Personnel competence and professional identity
- d. Partnerships
- e. Carbon neutrality

### 3. Milestones for institutions' roadmap work, describing how an

institution can commit to the roadmap. This section additionally describes how an educational institution can build its own roadmap.

## Roadmap and its use

The key objectives and vision of the sustainability roadmap for vocational education and training are summarised in **this programme paper**. The programme sets out a jointly created framework for how vocational education and training will participate in solving the ecological crisis and in implementing the sustainability transition as part of a wider sustainability transition in society.

**In addition, this programme paper guides educational institutions to:**

- commit to the sustainability roadmap and make the commitment impactful
- build their own sustainability roadmap that defines their path to a shared vision and objectives
- monitor and report on the progress of sustainability work.

**In addition to the programme paper, the roadmap includes a more extensive [ThingLink learning environment](#) produced in the VASKI project that describes the implementation of the action paths of the roadmap priorities in more detail.** The Sustainability Roadmap learning environment contains a more comprehensive description of the different paths that educational institutions can take to progress towards the shared vision in its sustainability work. In addition, there are plenty of examples and tools in the learning environment to support the building of a sustainable future at an educational institution. This programme paper includes links to the learning environment.

# Shared vision of the future in the sustainability roadmap

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## Vision for vocational education and training for 2030:

### VOCATIONAL EDUCATION AND TRAINING 2030 – A SUSTAINABLE FUTURE TOGETHER

The sustainability roadmap describes vocational education and training on its way to a carbon-neutral society that operates within the carrying capacity of nature. The value base, tasks and role of education will be renewed to implement a transition towards a sustainable lifestyle.

In 2030, vocational education and training builds professional competence that furthers the green transition and ecosocial education. Lifelong and continuous learning that happens everywhere supports these efforts. The value base of education has a heightened focus on respecting the intrinsic value of nature, pursuing moderation and fostering humanity. The new role of vocational education and training is established in the reformation of society together with partners in business and industry. Education, business and industry are creating a shared vision of a sustainable future.



## Future vision: Vocational education and training as a building block of a sustainable future

The roadmap work produced a future vision on what kind of vocational education and training will be needed to enable the sustainability transition. The future vision describes the renewal of the tasks, value base and role of vocational education and training as follows:

### STRENGTHENING TASKS

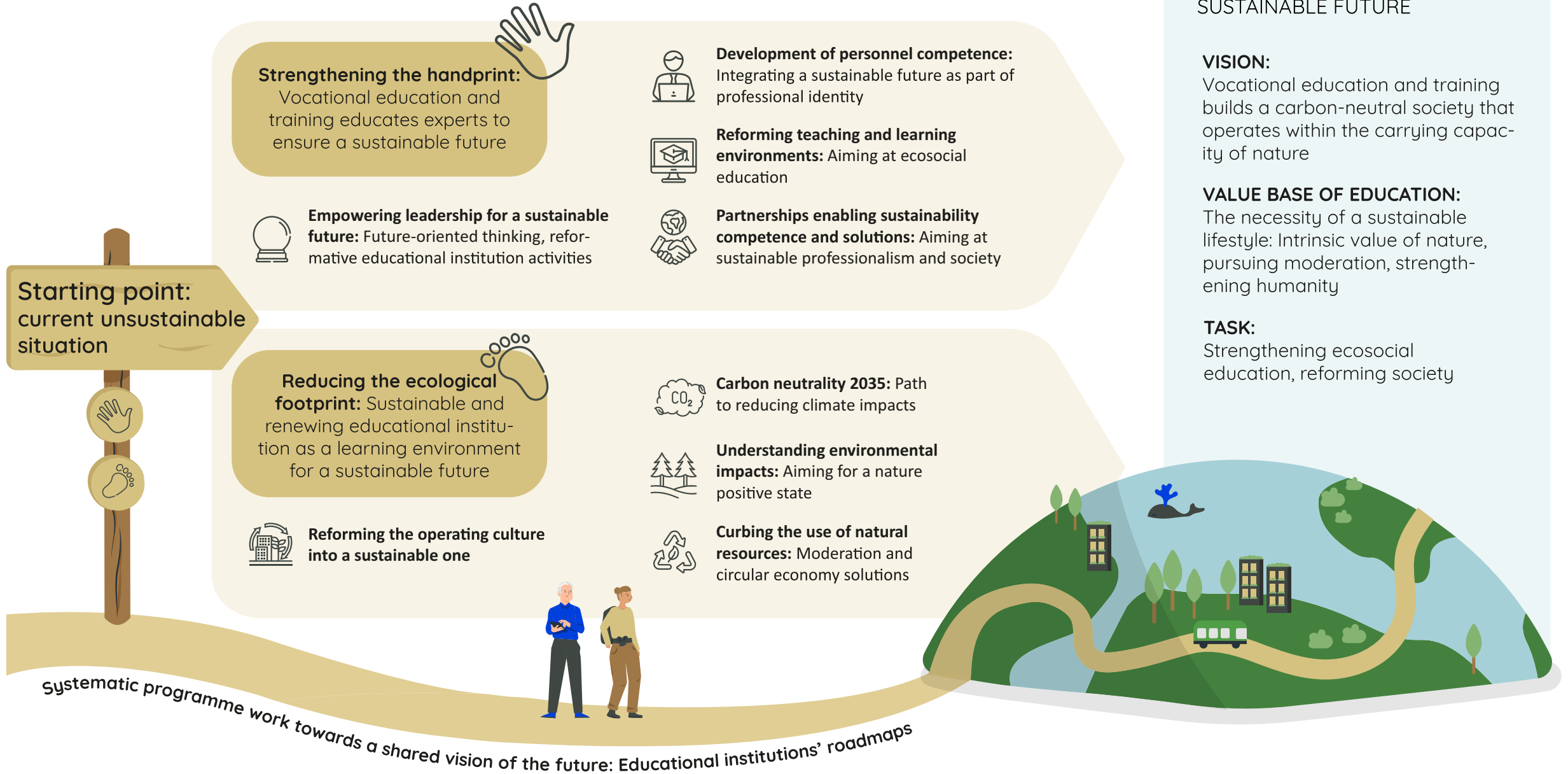
- Building a sustainable future
- Supporting lifelong learning
- Promoting ecosocial education
- Educating people to be active citizens
- Reforming employment and industry

### STRENGTHENING VALUES, ROLE AND IMPACT

- Intrinsic value of nature
- Pursuing moderation
- Fostering humanity
- Renewing society
- Development partnerships with business and industry



From educational institutions' perspective, the roadmap can be structured in the following way:





# Objectives of the sustainability roadmap

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The objectives of the sustainability roadmap outline the changes that vocational education and training institutions must make to further the transition to a sustainable lifestyle, business and industry. In addition to this shared overarching objective, the roadmap focus areas (signposts) have sub-objectives that guide educational institutions in becoming proactive actors for a sustainable future.

## OBJECTIVES OF THE SUSTAINABILITY ROADMAP

Actors involved in vocational education and training are carbon neutral and have fully integrated the operating methods required by sustainable development and the green transition into their operations. The work aims to achieve permanent operational and structural changes so that vocational institutions act as proactive actors for a sustainable future.

**Leadership and operating culture** The management of the educational institution is committed to building a sustainable future, putting it into practice with personnel and students through their actions and through the values and operating methods of the entire educational institution.

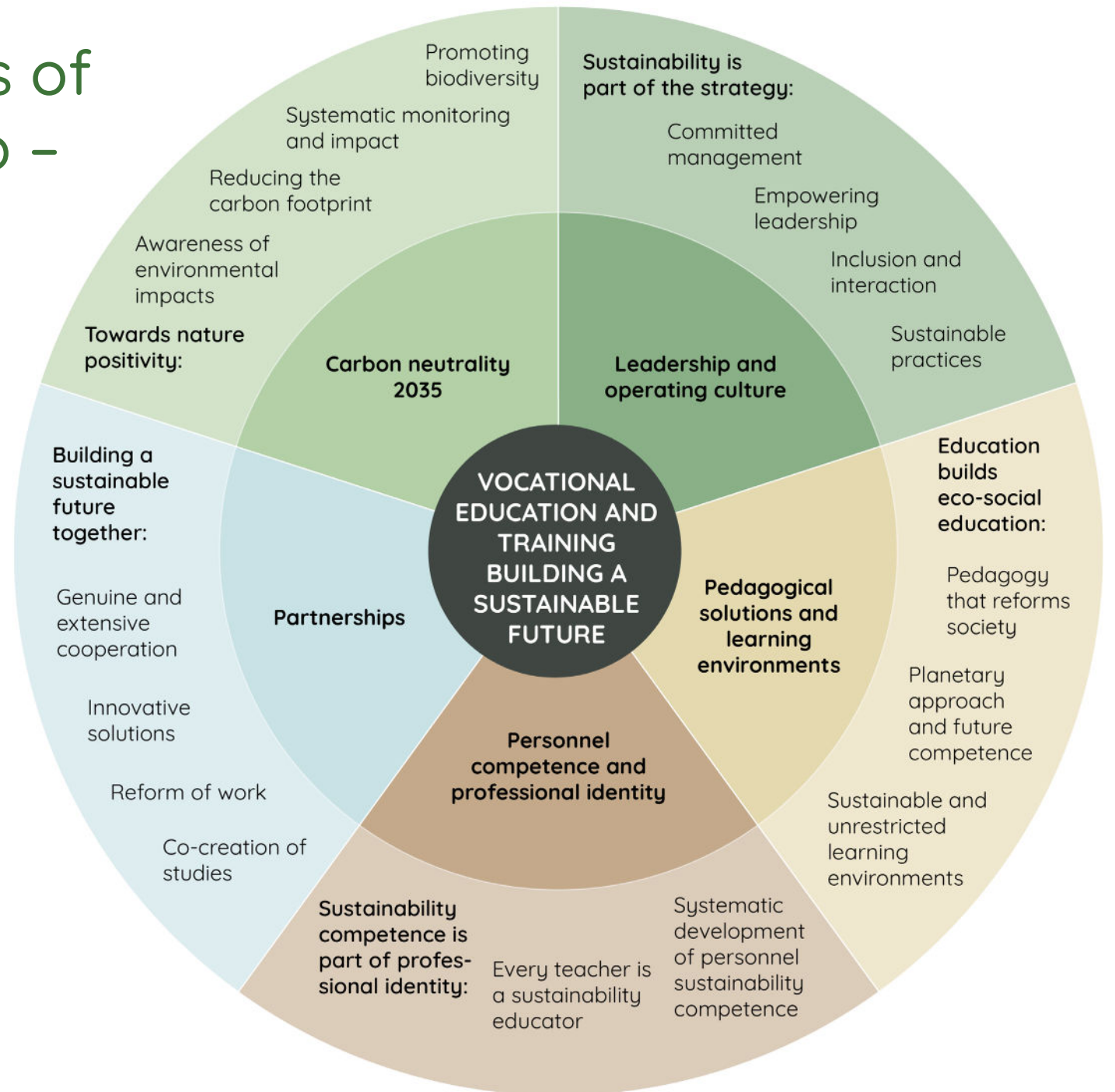
**Pedagogical solutions and learning environments** Goal-oriented sustainability education is integrated into teaching, which is reflected in the selected pedagogy and use of learning environments as well as the content of the education.

**Personnel competence and professional identity** The sustainability competence and agency of personnel are developed systematically and continuously. Competence meets the needs of the future labour market, society and the planet.

**Partnerships** We work with our partners to make vocational education and training, competence and the labour market more responsible and sustainable, while responding to the employment needs of our region.

**Carbon neutrality** Vocational education and training is carbon neutral by 2035. Defining each education provider's carbon footprint and subsequent measures support the reduction of the footprint and the development of education.

# Focus areas and measures of the sustainability roadmap – Signposts towards a sustainable future



## Leadership and operating culture

Empowering leadership and sustainable operating processes enable the sustainability transformation of educational institutions. These are the basic building blocks of sustainability at an educational institution, making all other sustainability work possible.

### OBJECTIVE

The management of the educational institution is committed to building a sustainable future, putting it into practice with personnel and students through their actions and through the values and operating methods of the entire educational institution.

### Achieving this objective requires:

- **Empowering leadership for a sustainable future** by genuine commitment to the value base of ecosocial education, self-knowledge and willingness to grow as an engaging leader and serving as an example in sustainability work.
- **A sustainability reform of the operating culture** by developing interaction and trust within the educational institution and in cooperation networks, as well as active internal and external communication.
- **Structures and processes to support sustainability work** by integrating sustainability perspectives into the leadership system, HR management practices, indicators and operational monitoring and reporting of the educational institution. Additionally by appointing responsible parties and allocating necessary resources to them.

## ACTION PATH FOR LEADERSHIP AND OPERATING CULTURE

- We boldly maintain and develop our competence and understanding of how to build a sustainable future and its significance in vocational education and training.
- We enable and ensure the inclusion of all personnel and students in sustainability work.
- We have set objectives for sustainability work in our organisation, and the work is furthered, monitored, measured and reported systematically.
- We include the Sustainable Development Goals in all levels of personnel management, such as recruitment, orientation and development discussions.
- We communicate about the sustainability work of the educational institution internally and externally.



## Pedagogical solutions and learning environments

The establishment of a sustainable lifestyle and the value base of ecosocial education is achieved through creative pedagogical solutions in sustainable learning environments. Guiding students to a sustainable path in their studies helps them adopt sustainable practices in employment.

### OBJECTIVE

Goal-oriented sustainability education is integrated into teaching, which is reflected in the selected pedagogy and use of learning environments as well as the content of the education.

### Achieving this objective requires:

- Understanding and adopting the value base of **ecosocial education** and **pedagogy that reforms society** as the starting points for the provision of vocational education and training.
- Examining and reforming **pedagogical solutions** in vocational education and training and **different learning environments** from the perspectives of the new value base, the required sustainability competences and the implementation of goal-oriented sustainability education.
- In-depth and comprehensive integration of sustainability education into all stages of students' study paths: **a) the start**, personalisation and guidance of studies, **b) acquisition of competence in studies and employment** and **c) study evaluation**.

## ACTION PATH FOR LEADERSHIP AND OPERATING CULTURE

- We have pedagogical policies that define the accumulation of sustainability competence.
- Our fields of education recognise their field-specific sustainability challenges and promote sustainability solutions using pedagogical, guidance-oriented and educational methods.
- We have a clear competence path for sustainable development, and we monitor its implementation.
- We actively develop solutions for pedagogy and invest in learning environments that respond to future-oriented competence needs.



## Personnel competence and professional identity

The renewal of education and operating culture is only possible once the personnel of vocational education and training have committed themselves to raising the level of their sustainability competence and assumed the professional identity of a builder of a sustainable future.

### OBJECTIVE

Personnel sustainability competence and agency are developed systematically and continuously. Competence meets the needs of the future labour market, society and the planet.

### Achieving this objective requires:

- **Identifying the starting points** for competence development by defining sustainability competence and mapping out the level of sustainability competence among personnel.
- **Understanding factors affecting continuous learning**, the methods of competence development and the planning of education.
- Defining and building up **personnel sustainability competence paths**.
- Identifying and utilising **different sustainability education solutions**.
- Working to reform **professional identities** through discussions and the accumulation of competence.

## ACTION PATH FOR LEADERSHIP AND OPERATING CULTURE

- We anticipate the sustainability competence needs of the future.
- In competence development, we emphasise systemic thinking and a future-oriented approach that renews society.
- We systematically ensure the evaluation of sustainability competence among personnel, competence level-specific development plans and follow-up.
- We allocate resources for the versatile and continuous development of sustainability competence among personnel (e.g. training, degrees, work placements, projects and other development).



## Partnerships

The transition towards a sustainable lifestyle requires active partnerships between vocational education and training institutions and actors such as employers, regional operators and other educational institutions and levels of education. To have a reformative impact on society, education needs partnerships that are based on sustainability or sustainable starting points.

### OBJECTIVE

We work with our partners to make vocational education and training, competence and the labour market more responsible and sustainable, while responding to the employment needs of our region.

### Achieving this objective requires:

- Cooperation with **employment and industry** to build a sustainable future
- **Partnerships and cooperation** that build a sustainable future between vocational education and training institutions and across different levels of education
- Understanding the **societal role** of vocational education and training and actively exerting influence in regional development and national sustainability work
- Examining **international cooperation** between educational institutions and multiculturalism efforts from the perspective of a sustainable future.

## ACTION PATH FOR LEADERSHIP AND OPERATING CULTURE

- We operate actively in regional, national and international networks.
- We work with employers and industry to develop a sustainable future in our field through work placements etc.
- We participate in developing the educational contents of regional employment and business.
- We systematically strengthen RDI activities between different fields and levels of education.

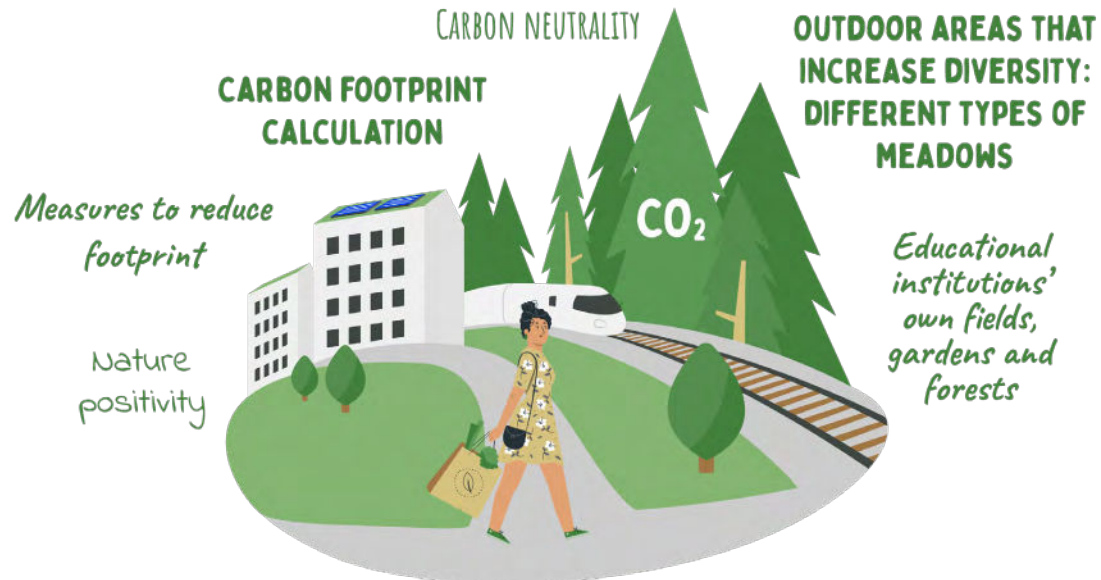


## Carbon neutrality

In addition to focusing on educational institutions' sustainable handprint, their negative impacts require attention as well. Reducing the environmental impacts of educational institutions can also be part of the learning process for future professionals, who then bring the operating models they have learned to the labour market.

### OBJECTIVE

Vocational education and training is carbon neutral by 2035. Defining each education provider's carbon footprint and subsequent measures support the reduction of the footprint and the development of education.



### ACTION PATH FOR LEADERSHIP AND OPERATING CULTURE

- We calculate our carbon footprint annually and report the figures on a shared platform.
- We define measures that enable reducing our carbon footprint and the timetable of their implementation.
- We monitor the implementation and effectiveness of the measures.

### Achieving this objective requires:

- **Calculating the carbon footprint of your educational institution:** The roadmap project included the development of a carbon footprint calculator that can be used to support sustainability efforts.
- **Reducing an educational institution's carbon footprint:** The roadmap includes examples of different measures that can be taken to reduce the carbon footprint of an educational institution. The measures are divided into three categories: direct emissions, purchased energy and indirect emissions. Each organisation can pick the measures that suit them and monitor the subsequent impact on their carbon footprint.
- **Commitment to the development of calculations.** **Tips and advice** are available in the roadmap.
- **Reporting calculation results.** The roadmap includes instructions on carbon footprint reporting with a Power BI template that has been developed for vocational education and training. The roadmap also has examples of how other organisations have reported their carbon footprint in different ways.

# Milestones for roadmap work in educational institutions

The sustainability roadmap points us all towards vocational education and training that supports the green transition and builds a climate-responsible society that operates within the carrying capacity of nature. Our shared direction and intent are summarised in the shared vision, objectives and action paths of the sustainability roadmap and their supporting future visions.

**The sustainability roadmap is realised through the sustainability work that is carried out in the everyday life of vocational institutions.** The more extensive Sustainability Roadmap learning environment describes how an individual educational institution can proceed on its own path towards the shared objective of the roadmap. **The sustainability roadmap points out different paths to how education providers can further the transition towards a sustainable lifestyle in their daily work.** Progress in the implementation of the sustainability roadmap can be summarised with the following stages:

- Commit to the roadmap and make your commitment known
- Create a path or roadmap for your institution towards the shared vision
- Monitor and report on progress
- Challenge stakeholders to build a sustainable lifestyle with you

## Commit to the roadmap

The implementation of the roadmap starts with learning about the vision, future visions, objectives and measures of the roadmap and committing to them. The 61 educational institutions of the VASKI network are committed to implementing the roadmap and promoting sustainability work by participating in the VASKI project.

Commitment to the sustainability roadmap and its future vision should be communicated

as comprehensively as possible to an educational institution's personnel, students and other stakeholders, for example on the educational institution's website and intranet pages. The commitment to building a sustainable future can be communicated with the VOCATIONAL EDUCATION AND TRAINING 2030 – A SUSTAINABLE FUTURE TOGETHER icon. To use this icon, the educational institution must commit to the jointly defined objectives and measures and carry out the annual “Sustainability self-assessment of vocational education and training”, which is based on the action path of the sustainability roadmap.





Educational institutions' commitment to the shared sustainability roadmap is an important message to these institutions' partners. Responsibility is an increasingly sought-after feature that partners may even require. For this reason, commitment to the sustainability roadmap can serve as a competitive advantage for an educational institution, for example in the acquisition of new partnerships and student recruitment. By committing to the sustainability roadmap, educational institutions can demonstrate the objectives of their work in a concrete way.

The VASKI network behind the sustainability roadmap covers a significant part of vocational education and training in Finland. The aim is to further expand the network to enable the sustainability transformation. A wide network has the potential to influence other actors and structures in society. Commitment to the sustainability roadmap is a step towards strong agency in societal influence work for vocational education and training.

## **Create a sustainability path for your educational institution - See the milestones for sustainability work**

The sustainability roadmap is a description of the shared intent of vocational education and training to become a builder of a sustainable future. The future vision can be pursued by following many different paths. The sustainability roadmap describes possible milestones that an educational institution can reach to further sustainability in an organised way. The milestones form each institution's own sustainability path or roadmap.

Each educational institution can use the following steps or milestones to find their own path. The milestones can also overlap or interweave:

### **CREATING A SITUATIONAL PICTURE AND INTENT**

- Learning about the vision, objectives and future visions of the roadmap.
- Leadership commits to roadmap work and its value base.

### **DETERMINING THE EDU- CATIONAL INSTITUTION'S STARTING POINT**

- Preliminarily mapping out the institution's footprint and handprint.
- Identifying the essential perspectives of the educational institution's sustainability work.

### **PREPARING THE EDU- CATIONAL INSTITUTION'S OWN PROGRAMME**

- Objectives and measures for sustainable development work at the educational institution.
- Determining the target schedule, indicators and responsible parties for the measures.

### **IMPLEMENTING ACTION PATHS AS A COMMUNITY**

- Integrating a sustainable future into HR practices, leadership system and partnerships.
- Including co-creation and the facilitation of a sustainable future in everyday work.

### **COMMUNICATIONS, EVAL- UATION AND CONTINUOUS**

- More impact with responsibility communication and responsibility reporting.
- Assessing the progress and effectiveness of measures in relation to the vision and objectives of the roadmap. Taking the changing situational picture into account and updating objectives.

## Monitor and report

**Evaluation and reporting are prerequisites for transparent, credible and effective sustainability work.** When establishing an educational institution's sustainability roadmap and the evaluation of the institution's sustainability work, evaluation must be proportional to the shared vision of the roadmap and the shared future vision defined in the roadmap. This means evaluating whether the measures have brought the educational institution towards reducing its ecological footprint, i.e. carbon neutrality, or even towards a nature positive state. This also includes evaluation of whether all educational activities at the educational institution build a sustainable future: does it push the local region and Finnish society towards a sustainable lifestyle that fits within the limits of one planet, emphasising moderation, interpersonality and the intrinsic value of nature.

The sustainability roadmap includes evaluation tools for monitoring the progress of the roadmap objectives. The key monitoring tools are:

- Carbon footprint calculator and carbon footprint reporting
- Personnel sustainability competence survey
- Sustainability self-assessment form for vocational education and training

The Finnish National Agency for Education supports the implementation of the sustainability roadmap and develops a national monitoring system for it.

## Challenge stakeholders to get involved in sustainability work

Educational institutions will not be able to reach the future vision of the sustainability roadmap for vocational education and training without stakeholders' support. For example, educational institutions do not decide independently on the mandatory sustainability content of their courses or on directing their funding so that the level of sustainability competence of graduates is a factor in funding decisions. As it stands, it is also impossible for educational institutions to use their funding to compensate for their impacts on nature and the environment, which makes it difficult to achieve carbon neutrality. In addition, support from representatives in employment, business and industry is needed. A worthwhile question for the future is whether actors can be accepted as business and industry partners of vocational education and training if these actors have not committed to building a sustainable future.



# Conclusion

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**S**afeguarding the preconditions for life and wellbeing requires critical evaluation of current operating models and the establishment of new sustainable operating models in both education and training. It is difficult to imagine how society could become more sustainable without competence development and education that reform society. However, building a sustainable future requires genuine efforts to reform the value base and task of education, so that education will not continue to uphold or even worsen the sustainability crisis.

Sustainability will not be achieved unless professionals work in a more sustainable way and for a more sustainable lifestyle. A shared development challenge for vocational education and training institutions and their students is to find new ways of working as professionals to foster natural systems that maintain people's wellbeing. From the perspective of vocational education and training, the task is an inspiring one: As we build a sustainable future, we safeguard the preconditions for wellbeing and life

not only for ourselves, but our children, grandchildren, fellow citizens all over the globe, and for non-human nature. It is difficult to imagine what could be more meaningful and important than preserving the prerequisites of life! And the time for it is now!



## GLOSSARY

### **ECOSOCIAL EDUCATION:**

A concept of education that aims for good life within the limits of our single planet. An ecosocially educated person identifies interdependencies between ecological, social and economic reality. (Salonen, Arto. 2015. Ekososiaalinen sivistys herättää luottamusta tulevaisuuteen. Aikuiskasvatus. 35. 4-15.)

### **TRANSFORMATIVE (REFORMATIVE) LEARNING:**

Building a sustainable future requires transformative learning that develops a holistic worldview, which changes our understanding and perceptions of the relationship between humans and nature, of humanity and the factors of wellbeing, and the role of the economy in our world and daily life (Laininen, Erkka. 2019. Transforming Our Worldview Towards a Sustainable Future. In Cook, Justin. W. (ed.) Sustainability, Human Well-Being and the Future of Education. Basingstoke: Palgrave Macmillan. DOI: <https://doi.org/10.1007/978-3-319-78580-6>)

### **SUSTAINABILITY COMPETENCE:**

Sustainability competence is a combination of knowledge, skills and attitudes needed to promote sustainable development in the world. (Vesterinen, Marjo. 2023. Kestävyysoasaamisen opetus alakouluissa. In Finnish. Blog post. Accessed on 13 November 2023. <https://www.sirene.fi/blog/kestavyysosaamisen-opetus-alakouluissa/>)

### **CARBON NEUTRALITY:**

In general, carbon neutrality refers to producing only the amount of carbon dioxide emissions that can be sequestered. In other words, the carbon footprint of a carbon-neutral society, product or system throughout its life cycle is zero. (Sjöstedt, Tuula. 2016. Mitä nämä käsitteet tarkoittavat? In Finnish. Web page. Accessed on 13 November 2023. [https://www.sitra.fi/artikkelit/mita-nama-kasitteet-tarhoittavat/](https://www.sitra.fi/artikkelit/mita-nama-kasitteet-tarkoittavat/))

### **NATURE POSITIVE:**

It is generally considered that the impact of a situation is nature positive if the combined impact of human actions on biodiversity is positive, i.e. it strengthens the wellbeing of nature, which includes the status, abundance, diversity and resilience of species, populations and ecosystems. A nature positive impact is achieved when the benefits produced for nature exceed the harm caused to nature. (Tulevaisuussanasto. n.d. Sitra. Web page. Accessed on 13 November 2023. <https://www.sitra.fi/tulevaisuussanasto/luontoposiitivin-en-vaikutus/> ; The Nature Positive Initiative. n.d. What does 'Nature Positive' mean? Web page. Accessed on 13 November 2023. <https://www.naturepositive.org/about#Nature-Positive-Initiative>)