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Abstract

The deliverable outlines the Participatory Staff Engagement Model (ENGAGE) developed under the CARING NATURE project, focusing on promoting environmentally sustainable practices in health and care systems through staff engagement. The model aims to foster a culture of sustainability within health and care organisations by actively involving staff in the green transition. The ENGAGE model comprises several components, including a learning approach, a library of participatory methods, guidelines for application, training resources and an overarching engagement model. These components are designed to empower health and care staff to take ownership of environmental initiatives and promote sustainable practices. The model was co-developed with a Community of Practice (CoP) – a network of environmental partners – at the Wellbeing Services County of Päijät-Häme (WPH) in Finland, incorporating insights from literature reviews, stakeholder consultations and best practices in participatory methods. The deliverable highlights the objectives, methodology, key components, challenges and WPH use case of the model. It outlines next steps for piloting the model and refining it based on feedback from four other health and care organisations. It also introduces the website that has been produced to advance sustainable use of the model (<https://www.engage-by-caringnature.eu/>).

Keywords

Staff engagement, participatory methods, green transition, health and care systems, model, community of practice

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ACRONYMS

Acronym	Description
COMPASS	Decision support system for sustainable architecture
CoP	Community of practice
DIN	DIN Deutsches Institut für Normung e. V.
Dx.x	Deliverable x.x
ENGAGE	The participatory staff engagement model
EU27	The 27 European Union member states
FPG	Fondazione Policlinico Universitario Agostino Gemelli IRCCS
FPHAG	Fundació Privada Hospital Asil de Granollers
GAC	GAC Group
HC	Healthcare
HCP	Health and care provider
ICT	Information and communication technology
ILO	International Labour Organization
ISO/TC	International Organization for Standardization/ Technical Committee
LUT	Lappeenranta-Lahti University of Technology LUT
Mx	Month x of the project
NBI	Nature-based infrastructure
RINA (INFRA)	RINA Consulting S.p.A.
SWOT	SWOT Analysis (Strengths, Weaknesses, Opportunities and Threats)
Tx.x	Task x.x
UCLouvain	Université catholique de Louvain
UKHD	Universitätsklinikum Heidelberg
UN	United Nations
WHO	World Health Organization
WP	Work package
WPH	Wellbeing Services County of Päijät-Häme
7HRC	The 7th Health Region of Crete



Executive summary

The CARING NATURE project aims to develop climate-neutral initiatives in health and care systems. The project focuses on environmentally sustainable practices and the active involvement of health and care professionals in implementing such solutions. This deliverable titled “Participatory staff engagement model v1” is part of Work Package 4 (WP4, Development of organizational results) as an intermediate deliverable of Task 4.4 (Participatory staff engagement model).

This deliverable presents the Participatory staff engagement model, ENGAGE, aimed at promoting environmentally sustainable practices in health and care systems. The importance of staff engagement in the green transition within health and care organisations is addressed and emphasised. Staff should be seen as ambassadors of the green transition, as the health and care sector is very large with 21 million workers in the 27 European Union member states. The green transition requires actions at all levels from the individual level to the managerial and organisational levels.

The primary objective of the ENGAGE model is to foster staff engagement in the green transition of health and care providers through participatory methods. The model was co-developed with a Community of Practice (CoP) – a network of environmental partners – at the Wellbeing Services County of Päijät-Häme in Finland. The methodology is based on research literature, consultations with stakeholders and the incorporation of best practices in participatory methods.

The ENGAGE model comprises several components (Table 1): a description of the learning approach, a library of participatory methods, guidelines for application, training resources and an overarching engagement model that integrates all components. The model aims to empower staff to take ownership of environmental initiatives, thereby fostering a culture of sustainability within health and care settings.

Table 1. *ENGAGE's components.*

Component	Description
Learning approach	Community of practice for health and care organisations
Library of participatory methods	A collection of methods tailored for the green transition
Guidelines for application	Instructions for effectively using participatory methods
Training	Capacity building for using participatory methods
Participatory Staff Engagement model	An integrated approach covering all previous components

The ENGAGE model includes a diverse range of participatory methods tailored to the green transition context. The library of methods of ENGAGE is divided into three parts: paradigm-preserving, paradigm-stretching and paradigm-breaking methods, according to how they change people’s perceptions and understanding. The library is a core part of the ENGAGE website, where the model has been compiled. Guidelines for applying ENGAGE’s participatory methods are also a core part of the website. This deliverable introduces the website (<https://www.engage-by-caringnature.eu/>) that has been produced to advance sustainable use of the model also after the completion of the CARING NATURE project.

This deliverable also brings up various challenges faced by health and care professionals in advancing environmentally sustainable practices in their workplace, such as time constraints, organisational culture and perceptions of added workload. It emphasises the need for supportive management and clear communication to overcome these barriers. When organising staff engagement with the help of participatory methods, the key is to plan according to the organisation’s context, culture and practices.

The deliverable outlines the next steps for piloting the ENGAGE model across various health and care organisations, with a focus on refining the model based on feedback from its implementation. The next version of the model will be refined in response to the insights gained during the piloting phase. The ENGAGE model represents a step towards integrating sustainability into health and care systems through participatory staff engagement. The deliverable highlights the importance of collaboration among health and care professionals and management in advancing environmentally sustainable initiatives.



1 Introduction

Staff's behaviour and attitudes can promote or hinder the adoption and implementation of environmentally sustainable solutions (for example, recycling) and technologies in health and care organisations. On the other hand, environmentally sustainable solutions and technologies affect staff's work and organisational practices in many ways. New participatory staff engagement methods are needed, as research on experiences of professionals has shown that interaction with peers (colleagues) fosters learning and knowledge sharing. It is also necessary to create spaces for staff engagement.

Sustainability is not only a managerial and organisational issue, but it also concerns individuals and their ways of doing things. Health and care staff know profoundly the 'grassroots level' of their work and its everyday processes, so they can have valuable insights for practical sustainability solutions (for saving resources, for instance) that managers and administrators on the higher level might not think of.

The aims of developing novel methods for people's engagement are to raise awareness of the state, challenges and opportunities of environmental sustainability in health and care systems, to identify people's innovative ideas and solutions for green transition in the organisational contexts of health and care systems and to contribute to mainstreaming the practical solutions developed by CARING NATURE or other available solutions. Participation can encourage people to take more active roles, and these roles can serve as mechanisms for transforming and democratising health and care systems to make them more sustainable, thus addressing climate change.

The purpose of this deliverable D4.4 is to introduce version 1 of the Participatory staff engagement model (ENGAGE) prepared by LUT University in Task 4.4 of CARING NATURE. The model was co-developed with a Community of Practice (CoP) at Wellbeing Services County of Päijät-Häme (WPH). The CoP, a network of environmental partners, was selected in Task 2.2.

The ENGAGE model (Result 5.1) is related to CARING NATURE's Objective no. 5 – To obtain staff engagement in the green transition of the health and care providers with health and care-specific participatory methods for Communities of Practice. Objective 5 again is linked to other objectives of the project, as ENGAGE may activate behaviours for "greener" energy demand and waste management, and behaviours supporting knowledge sharing, decentralised monitoring and trusted data collection.

The components of the ENGAGE model are as follows:

- 1) Description of the learning approach for staff engagement in health and care systems' Communities of Practice (CoP), with reference to the green transition
- 2) Library of participatory methods for staff engagement in the green transition context
- 3) Guidelines for applying participatory methods
- 4) Training for using participatory methods
- 5) Engagement for green transition model (covering and integrating all previous 4 points)

The methods were developed for use in health and care organisations' CoPs, notably by health and care professionals and providers of health and care (such as medical doctors, nurses, etc., and managers). Participants becoming "owners" of the solutions are at the core of this methodology for the CoPs.

This document is structured as follows:

- Section 2 describes the methodology of the development of ENGAGE such as the steps of the development process (prior to the co-development with WPH), best practices, constraints and sources (mainly a review of literature).
- Section 3 describes the solution, the ENGAGE model as it has been developed from the start of T4.4.
- Section 4 describes how the solution was applied at WPH, the co-developer, using it as a use case. It describes the CoP selected at WPH, the implementation of the co-development process and its results (the evaluation). Section 4 also describes the activities (by M18) related to the components of ENGAGE that concern the piloting HCPs.
- Section 5 includes a description of the ethical and data privacy aspects.



- Section 6 includes the conclusions, such as what will be described in version 2 of the ENGAGE model (D4.8) and what will be the research purpose of the next use cases.
- Annexes 1 and 2 contain further information on the library of participatory methods on the ENGAGE website that has been developed in Task 4.4 to provide the users of the ENGAGE model with support material, including the library of participatory methods (descriptions of methods) and guidelines for applying them.
- Annexes 3–5 contain further information on the surveys conducted in Task 4.4 (a background survey to WPH's CoP members, an evaluation survey for WPH's CoP members and an evaluation survey on the ENGAGE training).

In addition to the links between the objectives of the project, the work done in Task 4.4 supports Tasks 4.1, 4.2 and 4.3 on the human/social behaviour aspects. This will become visible particularly through the next use cases, depending on the piloting HCPs plans. The work done in T2.1 (reported in D2.1) fed into T4.4 by providing information for the development and testing, piloting and validation of the ENGAGE model.

The work done in T4.4 continues along with WP6 (Piloting and validation), Tasks 6.1, 6.2, 6.3 and 6.5 (Piloting and validation in Italy, Spain, Germany and Greece). T4.4 concludes in M32 with the preparation of version 2 of the ENGAGE model (D4.8), which will be fine-tuned based on learnings from WP6. The work done in T4.4 will also feed into D6.1 (Validation report), due in M30, which will describe the pilots implemented in WP6.

2 Methodology

This section contains a description of how the ENGAGE solution was developed. It explains the steps of the development process, development methods and best practices, constraints and sources.

2.1 Steps of the development process

The steps of the development process of the ENGAGE model during WP2 were as follows:

- Provision of inputs to the work in T2.1 (M1-M3) regarding the CARING NATURE healthcare sustainability framework (described in D2.1) and incorporating the learnings from it concerning staff engagement.
- Provision of information concerning requirements related to ENGAGE and on the WPH use case as well as participation in validation methodology definition as requested by the task leader (M2-M6, T2.2 and T2.3).
- Incorporation of learnings from consultations within the consortium and with external stakeholders (LUT-WPH-facilitator FPG discussion, 12 March 2024; ENGAGE Phase 2 meeting with the piloting HCPs, 3 April 2024; Staff Engagement workshop with external stakeholders, 8 May 2024) (M3-M5, T2.2 and T2.3).

2.1.1 Learnings from the healthcare sustainability framework

The relevant learnings from the healthcare sustainability framework's domain of staff and community engagement (actions for it) were the following (D2.1):

1. Education and capacity building of health and care professionals on the links between health and climate change, the environmental impacts of healthcare, and interventions they can take to reduce emissions.
2. Raising public and workforce awareness on environmental risk factors, healthcare waste, and best practices.
3. Engaging the health and care workforce and its associations and unions in embedding environmental sustainability and resilience into health and care system culture.



2.1.2 Pre-identified innovative aspects

The methodology for the CARING NATURE results' (such as the ENGAGE model) requirements elicitation has been described in detail in Section B of D2.1. A key question in the related consultations was “What do you need to motivate HCP staff to actively participate to the green transition in health and care?” Prior to the consultations (during the first phase of T2.2), the innovative aspects of the ENGAGE model have been identified as follows:

- The close and multidirectional connections between people's ways of doing things and environmental sustainability are only starting to be understood and ENGAGE advances this kind of understanding.
- ENGAGE draws on the considerable body of research and practice on participation¹ and builds on understanding the role of situated learning and informal learning (learning through real-life experiences and informal interactions) when creating spaces for people's engagement.
- ENGAGE pushes the knowledge frontier to enable better advancement of the green transition by developing methods to support engagement in and between Communities of Practice (CoPs) in HC organisations.
- ENGAGE reinforces interaction and knowledge sharing and builds a sense of belonging within networks/teams/groups when co-designing and mainstreaming innovative solutions for green transition in the practical circumstances in HC organisations.
- ENGAGE provides an innovative way to make it clear that green transition is a key responsibility of all staff, to advance transprofessional knowledge and awareness in environmental matters (also with other sectors) and to contribute to building or strengthening regional and national networks for climate resilience and sustainability.
- ENGAGE contributes to identifying key actors and strategies for health and care providers and professionals in advocating for green transition in health and care systems.

2.1.3 Solution 0+ requirements

The consultations with the internal end-users and the external stakeholders during T2.2 and T2.3 produced the knowledge for the Solution 0+ requirements. Solution 0+ requirements were thus formed based on the descriptions of the 10 Solutions provided in the Grant Agreement (named Solution 0) by enriching them with the requirements that emerged from the meetings with the internal end-users and the workshops with the members of the Reference Stakeholder Group.

The consultations showed that environmentally sustainable solutions and engagement in green transition may be seen as too time-consuming, too expensive, adding an extra burden and not making daily activities at work easier. The Solution 0+ requirements were divided into content and process-related perspectives, as described in D2.1 and below.

From the **content point of view**, the ENGAGE model should consider that

- People's behaviour and attitudes affect already the identification of environmentally sustainable solutions (for example, recycling) and technologies in hospitals and primary care, in addition to their adoption and implementation.
- Attitudes may depend on the amount of extra work, for example. Time is a scarce resource, and there is a general shortage of nursing staff.
- The organisational culture is important to pay attention to in order to advance environmental topics. The last few years have changed people's minds, but there is still a lot of work to do in making the organisational structure support the staff's agency in the green transition.
- Not only the negative points – what is done wrong – but also positive results and opportunities must be focused on in the communication and management.

¹ Such as the pioneering work of *Arnstein S., 1969*.



- Staff members have a role to play towards patients, too, as they can give green transition related advice. Staff should be seen as ambassadors of the green transition, as the sector is very large with 21 million health and care workers in the EU27.²
- Engagement in the green transition may be hindered by standard procedures – “we always did it this way” type of thinking and resistance to change.
- The perception that environmentally sustainable solutions may lead to increased costs especially at the beginning (staff and material costs). They also affect supply chains.
- Barriers may include even a feeling of security risk (e.g., reduction in use of gloves).

From the **process point of view**, the consultations confirmed that the construction of the CoP for ENGAGE and the implementation must be done carefully in the HCPs:

- Sufficient time is needed.
- Informed recruitment and communication are essential (“you are an important member for the CoP”).
- Involving also leading staff members is key. Seeing things in a new light is essential, and clever ways to communicate and manage the engagement processes are also needed.
- The management’s informed acceptance is important because staff engagement is a resource question requiring use of working hours. The participants need to be permitted to participate.
- The CoP should include professionals from different health and care services/units and represent different background (e.g. nurses, medical doctors, other HC professions, service managers for hospital, technical staff, administrative employees)
- Possible staff changes should be considered beforehand so that they do not lead to problems in or even to ending the activities. Each organiser, in particular, and the participants should have named substitutes. Managers should also have named substitutes.
- Access to instructions and other necessary knowledge must be given so that all participants have access to them and even responsibility to follow them. Updating of responsibilities should also be specified.
- Sociocultural echoing about the process is important – making the activities visible in different formats, not just written ones. Accessible and attractive formats are essential (depending on the context, they can be, for example, posters, videos, or alike – there may also be country-specific differences in preferences and needs).
- Special emphasis on the necessary facilitator expertise is a must, being key to the success of the validation and the use of the model.

These requirements provided important insights for the development of the ENGAGE model. The participants in the meetings both echoed the innovative aspects that had been pre-identified and provided practical examples and additional viewpoints. Understanding the dynamics present in health and care organisations is vital.

During the planning and implementation of the co-development with WPH, special attention was thus paid to the selection of the CoP, the organisational culture, time use, identification of needs and barriers in environmental work as well as the process-related perspectives (see Section 4). The requirements were also used as a checklist during the reporting.

2.2 Development methods and best practices

The development of the ENGAGE model in WP2 and Task 4.4 was based on (1) a review of research literature (see Section 2.4.1) to detect existing research knowledge concerning topics related to ENGAGE’s components, such as Communities of Practice, informal learning, situated learning, participation and participatory methods, (2) a review of best practices concerning facilitation and participatory methods (see the results in Section 3.4) and (3) the co-development phase with WPH (Section 4).

² <https://www.cedefop.europa.eu/en/tools/skills-intelligence/sectors?sector=06.16&country=FI>



While it is increasingly recognised that health and care staff have an important role to play in the sector's green transition, the topic has often remained at the strategic level and the concrete actions – the food for best practices – have not been well developed. World Health Organization (*WHO, 2020*), for example, has emphasised skilled workforce as essential for interventions for environmental sustainability as well as the need to assemble and train a multisectoral operative team for increasing climate resilience and environmental sustainability in health and care facilities (Figure 1).

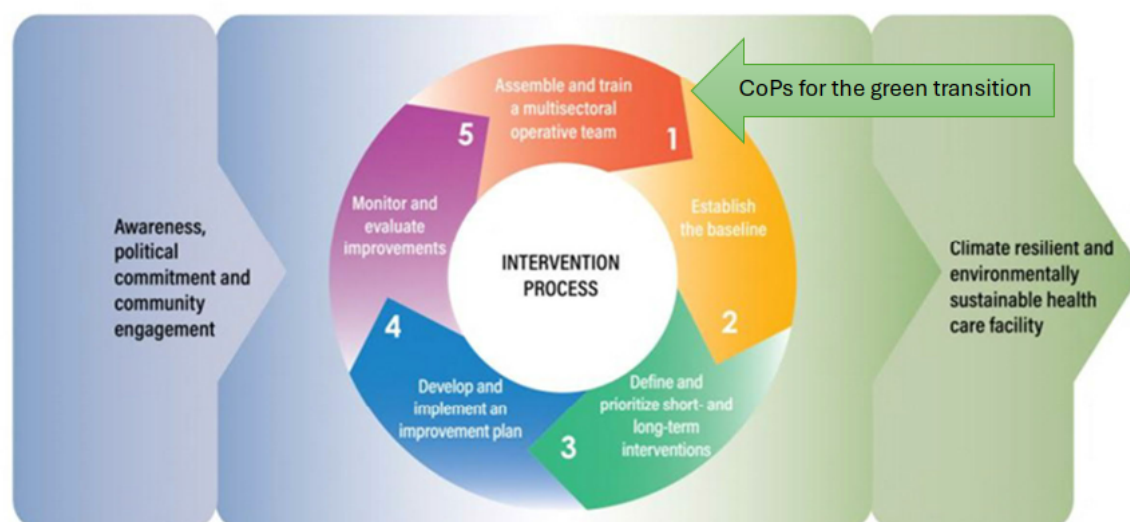


Figure 1. Proposed process and steps for increasing climate resilience and environmental sustainability in health and care facilities (source: adapted from *WHO, 2020, Figure 5; the potential of CoPs for the green transition added*).

Best practices from previous Horizon projects concerning people engagement (such as engaging citizens in the energy transition and engagement in science communication) have been utilised as appropriate (GRETA³, 2021-2023; ParCos⁴, 2020-2023; TANDEM⁵, 2022-2025).

2.3 Constraints

Constraints may play different roles in the different results of CARING NATURE. While some might see the requirements (Section 2.1.3) as constraints, they provided a vital foundation for the subsequent development of the ENGAGE model, with an emphasis on the need for a thorough understanding of the field of health and care and the organisational context in question.

However, in a result such as the ENGAGE model, there are many factors that are outside of the influence of ENGAGE (e.g., Table 12, D2.1). One of them is related to concrete, measurable progress in the green transition. While ENGAGE aims to improve health and care staff engagement in the green transition with the help of the use of participatory methods, the progress in the green transition, such as a measurable reduction in a HCP's CO₂e footprint is outside of the influence of the ENGAGE developers. Such a reduction depends on many organisational practices and decision-making at the highest managerial level.

Another factor that is to a large extent outside of the influence of ENGAGE is, for example, the relevance and usability of the model in a specific HCP and its CoP. Even when utilising a model that has broad relevance and usability, careful contextualisation is always needed when implementing staff engagement with the help of participatory methods. The activities must be tailored to the organisation and the CoP in question, with skilled facilitation (see Section 3.4.2). If this is not done in and by the

³ GGreen Energy Transition Actions, <https://cordis.europa.eu/project/id/101022317>

⁴ Participatory Communication of Science, <https://cordis.europa.eu/project/id/872500>

⁵ Transdisciplinary ANd Deliberative equity appraisal of transition policies in Energy and Mobility, <https://cordis.europa.eu/project/id/101069653>



piloting HCPs and the activities are not based on the needs of the participants, the use of the model is unlikely to compensate that lack.

Factors such as a potentially low level of attendance in staff engagement workshops (contextual attraction power) are also to a large extent outside of the influence of ENGAGE. The ENGAGE model contains instructions concerning practicalities and an ample and adaptable library of participatory methods to use, but its developers cannot affect many contextual factors, including organisational missions concerning sustainability, related strategic organisational decisions and resulting staff engagement structures as well as related practices (such as permission to use working time), attitudes towards the HCP's initiatives, quality of CoP construction, management and facilitation as well as the workload and the actual agendas (e.g., shift work) of the involved staff (see also D2.1).

As to the standards and regulations, Section 11.1.3 of D2.1 contains the relevant information. During the work in WP2, the following technical committees were identified as relevant on European or international level: ISO/TC 283 - Occupational health and safety management; ISO/TC 283/TG 8 - OHS risks arising from climate change and ISO/TC 283 WG 7 - Climate change. The following applicable regulations were identified as relevant in the lead developer survey in T2.2 (Results' requirements): ILO C187 - Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187) and WHO guidance for climate resilient and environmentally sustainable health care facilities.

Since then, standardisation activities have continued in T7.2, led by DIN, also with the support of the ENGAGE developers, to search for and identify potentially relevant technical committees, published standards and standards under development. This landscape will allow the use of existing standards and definition of a strategy to contribute to ongoing activities or to initiate new ones. These outcomes will be compared with possible standardisation needs and opportunities related to ENGAGE, too.

2.4 Sources

2.4.1 Literature review

A review of research literature was performed to detect existing research knowledge concerning topics related to ENGAGE's components; Communities of Practice, informal learning, situated learning, participation and participatory methods.

In the literature review completed as part of the work in WP2 (the European healthcare sustainability model, D2.1, Section 4.2.10), staff engagement was confirmed to be a vital component in the effort to decarbonise hospitals (*Howard C. et al., 2023*). When staff members are actively involved in sustainability initiatives, they can drive significant changes through their daily practices and decision-making processes (*Aboueid S. et al., 2023*). Engaged staff are more likely to adopt and promote, for example, energy-efficient practices, waste reduction strategies and sustainable resource use in their work environments.

Employees' collective efforts can be harnessed by health and care organisations by fostering a culture of environmental awareness. Such collective staff engagement both helps to lower the organisation's carbon footprint and sets a positive example for patients and the broader community, reinforcing the organisation's commitment to environmental stewardship. Empowered health and care professionals may thus contribute to steering also other economic sectors and society towards decarbonisation goals (*Howard C. et al., 2023*). (See also D2.1, Section 4.2.10.)

2.4.1.1 Environmental sustainability thinking in health and care

Environmental sustainability thinking is still new in health and care systems. Until recently, sustainability has been regarded particularly from the point of view of economic and social sustainability. Knowledge is needed about what sustainable health and care systems are like and how they can be advanced. Connections between the climate crisis and challenges of health and care systems need to be better recognised. According to WHO, about 5–15 % of CO₂ emissions of industrialised countries result from healthcare services (*WHO, 2015*). If healthcare were a country, it would be the fifth-largest emitter on the planet (*Pichler P. et al., 2019*). At the same time, health and care systems are in a turbulent situation in many countries due to population ageing, economic pressures and rapid increase of digital technologies.



There are challenges and opportunities in how technologies are integrated into existing health and care systems (Tuominen-Thuesen M. et al., 2022; Pekkarinen S. et al., 2020, on digital technologies). The sustainability of technological innovations depends on whether integration is conducted in a way that supports their long-term stability (European Commission, 2019). Contextual factors such as organisational support and people's capabilities, capacity and education affect the integration of sustainable innovations (e.g., Ogden T. & Fixsen D., 2014; Pekkarinen S. & Melkas H., 2019). Nordic Innovation (2019) emphasises that sustainable healthcare covers sustainable behaviour and practices in addition to sustainable service environments and sustainable technologies. All these components are intertwined, as shown by, for example, Melkas H. et al. (2024).

Environmental issues are not the key driver of development in health and care systems, but they are of increasing interest among HCPs and health and care staff as well as policymakers and decisionmakers and citizens (Tuominen-Thuesen M. et al., 2022; Melkas H. et al., 2024). On the other hand, there may be resistance and obstacles related to hierarchies in health and care organisations. The close and multidirectional connections between people's ways of doing things and environmental sustainability are only starting to be understood (Ryghaug M., Skjølsvold T. & Heidenreich S., 2018; Melkas H. et al., forthcoming).

According to the results of a recent study on Japanese physicians' climate change-related knowledge, attitudes and practices and their advocacy for climate change policies (Igarashi N. et al., 2024), for example, almost 90% of the respondents were aware of climate change, but only 2% answered all knowledge questions correctly. Main barriers were lack of information, resources, knowledge and time. Almost 60% felt responsible for advocating sustainable healthcare, but only about 40% engage in it. The authors concluded that there is a significant gap between willingness and actual practice in advocacy. Physicians need better education, resources and support to effectively combat climate change. Methods to effectively engage health and care staff and providers into a participatory knowledge-building process towards the green transition in health and care systems are thus needed (Pässilä A. et al., forthcoming).

2.4.1.2 Learning, participation and Communities of Practice

Developing novel methods for staff engagement provides opportunities to raise awareness of environmental sustainability in health and care systems, unveil individual staff members' innovative ideas and solutions for the green transition in their organisations and contribute to mainstreaming various practical solutions that advance the green transition. Adoption and implementation of environmentally sustainable solutions and technologies in health and care organisations depend on the staff's behaviour and attitudes; on the other hand, the staff's work and organisational practices are often affected by environmentally sustainable solutions and technologies in many ways (Tuominen-Thuesen et al., 2022; Melkas H. et al., 2024). Participatory staff engagement can encourage people to take more active roles in the green transition, thus transforming and democratising health and care systems to make them more sustainable (Brydon-Miller M., 2022; Jorgenson S. & Stephens J., 2022).

Previous research has produced rich insights into the experiences of health and care professionals that interaction among peers in the workplace fosters learning and information sharing (Phelan A. et al., 2006; Li L. et al., 2009; Joynes V. et al., 2017; Steinert Y., 2025). Workplace learning can lead to a community of practice, which in turn can promote ongoing professional learning (Steinert Y., 2025). Informal groups and networks present good opportunities for information exchange.

Communities of Practice (CoPs), which have been described as a type of informal learning organisation, have received increasing attention in the health and care sector; however, there is a lack of research on their varying structures, functions and effectiveness (Li L. et al., 2009). The concept of a 'Community of Practice' (CoP) was first proposed by cognitive anthropologist Jean Lave and educational theorist Etienne Wenger in their 1991 book *Situated Learning*.

Current solutions for people's engagement do not sufficiently take into account the considerable body of research and practice on participation (such as the pioneering work of Arnstein S., 1969) nor build upon the understanding of the role of situated learning (Lave J. and Wenger E., 1991) and informal learning (Ellström P., 2011, Joynes V. et al., 2017) when creating spaces for people's engagement. Participation and knowledge-building taking place in CoPs (Lave J. and Wenger E., 1991) involve much more than the development of technical skills.

CoPs have been understood as a group of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis (Wenger-Trayner E., McDermott R. & Snyder W., 2002; Cox A., 2005; Degn L. et al., 2017; Gray D. & Gabriel Y., 2018). The CoP was originally developed to provide a template for examining the



learning that happens among practitioners in a social environment, but over the years the focus has shifted to personal growth, the trajectory of individuals' participation within a group and the application of the CoP as a managerial tool for improving an organisation's competitiveness (*Li L. et al., 2009*).

Wenger (1998) listed three factors that contribute to the development of a CoP: a shared interest, concern or field of action; commitment to the CoP, and the shared language and resources of the CoP, such as routines, concepts or methods. The social dimension and the sharing of tacit knowledge are central to the work of CoPs (*Retna K. & Ng P., 2011; Rodman L. et al., 2020; Wenger-Trayner E. et al., 2002*). The interdependence of social and intellectual ties is therefore emphasised (*Cortese, C. & Wright C., 2018*). Through mutual interaction, CoPs can facilitate the creation, sharing and utilisation of knowledge within an organisation and can positively influence organisational strategy, operations and performance (*Spraggon M. & Bodolica V., 2021; Suikkanen A., 2025*).

Previous research has shown that management support is key in enabling, building and supporting the work of the CoP in a professional organisation to develop to its full potential (*Aljuwaiber A., 2016; Borzillo S., 2017; Duryan M. & Smyth H., 2019; Li L. et al., 2009; Peñarroja V. et al., 2019*). Management should value learning from the CoP, resourcing time for the activity, encouraging the CoP members and removing barriers to action, and adapting the outcomes of the CoP's work to formal structures (*Borzillo S., 2009; Schulte B. et al., 2020*).

Senior management's interest in the CoP achievements is important. Enabling and supporting the sharing of good practices and seeing the CoP as an opportunity and an asset for the organisation contributes to the CoP performance (*Borzillo S., 2009*). For example, organisational leadership can support and enable the development of innovative learning and knowledge sharing environments for CoPs (*Retna K. & Ng P., 2011; Suikkanen A., 2025*).

The mutual commitment of CoP members refers to the interaction between members in which the norms and relationships of the CoP are reinforced and a shared understanding of the activity's meaning is formed (*Golden T. et al., 2019; Gray D. & Gabriel Y., 2018; Ranmuthugala G. et al., 2011*). Wenger (1998) defines the process of meaning's negotiation as a process in which members of a CoP co-create the meaning of the activity and their engagement in it. According to Wenger's (1998) theory, the meaning-making process is simultaneously dynamic, contextual, unique and temporary. Practices and their meanings are constantly changing and evolving through social engagement and discussion among members of the CoP (*Smith S. et al., 2019; Wenger E., 1998; Weller A., 2020; Suikkanen A., 2025*).

Participatory staff engagement benefits from combining an interpretative, process-oriented and exploratory approach and an analytical, project-oriented problem-solving approach. Interpretation values continuous processes, exploration and discovery, while analysis focuses on solving well-defined problems (*Lester R. & Piore M., 2004*). Combined, these two perspectives provide a powerful balance between exploration and adaptation, and structure and finding solutions (*Lester R. & Piore M., 2004*; see also the ENGAGE website: <https://www.engage-by-caringnature.eu/>). Co-creating solutions in participatory activities ideally involves both divergent and convergent thinking—first generating a wide range of ideas and then refining them into practical, cost-effective solutions.

A staff engagement process typically unfolds in four phases: understanding the problem, synthesising findings, co-creating solutions and implementing them. Throughout this process, participatory methods help ensure employees feel valued and empowered to contribute. Various categorisations of these types of methods have been proposed. For example, techniques to enhance creative thinking have been divided into three categories: paradigm-preserving, paradigm-stretching and paradigm-breaking approaches (*McFadzean E., 2000*). Paradigm-preserving methods refine ideas within existing frameworks. Paradigm-stretching methods expand perspectives and encourage creative thinking. Paradigm-breaking methods challenge conventional approaches, fostering intuitive, human-centred innovation. (*Knight C. et al., 2017; McFadzean E., 2000*; see also the ENGAGE website.)

Literature references for individual participatory methods can be found in the method descriptions on the ENGAGE website (Library of participatory methods; <https://www.engage-by-caringnature.eu/>). Additional literature references regarding the guidelines for using the library can also be found on the ENGAGE website. The development of the ENGAGE model also draws on the developers' previous research on knowledge management for innovation (e.g., *Melkas H. et al., 2016; Parjanen S. et al., 2011*), arts-based methods (*Pässilä A. et al., 2021; Pässilä A. et al., 2013*), and practice-based innovation (*Melkas H. & Harmaakorpi V., 2012*).



2.4.2 Practice in the co-development reality

The WPH use case provided an exceptionally fruitful foundation for the co-development of the ENGAGE model, as WPH is an organisation that is strongly committed to environmental sustainability (see Section 4 on the use case; *Hämäläinen R.-M. et al., 2023a*) and has already established structures and roles for such work. There was already existing interest in participatory staff engagement in this field and related experiences.

During the first phase of T2.2, the practice at WPH was discussed with WPH. The County is a big organisation, where silos also exist, but the comprehensive national reform in Finland's social and health care and rescue services in 2023 aimed at reducing silos in organisations and services by combining service processes. Multiprofessional working groups work in health and social care centres to care for multi-morbid patients. There are different professionals also in operating rooms, working together. IT professionals, again, need to be able to base their work on feedback from the professionals in health and care services and even social welfare and rescue services.

Nurses play an important role in the development work. The gaps between professions may not be as wide as perhaps in some other countries. Many professional caregivers participate in development projects, but that also exacerbates staff shortage, which may lead to criticism against development work. Environmental activities depend on which environmental theme is in focus, and the level of interest may vary depending on the unit's situation. Hierarchy can make things slower also in Finland.

Staff engagement practices vary across units. Participation has been seen as important; the County director has specifically asked for new ideas and practices to obtain savings and innovations. Seeking for innovations and savings is aimed at in all staff roles. There are tens of development projects in progress in the County with different leaders, mainly funded by the Ministry of Social Affairs and Health. They are, for example, different pilots in the sphere of multi-professional work and work practices or related to different environmental matters, such as gaining savings in transportation and logistics by combining transportation, reducing food waste and handing over buildings. There is a great interest in gaining data about environmental matters.

The practical measures related to the County's environmental programme are led by the County director and the heads of divisions and their personnel (Figure 2). Boards, advisory boards and advocacy bodies are also consulted when necessary. The practical implementation of the measures is planned in more detail and budgeted in the units responsible for the measures in connection with the planning of normal operations. There are no reward systems for staff participation in the green transition.

The environmental partners (a network in the County, WPH's CoP in the co-development of ENGAGE) currently consist of about 40 persons from different units (May 2025; 25-30 persons during the co-development of ENGAGE). They are entitled to use one day per month to develop environmental work. Monitoring of the environmental programme is done twice a year; this is related to sustainability reporting. There is an internal environmental training programme on the intranet for the staff to attend. About 200 staff members have passed it (out of 7500). Measuring staff engagement is difficult, except for measuring participation in training (participation in seminars, the above-mentioned training programme; those can be measured).



Coordination model for the Sustainable Development and Environmental Programme 2023-2025

Wellbeing Services County of Päijät-Häme



Figure 2. Coordination model of the environmental programme of WPH (source: WPH).

As part of the co-development of ENGAGE, LUT conducted a survey among the environmental partners to gain important background information on the current practice at WPH and the needs of the environmental partners (see Section 4).

3 Solution

This section contains the description of the ENGAGE solution as it has been developed from July 2024. It contains a description of the process and design choices as well as each component of ENGAGE.

3.1 Relationship between the components

3.1.1 ENGAGE's components

The solution developed in T4.4 is the participatory staff engagement model called ENGAGE. The components of the ENGAGE model, specified in the Grant Agreement, are as follows:

- 1) Description of the learning approach for engagement in health and care systems' Communities of Practice (CoP), with reference to the green transition
- 2) Library of participatory methods for engagement in green transition context
- 3) Guidelines for applying participatory methods
- 4) Training for using participatory methods
- 5) Engagement for green transition model (covering and integrating all previous 4 points)

The components can be seen as steps where the fifth step covers and integrates all previous four points, compiling the ENGAGE model. All components are needed for the model. Components 1-5 are described in the next sections.

3.1.2 The process and design choices

The development and the co-development of ENGAGE mainly took place side-by-side. The learning approach, CoP, has been selected during the CARING NATURE project proposal phase, but it was



adapted to the field of the green transition in the health and care sector during the development process. The library of participatory methods (Section 3.3) was developed during the co-development with WPH, apart from ENGAGE's dramaturgical characters (Figure 3) that can be used to communicate and describe the environmental issues and the CoP's activities (for example, a visual character with green hair can be used as an artful inquiry tool for idea generation, distancing, reflection and communication). The dramaturgical characters were developed at LUT during the planning of the co-development.



Figure 3. A collage of some of the dramaturgical characters (illustrations: Anne Pässilä).

While the library contains diverse methods that can and have been utilised also in other contexts and for other needs, they were adapted to the green transition in the health and care sector during the co-development. This adaptation was done by the research group from different perspectives (notably methodological expertise and health and care sector expertise). The co-development with WPH was led and proceeded in a certain manner specifically tailored and contextualised to WPH (see Section 4). Such contextualisation and tailoring are crucial for participatory staff engagement.

Simultaneously, we continuously analysed what other methods could be utilised in the context of the green transition in health and care systems. The level of difficulty of the method use was a central perspective in the analysis – all CoP members do not have professional skills in the use of different participatory methods, but they may have basic skills.

The library was thus compiled based on the analysis of how the co-development and its different activities were conducted at WPH. Some of the methods in the library are therefore simple and basic ones. Based on our analysis, it was essential to include methods requiring different skills – also those that are easy to use for anyone in the CoPs (such as SWOT). Not everyone has advanced skills in staff engagement and facilitation, and this was not expected, either – on the contrary.

There may also be different phases and components in the CoPs work (see Figure 4 on the interpretative and analytical phases and divergent and convergent thinking), which makes it necessary to utilise different methods at different phases. Diverse facilitators' readiness to use different kinds of methods was carefully considered also beyond the level of difficulty. The library was designed to cater for many kinds of users. These design choices were affected both by the co-development implementation and the related continuous communication in monthly meetings with WPH as well as the above-mentioned analysis of the researchers.

The guidelines for applying the participatory methods and the training for using those methods were developed during and after the co-development process with WPH. It was not possible to develop them before this phase, as they need to be integrated and consistent with the other components.

One of the design choices was related to the nature-based infrastructure (NBI) perspective. Considering the potential of NBI to motivate staff engagement was linked to the development of the ENGAGE model in the Description of the Action. Discussions on this topic were held both with the partner responsible



for the NBI approach (UCLouvain) and the co-development partner WPH, early on. Through the discussions, it became clear that NBI related tasks do not belong to the responsibilities of the selected CoP members of WPH, the environmental partners network (see Section 4). The co-development work with WPH thus concerned other topics. NBI has been developed by other employees in WPH, in different ways, which can be connected to the COMPASS⁶ related work within CARING NATURE.

However, NBI can be seen both as a topic and a method, and incorporating the latter was possible within the co-development of ENGAGE, using Lahti Health Forest (part of the infrastructure of City of Lahti and WPH) as an environment for implementing nature-based methods (see Section 4). The idea that NBI can be seen both as a topic and a method can be seen as a promising line of work/research for other purposes as well.

3.2 Component 1: The learning approach

The learning approach for engagement in health and care systems' CoPs, with reference to the green transition was elaborated based on the research literature on CoPs (notably *Lave J. & Wenger E., 1991*). In the context of the green transition, a CoP is a group of health and care staff members who share a common interest in sustainability and who want to learn from each other through regular interaction and everyday work situations. Members of a green transition CoP collaborate and co-create to find more sustainable practices, they learn and share knowledge about green transition, and they develop their skills together. This community provides a supportive environment where individuals can grow and improve their practices through shared experiences and collective and critical learning.

There are three principles that describe the purpose, the people involved and the practices of a green transition CoP in health and care systems:

1. **DOMAIN:** *Domain is linked to purpose. Members share a common domain of interest, competence and commitment that unites them.* This creates shared space, motivation and meaningfulness in work, inspires participation, guides learning and gives focus to action. It is the common ground that binds the community together. For example, in a workplace, a group of health and care practitioners concerned about environmental issues such as food waste or recycling share an interest in improving their daily work practices. This common domain *gives them a sense of identity and purpose and motivates them to participate and learn from each other.*
2. **COMMUNITY:** *Community is about people, the practitioners involved and the relationships and interactions between practitioners. Through regular engagement, members build trust, share information and knowledge and support each other.* It is the social fabric of the group. In practical terms, this means regular interactions such as formal and informal meetings, discussions about finding alternative practices, and collaborative projects. Through these interactions, *practitioners build relationships, trust and a sense of belonging.* For example, health and care practitioners have weekly or monthly meetings to discuss challenges, generate ideas, co-create and share solutions, and support each other. They often take the lead in mentoring colleagues, organising sensemaking and setting the vision for sustainability in workplaces, and creating space, structure and framework for discussion, testing and impact assessment of new environmental practices. They may not have all the answers, but they are crucial to keeping the community engaged and focused on its environmental purpose. The full potential of the CoP comes from the structure of the organisation recognising the role of this type of employee. *Management support is important.*
3. **PRACTICE:** *Practice refers to procedures such as co-creation forums, guidance and platforms such as meetings for sharing sustainable practices.* It includes the shared repertoire of resources, experiences, stories, participatory methods and ways of dealing with recurring problems as well as opportunities. It is the practical aspect of the community's explicit and implicit knowledge and skills. It is the body of knowledge, tools and techniques that the community develops and shares around the green transition. Practically, *it includes the resources and experiences that practitioners use to solve problems, think about possibilities and improve their skills.* For example, health and care practitioners can share best practices and lessons learned from the past and co-create a space where they can work together to create new and better practices. This could be through workshops, webinars or conferences where practitioners discuss sustainable practices and how best to organise

⁶ COMPASS is a solution developed in the CARING NATURE project; it consists in a decision support system and a set of guidelines for designing or restructuring healthcare buildings to reduce their environmental impact.



them in their daily work and workplaces. For example, how to organise the adoption of renewable energy, waste management or green infrastructure development?

The learning approach for CoPs was enriched with elements such as divergent and convergent thinking, resulting in the overview of the ENGAGE learning approach for CoPs (Figure 4; see also Sections 3.3 and 3.4 and the ENGAGE website for further information on its elements), firmly anchored in relevant research literature.

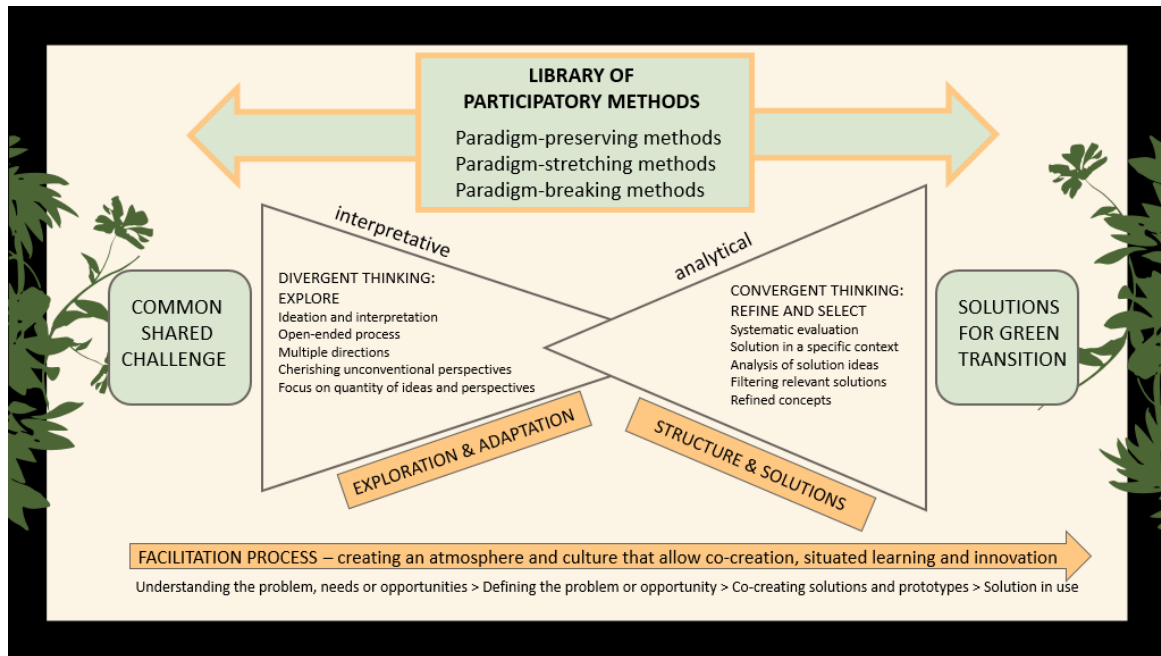


Figure 4. An overview of the ENGAGE learning approach for CoPs (source: adapted from Pässilä A. et al., forthcoming; illustration: Anne Pässilä).

3.3 Component 2: Library of participatory methods

The library of participatory methods was developed based on research literature, best practices and the continuous analysis during the co-development phase at WPH (see also Section 3.1.2 for important information on the process and design choices). The library of participatory methods is a core component of the ENGAGE model. The foundation of ENGAGE is on advancing green transition as a key responsibility of all staff, building transprofessional knowledge and awareness in environmental matters and building or strengthening networks for green transition in health and care organisations.

When developing the ENGAGE model, the considerable body of research and practice on participation (such as the pioneering work of *Arnstein S., 1969*) was carefully considered, while building on understanding the role of situated learning and informal learning when creating spaces for staff engagement. Better advancement of the green transition in health and care organisations was supported by directing ENGAGE's methods to support engagement in and between CoPs. CoPs have important potential in reinforcing interaction and knowledge sharing and building a sense of belonging among staff when co-designing and mainstreaming innovative solutions for green transition in the practical circumstances in health and care organisations and systems.

3.3.1 A staff engagement process – an overview

Four general phases of a staff engagement process – that always need to be contextualised – are as follows (see also Figure 5):

1. **Understand the problem, need or opportunity.** This involves gathering information, conducting research and empathising with users or stakeholders to find out what is really



needed. In design thinking this is often referred to as the "empathising" phase. Key activities: User research, interviews, surveys, analysis of lived experience of Communities of Practice and identification of pain points.

2. **Synthesise the findings to define the problem or opportunity.** This step helps to narrow the focus and ensures that the team has a well-understood goal or challenge to address. Key activities: Defining the problem, creating a problem statement, mapping the roots, causes and nature of the problem, and making sense of what kind of new knowledge is needed.
3. **Co-create solutions.** This is a stage of staff engagement in which the members of the Community of Practice generate ideas, iterate on them, and build potential solutions. It involves brainstorming, sketching and building and testing of the practice, solution or service. Key activities: Idea generation, prototyping, testing and feedback loops to refine and improve solutions.
4. **Bringing the solution to life and into practice.** This includes finalising the solution, launching it and ensuring it is ready for use. It also includes post-launch activities like monitoring, gathering feedback and making necessary adjustments. Key activities: Solution launch, implementation, communication about the launch and post-launch evaluation.

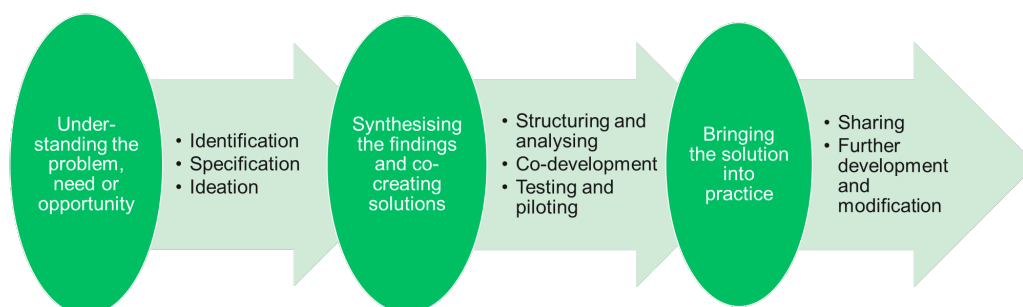


Figure 5. An overview of a staff engagement process.

The participatory methods must be tailored to each phase of the process as well as each individual workshop or other event within the process (see Section 3.1.2 on the process and design choices of ENGAGE). These considerations were the basis of structuring the library for different kinds of users in health and care systems. Different methods are included, for diverse users, according to their selection.

3.3.2 Structure and use of the library

3.3.2.1 Three types of methods

The library is divided into three parts: *paradigm-preserving*, *paradigm-stretching* and *paradigm-breaking methods* (McFadzean E., 2000), according to how they change people's perceptions and understanding. The library is a core part of the ENGAGE website (<https://www.engage-by-caringnature.eu/>), where the model has been compiled (see also Annexes 1 and 2 for further information on the library). Audiovisual elements will be added to the ENGAGE website during its refinement.

1. **Paradigm-preserving methods**, e.g. brainstorming, SWOT, blue ocean strategy, stakeholder analysis. These are techniques *used to analyse and generate ideas within the context of existing frameworks or assumptions*. These methods help staff members, in the Community of Practice, to make informed decisions, innovate and refine strategies while remaining grounded in established paradigms or ways of thinking. These methods are paradigm-preserving because they work within the confines of existing frameworks, goals and environments. They do not seek to completely overhaul or disrupt current understandings, but rather help organisations to assess, plan and innovate within those established structures. They provide a balance of creativity, strategic analysis and stakeholder alignment, while respecting existing paradigms.
2. **Paradigm-stretching methods**, e.g. meaning making and sense making methods such as work and patient or customer stories, personas, world café, patient or customer journey mapping, scenario planning for possible future scenarios. These techniques are used to *expand our thinking*



or change the way we approach problems, typically by presenting new perspectives and frameworks. In the context of meaning making and sense making, these methods help individuals or teams to understand complex situations, customer needs or organisational challenges. These methods are not just techniques for gathering data or generating ideas—they are frameworks for broadening how we see problems, opportunities and solutions. By encouraging diverse perspectives, creative thinking and deeper empathy, paradigm-stretching methods such as work stories, personas, journey mapping and empathy mapping help us break free from conventional ways of thinking and approach complex issues with a fresh mindset.

3. **Paradigm-breaking methods**, e.g. arts-based methods such as drama methods, hidden thoughts, visual methods, storytelling and narrative inquiry. These are techniques that *challenge traditional ways of knowing and understanding*. These methods go beyond the logical, linear forms of inquiry and tap into non-verbal, intuitive and creative dimensions of human experience. These paradigm-breaking methods push the boundaries of traditional research or development practices and offer new, creative and often more human-centred ways of understanding the world. They invite new perspectives and insights that might be obscured by more structured, objective or linear methods.

The 30 methods are listed in Table 2 below by category (see Annex 2 and the ENGAGE website for further information).

Table 2. Contents of the library of participatory methods.

Category	Name
1. Paradigm-preserving methods - techniques used to analyse and generate ideas within the context of existing frameworks or assumptions - help the staff to make informed decisions, innovate and refine strategies while remaining grounded in established ways of thinking without disrupting current structures	'Why, What, Where, When' technique in group work
	Plus 5 technique
	Informal and formal arenas for interaction
	SWOT analysis of the green transition
	Fishbone diagram (Ishikawa diagram) for the green transition
	The Blue Ocean strategy 2 x 2 matrix for analysing operating environments of the green transition
	If everything were possible: A model for structuring idea generation on the green transition
	A four-field structuring model for idea generation on the green transition
	Stakeholder analysis
	Brainstorming
	Integrating environmental matters into daily work life
	Green transition idea box
	2. Paradigm-stretching methods - techniques to expand our thinking or change the way we approach problems, typically by presenting new perspectives and frameworks - help individuals or teams to understand complex situations or organisational challenges
Shared breathing exercise	
BeWeDō® method	
Photovoice	
Discussion cards	
Karelian coffee table discussion	
Reflective sketchbook	
Personas	
Customer journey	
3. Paradigm-breaking methods - techniques that challenge traditional ways of knowing and understanding	Work stories
	Trust exercise
	Giving and receiving gifts exercise
	Still image exercise
	Dérive (drifting, wandering)
Nature-based empowering photography	



- tap into non-verbal, intuitive and creative dimensions of human experience	Drama methods
	Hidden thoughts
	Visual methods

3.3.2.2 Structure of method descriptions

Each participatory method is described on the ENGAGE website using the following template:

- Introduction
- What is required:
- Level of difficulty:
- Time required:
- Materials:
- Participants:
- How to use:
- When to use:
- Why to use:
- How to document:
- The roots of the method can be found here:

The introduction provides a brief overview of the method. “What is required” gives the library user basic information about what the use of the method requires. “Level of difficulty” is assessed in numerical terms:

1 = easy to use for anyone

2 = requires basic knowledge and skills related to the method

3 = requires advanced knowledge and skills related to the method

“Time required” indicates how time-consuming (approximately) the method is to use. “Materials” gives the user basic information about the kinds of materials that are needed, and “Participants” indicates the (approximate) appropriate number of participants when using the method. “How, when and why to use” contain practical instructions for using the method, and “How to document” contains ideas for documenting the use of the method. Finally, information is given concerning where the roots of the method – such as the theoretical background – can be found.

3.3.2.3 Other elements and use of the library

A website has been created for the ENGAGE model so that the library and the other materials are easily available for users both during CARING NATURE and after the end of the project. The website is introduced in Section 3.6. Along with the method descriptions, there will be templates and visualisations that clarify the use of the methods. Audiovisual materials will be added to further facilitate the use of the library.

A user interested in utilising the ENGAGE model can find methods for different contexts and purposes in the library; there are methods for idea generation (for imagining possible green transition-related solutions for diverse situations), implementation methods for action planning, testing solutions and real-life testing in a particular time and place, and reflection methods for evaluating the testing and evaluation of what resources and decision-making processes are needed for the implementation.

The interested user needs to select the methods according to, for example, facilitation skills, time available and context and needs (see the guidelines on the ENGAGE website and Section 3.4). The common way to describe the methods was designed to provide a convenient “recipe” for the users.



3.4 Component 3: Guidelines for applying participatory methods

3.4.1 Overview

The guidelines for applying ENGAGE's participatory methods are also a core part of the ENGAGE website (<https://www.engage-by-caringnature.eu/>), where the model has been compiled. The guidelines form a facilitator's manual. They contain brief introductory and inspirational texts and audiovisual elements (the latter are part of the ENGAGE website). The guidelines have been designed and provided so that they can serve both the users of the ENGAGE model during the piloting that takes place in WP6 of the project and any other users from health and care organisations after the end of the project. Special attention has thus been paid to the sustainability and sustainable use of the model itself.

The guidelines are divided into several parts on the ENGAGE website and contain the following elements (see also Section 3.6 on the ENGAGE website):

- Brief introductions to the CARING NATURE project and the green transition in health and care services
- Reasoning regarding participatory staff engagement including ENGAGE's theoretical framework; this part also contains introductions to
 - Combining interpretative and analytical approaches
 - Interpretative innovation, proximity and distance
 - Community of Practice in green transition related work
 - Divergent and convergent thinking in staff engagement
- Introductions to facilitation and a facilitator's role
- Introduction to facilitation as a process; this part also contains introductions to
 - Facilitation process stages and questions for facilitators
 - Facilitation process guidelines: Creating space for dialogue
 - Practicalities in facilitation including a facilitation script (when, with whom, why and how to organise staff engagement)

In addition, the library of participatory methods itself contains guidelines for applying the methods, as described in Section 3.3. Videos and other elements will be added to the guidelines to help the users of the ENGAGE model in their activities. The facilitation-related parts are described in the next section 3.4.2, whereas the earlier sections in this deliverable describe elements related to the theoretical framework behind ENGAGE (Section 2.4; see also the ENGAGE website for further information and other guidelines).

3.4.2 Guidelines concerning facilitation

3.4.2.1 Facilitation

Facilitation plays a key role in successful participatory staff engagement (*Fritz J., 2021*; see the ENGAGE website; <https://www.engage-by-caringnature.eu/>). Facilitation refers to the participatory process of making something easier or smoother, typically in the context of a heterogeneous group of people (such as people who represent different professions, levels of education or hierarchy, or work units, or who otherwise have different backgrounds) working together with a common purpose. For example, facilitation is often part of the innovation process. Facilitation involves guiding, helping and facilitating a group of people to work together, to share, analyse and develop ideas, and to define and solve problems.

Facilitating a green transition in health and care organisations emphasises a holistic approach to sustainability, encompassing environmental, social and health-related concerns. It requires strong leadership, collaborative efforts and consistent engagement from the strategic and management level of the organisation down to the practice level. It is important to remember that the green transition



requires not only structural and practical changes in operations, but also a shift in culture and mindset, both for staff and management, and for patients and clients.

Thus, facilitation in the context of green transition in health and care organisations creates space for staff engagement and guides these organisations through the process of adopting sustainable and environmentally friendly practices. The aim is to promote health and wellbeing while addressing environmental issues such as climate change, resource depletion and pollution.

It is important to keep the big picture in mind while acting on a day-to-day level, for example finding a way to adopt greener practices in daily operations, such as reducing waste, energy and water consumption, etc. Through effective facilitation, health and care organisations can not only reduce their environmental footprint but also create healthier environments and more sustainable practices that improve the wellbeing of all involved.

3.4.2.2 Facilitators

A facilitator stimulates discussion, ensures that everyone has a chance to contribute and keeps the group focused on the goals (see the ENGAGE website). For example, in a co-creation setting, a facilitator steers the conversation, ensures that diverse viewpoints are heard, activates creative engagement, manages the rhythm of co-creation, reinforces positive dynamics and manages time.

A facilitator plays a crucial role in creating a fair and balanced environment, especially in group discussions, and mediates potential conflicts or power imbalances. For example, in high-stakes or emotionally charged discussions, the facilitator's role is to de-escalate tense situations and help parties find common ground, encourage open and appreciative communication, and ensure that conversations are productive and constructive, even in moments of disagreement.

Facilitators set clear rules and expectations for communication, help to create a safe space where individuals feel comfortable sharing their thoughts and ensure that any breaches of behaviour are dealt with swiftly. Facilitators create an environment where everyone can contribute, stay focused and work towards a common goal. The facilitator's role is often neutral rather than provocative; they don't provide answers or take sides, but help the group to communicate, collaborate and make decisions.

Some of the key things a facilitator does are as follows:

1. Setting the agenda – planning and organising what needs to be discussed or worked on.
2. Encouraging participation – making sure everyone has a chance to speak and be heard, and planning what kind of participatory methods will be used at different stages of the work.
3. Managing the process – keeping the group on track, ensuring that discussions remain relevant and within time limits.
4. Conflict resolution – helping to resolve disagreements or differences in a constructive and respectful way.
5. Summarising and clarifying – ensuring that key points and decisions are clear and understood by all, and that next steps have been agreed.

3.4.2.3 Facilitation as a process

Facilitation process stages

Facilitation is a powerful tool for leading engagement for green transition. It involves guiding members of a Community of Practice through a process to achieve a common goal, ensuring that everyone participates and contributes effectively (see Figure 4 in Section 3.2 and the ENGAGE website). A facilitation process consists of three stages: (1) preparation and planning, (2) activities during the engagement sessions and (3) post-session reflection, as follows.

(1) Preparation and planning

Preparation and planning are about understanding the problem, needs or opportunities.

Essential questions for the facilitator are:

1. What are the objectives of the engagement session?



2. Who are the participants, and what are their needs and expectations? How does the Community of Practice define and understand transformative change and green transition?
3. How to ensure a mix of individuals with different backgrounds, expertise and experiences? Such diversity fosters innovation and prevents groupthink.
4. What materials and resources are required?
5. How will the session be structured and timed?

As part of the preparation and planning, a facilitator's script (see the end of this section) can be used as a tool where the facilitator can design what participatory methods they will use to encourage participation and engagement. For example, it is important to plan when and at what stage of the engagement process to use *futures thinking* tools such as 'what-if' scenarios to explore alternative pathways.

(2) Activities during the engagement sessions

The engagement sessions concern, for example:

- Session 1: Defining the problem or opportunity
- Session 2: Co-creating solutions
- Session 3: Solution in use and test

Essential questions for the facilitator are:

1. How can I create a welcoming and inclusive environment? How to foster trust and psychological safety, so that participants feel comfortable sharing their thoughts and experimenting with others?
2. How do I support a space and atmosphere where people can work together to generate ideas, solutions or shared visions, with emphasis on openness and inclusivity?
3. How to bring together diverse perspectives, skills and knowledge to create something new and meaningful?
4. How can I manage conflicts or disagreements effectively? How to cherish learning that allows for critical thinking such as questioning assumptions, exploring contradictions and imaginative speculation, for example thinking outside the box and envisioning new possibilities? What kind of *imaginative exercises* encourage participants to think about possible futures?
5. What strategies can I use to keep the group focused and on track? How to use *iterative* processes: design a feedback loop where ideas can evolve over time through continuous input from the members of the Community of Practice?
6. Between sessions (for example, 1 and 2 and 3): What kind of participant tasks between the sessions will contribute to the overall objective? What kind of information and knowledge do you need to collect for the next session? Which participatory methods would be best for the next session? Explain to yourself and your facilitation team why the methods you choose are best for the purpose. In the last session, you can invite the Community of Practice to define future steps by making together an action plan.

(3) Post-session reflection

Reflection is a crucial aspect of situated learning. It allows the Community of Practice to better understand their own basic assumptions and perspectives. This deeper understanding fosters more meaningful collaboration. Reflection helps members of the Community of Practice to learn from their experiences, both successes and failures.

Essential questions for the facilitator are:

1. What went well during the session?
2. What challenges did I face, and how can I address them in the future?
3. How can I gather feedback from the participants?
4. What improvements can be made for future sessions?

In any stage of the facilitation process, facilitation skills can be improved and refined. To improve facilitation skills, essential questions for the facilitator are:



1. How can I improve and train my active listening and observation skills?
2. How can I ask and comment in a respectful and encouraging way?
3. Which participatory methods do I feel comfortable using? Where and with whom could I test and practice using them?
4. How can I enhance my ability to summarise and synthesise information?
5. What methods can I use to build support and trust with participants?

Creating space for dialogue through facilitation

The guidelines concerning facilitation include other elements such as guidelines for handling various practicalities and for creating space for dialogue, which refers to both physical and psychological aspects (see the ENGAGE website). Given the central role of space, the related guidelines are introduced here, too, as an example.

The role of space is essential to building dialogue, as space allows for both the pacing and depth of the conversation. Space refers to both physical (examples shown in Figures 6 and 7) and psychological aspects of communication and relationship dynamics. Space in dialogue is about how pauses, silences and shifts in timing affect how people interact and how trust is built, and dialogue is constructed between people. Space therefore plays a critical role in facilitation because it directly affects how people participate, communicate and collaborate.



Figure 6. Different ways to organise space (illustrations: Anne Pässilä).

Practical guidelines on how to organise space for facilitation

Physical space: The organisation of the space in the room can encourage or discourage participation. For example, seating in a circle promotes equality and open communication, while traditional classroom-style rows may create a more hierarchical dynamic. In smaller, more intimate spaces, participants may feel more comfortable sharing knowledge, whereas larger, formal auditorium-style spaces can make people feel distant or less engaged.

Practical tips for facilitators:

- Plan how you will use the space. For example, one part of the room may be an open space, another part a place for group work and a third part a place for individual work.
- If you will use your own organisation's meeting room, think about how you can bring something surprising and creative into it. For example, the lighting can be different than usual, and you can bring images, symbols and artefacts that resonate with the theme, topic or purpose of the session.



Figure 7. Examples of physical spaces from the co-development phase of ENGAGE with WPH (photos: Riika Saurio).

Psychological space: It is important to create a safe, supportive and appreciative environment where participants feel heard, respected and valued. This requires both verbal and non-verbal cues from the facilitator. A supportive psychological space encourages open sharing, being oneself and creativity.

Practical tips for facilitators:

- Openly establish a working agreement with the session participants. For example, collectively agree that everyone has a role to play in creating a safe and supportive environment where communication can flow freely.
- Agree on how you will talk to each other and how you will relate to and react to each other's ideas and perspectives.
- Ensure that participants have the opportunity and freedom to express themselves without judgment or interruption.
- Encourage positive framing by inviting participants to focus on strengths, solutions and opportunities rather than problems or limitations.

Temporal space: The rhythm of time and work in a session can shape people's energy levels and the depth of discussion. Balancing time for reflection, breaks and interaction allows for meaningful engagement without fatigue and strengthens the dynamics of working.

Practical tips for facilitators:

- Agree with participants when to use mobile phones or computers and when to focus on live interaction.
- Give people time and space to process their thoughts, feelings and ideas.
- Regularly affirm participants' ideas, views and contributions.
- Organise brainstorming and reflection so that people have time to think about the topic alone, in pairs and in small groups.
- Arrange for breaks and refreshments such as coffee, tea, etc.



to share their concerns, and those were discussed (Figure 10). Important insights were gained on, for example, communication and building ownership.



Figure 9. The backcasting method at the ENGAGE breakout session.



Figure 10. Discussions at the ENGAGE breakout session.

3.5.1.2 Instructions for preparing for the training and piloting

The next steps in preparing for the training were written instructions concerning how to prepare for the training and piloting, given to the piloting organisations during January-April 2025, as follows.

Planning for the ENGAGE piloting process

Instructions were given to the piloting organisations concerning the facilitators' tasks during the piloting (such as selecting the participatory methods they wish to use and preparing a facilitator's script), what planning and facilitation implies in ENGAGE and the expected effort required to pilot ENGAGE. It was emphasised that the script of an individual workshop, for example, or any other detail depends on the whole, such as what the CoP is like, who is/are facilitating, what is discussed related to the green transition and with what aim, is the workshop the first, second or third in a series, how much time is available, etc.

It was explained that planning and facilitation within ENGAGE implies working closely with the CoP members and tailoring activities to them based on their needs and characteristics. It is a bottom-up rather than a top-down approach. Tools are provided via ENGAGE but the piloting HCPs determine the content according to what is appropriate for their organisation.

As to the expected effort in a meaningful piloting of ENGAGE, the key is, again, to plan according to the organisation's context, culture and practices. It was emphasised in the instructions that the piloting HCPs are entitled and encouraged to adjust everything into the context and culture of the organisation and their way of doing things. This is very much part of the ENGAGE model – finding a common way that



suits the organisation in question, i.e., the facilitator/s should interact with key people (and preferably also the CoP) in their organisation beforehand. Any choices need to be in line with the situation in the piloting organisation in question. ENGAGE is based on the conviction that imposing choices from outside does not lead to sustainable staff engagement practices for the green transition in health and care organisations.

Information on the facilitator/s to be selected/recruited for the ENGAGE piloting

These instructions focused on giving initial guidance on the profile and role of the facilitators, the type of activities that should be performed with the CoP and the content to be focused on with the CoP. It was emphasised in the instructions that the profile and role of the facilitators, the type of activities to be performed, the content to be focused on during the activities and the effort should be needs-driven – in other words, they depend a lot on the characteristics of each piloting organisation and the CoP of the organisation in question.

This is related to, for example, what the CoP is like – is it a group of people who have already worked closely together? Or do they hardly know each other? Is the working culture such that it is largely fixed to specific established practices? If so, the facilitator (preferably together with the CoP) needs to choose whether the CoP will continue according to the established practices, while bringing in some perspectives, too – or if the CoP will (together) choose a completely new way to do things. Or, an external facilitator can enter the process and bring along a new way to do things.

As to the role of the facilitators and their most suitable profile, it was emphasised in the instructions that it is essential that the facilitator's/facilitators' competence is credible in the eyes of the professionals who participate in the CoP. For example, the hierarchies in the organisation need to be taken into account very carefully.

A good idea can be to have two facilitators with quite different profiles working together as a pair – someone who is sufficiently credible for the professional group in question (with content knowledge on their work practices and processes and their work community) + an expert in the green transition related content/topic to be focused on – but with very good facilitation skills, too (including both group facilitation and 'knowledge brokerage' between different kinds of individuals).

For example, if the topic is recycling in operating rooms, the pair could consist of a surgeon and a recycling expert whose collaboration functions well and they thus understand each other's 'different professional languages'. They both need to be able to facilitate and lead group work and group processes and to organise ideation activities, and have some understanding and skills related to the CoP in question and the topic in question.

As to the methods, it was explained in the instructions that the ENGAGE library will consist of introductory materials (how to use ENGAGE), inspirational materials (why to use ENGAGE), preparatory materials (such as the script template, guidance on communication with the CoP), methodological materials, and materials on the scientific background. It was also explained how the methods will be divided in the library into paradigm-preserving methods, paradigm-stretching methods and paradigm-breaking methods depending on how they change people's perceptions and understanding. Different ones will be included, for the piloting organisations' use, according to their selection.

There are also differences in methods according to whether the essence is to work in pairs, groups or collectively, and what methods are targeted to what aims – e.g., structuring things, brainstorming, reflecting on experiences, grouping of ideas, etc. It was emphasised that further information on the methods will be given in the training.

3.5.1.3 Preparatory questions

After the written instructions and practical preparations with each HCP, the training participants received a set of preparatory questions to which they were asked to provide personal responses. This facilitated the planning of the training. The questions addressed training participants' needs, experiences and expectations. The questions are listed below.

Expectations and goals:

- What do you hope to achieve by participating in this training?
- What specific skills or knowledge are you looking to gain?

Previous experience:



- Have you used participatory methods before? Or have you been in a process where they have been used by someone else? If so, what was your experience like?
- If you have used participatory methods, can you please share any challenges you faced while using them?
- Can you please share your doubts about using participatory methods?

Current practices:

- How do you currently engage staff, stakeholders, clients or patients in your practice?
- What methods do you use, and which do you find most effective in your current practice?

Application and impacts in the CARING NATURE context:

- What aspects of participatory methods do you find most challenging?
- How do you think participatory methods could be tailored or adapted to better suit your needs?
- How do you plan to apply what you will learn from this training?
- What do you plan to focus on (for example, developing a patient journey or a specific capability; this will depend on the organisation), and why?
- What is the short-term goal for the development that you will focus on (for example, developing a patient journey or a specific capability; this will depend on the organisation)?
- What impacts do you hope to see from using participatory methods in your practice?

Collaboration and networking in the CARING NATURE context:

- How can we as the CARING NATURE community support each other in implementing participatory methods meaningfully?

Responses were received from ten training participants. There were participants with diverse backgrounds with regard to previous experience and current practices in using participatory methods. If participants had used participatory methods, they emphasised their value in providing diverse perspectives and enhancing problem analysis and collaborative problem solving. Gaining knowledge in participatory methods to establish and operate a sustainable CoP developing initiatives for the green transition and gaining skills for raising awareness about the green transition among staff were expected.

Challenges with participatory methods were noted to include engaging motivated groups and maintaining equal participation during discussions, ensuring representative participation, keeping stakeholders motivated throughout the process, translating input into actionable, sustainable outcomes, and embedding participatory practices in hierarchical structures or in contexts with limited time and resources. The responses provided important background information for the ENGAGE training.

3.5.1.4 Preparatory webinar

A preparatory webinar was provided to the piloting organisations and training participants on 28 April 2025. The webinar covered the following:

- Key points on participatory staff engagement for green transition in health and care organisations
- Overview of the ENGAGE process at Wellbeing Services County of Päijät-Häme (WPH, Lahti, Finland) and a brief introduction to their environmental partners network as an example of a Community of Practice
- Experiences of the ENGAGE process, interview with Riitta-Maija Hämäläinen, Head of Sustainable Development, WPH
- Introducing the training agenda, and time for questions

The webinar was recorded, and the recording was shared with the training participants (Figure 11). Twenty people attended the webinar. There were representatives of all piloting organisations.



Figure 11. The preparatory webinar of the ENGAGE training.

3.5.2 Implementation of the training

3.5.2.1 Training structure

The detailed agenda for the training was designed after the co-development process at WPH and shared with the piloting organisations in April 2025. The structure of the training implemented at FPHAG, FPG, UKHD and 7HRC is shown in Figure 12.

The training was adapted to context-specific circumstances where possible. The groups were heterogeneous; the trainees represented many different professions and positions. They did not necessarily know all the other trainees in their group and the groups had not selected a joint green transition related topic yet. The training was designed to consist especially of doing things together, using participatory methods and interacting – instead of lecturing.



<p>Day 1</p> <p><i>Part 1</i></p> <ul style="list-style-type: none"> • Welcome, introduction to the agenda and safe space contract • Introduction to ENGAGE's Participatory Staff Engagement <ul style="list-style-type: none"> ○ Overview of ENGAGE principles • Getting to Know Each Other <ul style="list-style-type: none"> ○ Introduction of participants and expectations with the help of socio-metric activity ○ Small group ideation: Importance of participatory staff engagement in a health and care context • Description of the Staff Engagement Process <ul style="list-style-type: none"> ○ Step-by-step breakdown ○ Small group ideation: Key components and objectives • Work Story in Green Transition and Staff Engagement <ul style="list-style-type: none"> ○ Participatory method in action ○ Action mapping: Core actors and activities in the green transition initiative (which is your development task with your Community of Practice) • Innovation and Knowledge Creation <ul style="list-style-type: none"> ○ Knowledge creation in staff engagement ○ Sharing and building knowledge collaboratively; shared meaning making around core concepts <p><i>Break</i></p> <p><i>Part 2</i></p> <ul style="list-style-type: none"> • Facilitation and Facilitators' Role <ul style="list-style-type: none"> ○ Responsibilities of facilitators ○ Skills required for appreciative facilitation • Facilitation Methods <ul style="list-style-type: none"> ○ Overview of different methods for ideation, implementation and reflection: Paradigm preserving methods, Paradigm stretching methods and Paradigm breaking methods ○ Small group ideation about benefits and application areas • Getting Familiar with Facilitation Methods <ul style="list-style-type: none"> ○ Practical exercises ○ Ideation in small groups: Why, how and with whom to organise interactive sessions <p>Day 2</p> <p><i>Part 3</i></p> <ul style="list-style-type: none"> • Drafting Facilitators' script: How to Run the Process <ul style="list-style-type: none"> ○ Brief overview of Day 1 ○ Introducing facilitators' script ○ Drafting a facilitation plan ○ Action plan for the next steps • Reflection <ul style="list-style-type: none"> ○ Fostering a deeper understanding
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Figure 12. Training agenda.

3.5.2.2 Attendance

The live interactive training workshops were arranged as follows:

- FPHAG, Granollers, 6-7 May 2025
- FPG, Rome, 8-9 May 2025
- UKHD, Heidelberg, 5-6 June 2025
- 7HRC, Heraklion, 16-17 June 2025

Altogether 48 persons took part in the training: 15 at FPHAG, 7 at FPG, 6 at UKHD and 20 at 7HRC (Figure 13).



Figure 13. Photo collages of the trainings at FPHAG, FPG, UKHD and 7HRC in May-June 2025.

The training workshops achieved their aim and were well received by the trainees. Lively discussions took place and commitment to participation and willingness and readiness to engage in the participatory exercises were expressed. The small group discussions that were part of the exercises were held in the local languages and then a brief was given to the trainers. This practice was considered useful in view



of the future concrete planning of the piloting in each organisation. The trainers' complete slide deck was shared as training material with all the participants.

3.5.2.3 Evaluation of the training

At the end of each training workshop time for reflection was allowed. The participants also received a short evaluation survey (Annex 5). The survey produced information on the participants' experiences and views of the training and the participatory methods used. The survey results will be used in further development of the ENGAGE model and in project reporting. The survey contained a few background questions on work experience, size of work unit, position and participation in the training, and questions on the following:

- Experiences from the training and the methods used:
 - The participant's experiences from the training, including what went well and what could have been done differently
 - Whether the training was beneficial for the participant as a facilitator in their work community
 - Effectiveness of various methods used in the training, such as theatrical images and storytelling
 - How the participant plans to apply the methods in their community of practice
 - Any aspects the participant felt were missing from the training
 - Methods the participant considers most suitable for promoting environmental issues and the green transition
- Views on participatory methods:
 - Statements about the ENGAGE model's participatory methods and their impact on interaction, knowledge sharing, environmental awareness and motivation to promote the green transition. Participants were asked to rate their agreement on a Likert scale from 1 to 5 (strongly disagree to strongly agree)
- Embedding participatory methods:
 - How the skills and use of participatory methods can be best embedded in the organisation

The survey was designed to be completed in about 10-15 minutes, and responses are anonymous. Seven respondents gave their feedback by 19 June 2025. Their work experience ranged from 10 to 45 years, and they had varied backgrounds. 42.9% were in supervisory roles, while 57.1% were not. 57.1% attended the training throughout both days, and 42.9% participated most of the time.

The feedback was very positive and concerned the creation of a safe learning environment, benefits of small team interactions and active participation, the approachable style of trainers and the participatory methods that were generally found effective, especially those that encouraged interaction and creativity. According to the respondents, the trainers engaged with the group in a very approachable manner, which helped create a safe space for learning, sharing and experimenting. This was highlighted as a significant positive aspect of the training. Grouping participants into small teams of 4 or 5 people facilitated active collaboration. This helped participants feel more engaged with the project and get to know each other better.

Participatory methods were particularly effective in encouraging all trainees to share their opinions and interact. These methods energised the participants and brought out a variety of perspectives and ideas. Storytelling with theatrical images, for example, was found to be interesting when engaging professionals, or patients. This method helped participants build a story about sustainability. Methods that help to link actions to personal and organisational values were also seen as suitable for promoting environmental awareness.

Participants plan to apply methods in various activities, focusing on understanding colleagues' needs and integrating sustainability into daily work. Some confusion was caused by participants understanding some of the tasks differently. More concrete green transition related examples and real-life cases were desired to inspire actions related to the CARING NATURE project. On the other hand, positive signs of how staff engagement can stimulate individual creativity have already been seen after the training, leading to new organisational practices in leveraging on innovative ideas from the staff.



According to the respondents' numerical assessments

- Participatory methods like those of the ENGAGE model can enhance staff's environmental awareness and increase motivation to promote the green transition: average score of 4.3 (out of 5)
- The development and use of participatory methods of the ENGAGE model can strengthen interaction and cross-professional knowledge sharing among staff for the benefit of the green transition: average score of 4.4
- Peer-to-peer learning based on the ENGAGE model is an important way of spreading environmental awareness and promoting the green transition: average score of 4.3

As to suitability of the participatory methods for use in various work environments and units, the average score was 3.7. This is in line with the feedback received during the co-development of the model with WPH. Differences between various work environments and units underline the need for careful contextualisation in any use of ENGAGE (see Section 4.5.1).

A few descriptive quotations from the survey are included below.

Exploring different methods was useful (portfolio of methods for different goals). At times, I felt we could have utilised more concrete and real examples in the context of implementing CN solutions, but we couldn't as we aren't yet in full validation/piloting mode. Still, the learnings will be very useful as we plan to get there.

I cannot tell whether I can apply the methods I learned in my work but we did work on a plan for the next steps in the project, so it was partly beneficial.

Went well. It has been a life experience. It has built the facilitators' team [...].

I believe all methods presented can be useful. Different methods for different audiences (team maturity, dynamics), and different goals - preserving, breaking, expanding, etc.

3.6 Component 5: Compiling the ENGAGE model

The ENGAGE model was compiled in the form of a website (<https://www.engage-by-caringnature.eu/>) to facilitate its sustainability and sustainable use also after the end of the project. The structure of the website is as follows.

- What and why this website?
- Green transition in health and care services
- What is participatory staff engagement?
- What is facilitation and a facilitator?
- Facilitation as a process
- Library of participatory methods
- Case Wellbeing Services County of Päijät-Häme
- Other country cases
- Sustainable embedding

The website guides the user in the use of participatory methods for staff engagement in the context of the green transition in health and care services. The website maps the why, what, who and how aspects of participatory staff engagement. Apart from introductory parts and materials, the user will find information on inspirational and preparatory materials on essential aspects such as:

- What is participatory staff engagement?
- How can it be facilitated and by whom?
- What kind of participatory methods are there and how can they be used?



- What kind of experiences have been gained and how can such new practices be sustainably embedded?

The website serves different kinds of users, particularly health and care professionals, managers and organisations. It can also be of use for decision-makers at different societal levels and educators, and anyone who wishes to find new perspectives to participatory methods, staff engagement, the green transition or health and care services (see Figure 14 and Annexes 1 and 2 for an overview of the contents, particularly of the library of participatory methods). Each method description can be downloaded and printed as a PDF file.



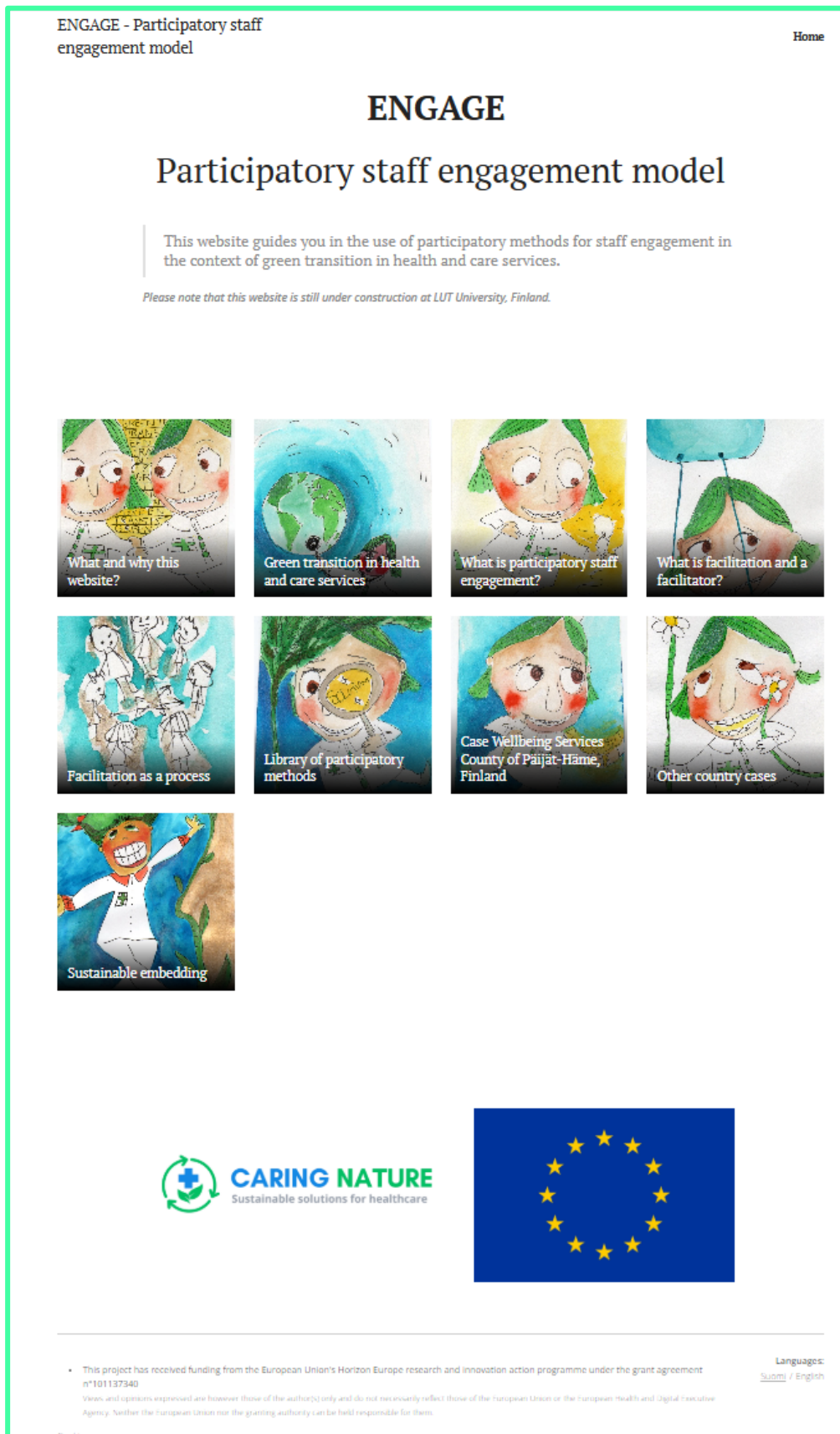


Figure 14. Overview of the ENGAGE website.



The website is under construction as of June 2025, because the ENGAGE model will be fine-tuned based on the piloting in the other HCPs during WP6.

4 Use case

This section describes the specific use case of WPH, the co-developer, i.e. the application of the ENGAGE solution to the specific health and care organisation in Finland.

4.1 Introduction

4.1.1 WPH's CoP

The use case of WPH (Finland) supported the co-development of ENGAGE from M7 to M18. The WPH use case dealt with topics related to the implementation of the Environmental Programme of WPH for 2023–2025 (*Hämäläinen R.-M. et al., 2023b*). The programme has been established to develop sustainable and environmentally friendly service production and to achieve carbon neutrality in the County by 2035. WPH's commitment to promoting environmental sustainability has led to the establishment of a network of *environmental partners* to support this goal. The network was launched in 2023 and it is linked to the wider Finnish network of eco-supporters⁷.

This network was selected to function as WPH's CoP to advance staff engagement for the green transition within WPH. The use case concerned different components of ENGAGE – the co-development process directly benefited the library of participatory methods and the guidelines for applying them, and insights from it were utilised also in the description of the learning approach and planning of the training for the piloting HCPs.

The environmental partners' network – the selected CoP – has the following aims:

- Support environmental management from the employee level
- Support the environmental programme and its objectives (see the Section on WPH in D2.1 for information about the programme's priority areas)
- Implement and embed the environmental programme into concrete actions and practices
- Increase the environmental awareness of personnel
- Reduce negative environmental impacts: energy savings, sustainable purchasing, mobility choices, reduction of waste, including food waste
- Potentially bring cost savings.

The CoP is thus a multi-professional network consisting of professionals from different health and care service units and different backgrounds, such as nurses, rehabilitation and catering & nutrition specialists, service managers for hospital services and elderly care as well as ICT development, and representatives from medical equipment maintenance and sterilisation as well as administration. The members' units are located in different parts of the larger geographic area of the County, which means that they do not work together in their daily work. Most of them had not met face-to-face before the co-development process of ENGAGE.

Each environmental partner carries out meaningful environmental work in their service unit, together with the supervisor and colleagues – communicating, training, motivating, etc., other employees for environmentally friendly choices. Their tasks are to:

- Promote an environmentally responsible operating culture in their own work community
- Participate in training for their tasks, and maintain and develop their environmental competence
- Find out the state of environmental issues at their workplace
- Participate in setting environmental goals

⁷ <https://www.ekotuki.fi/en/>



- Guide and encourage the members of their work community to engage in environmentally responsible activities, such as energy saving, reducing consumption and sustainable mobility
- Inform their work community regularly about the progress of environmental goals.

Each environmental partner may devote one day of their working time per month to promote environmental issues. The network has regular thematic meetings. An initial training of environmental partners is organised twice a year, in May and November. The future environmental partner asks their supervisor permission to participate in the training and to use working time for the task of an environmental partner. The network is part of WPH's organisational structure and structural management. The environmental partners have a strong intrinsic motivation that connects them – making this CoP highly relevant and appropriate for the co-development activities of the project.

I have a strong motivation to be an environmental partner, and it bothers me if things are not done in the right way in waste management, for example. (one of the partners)

The CoP is directly relevant for engaging the staff in the green transition, in terms of both developing the CoP itself further and developing its members' competence in acting as environmental "agents" or "hubs" in their service units. These two arenas also allowed to experiment a wide spectrum of engagement methods, as part of the ENGAGE library, thus contributing to ENGAGE's relevance for the four piloting HCPs and their diverse CoPs (and wider use after the project).

4.2 Execution modality

4.2.1 Overview of the preparation

The close collaboration between LUT and WPH started right after the start of the project to ensure successful implementation of T4.4. Monthly meetings have been held since M1 and there has been regular email correspondence. The collaboration first contributed to the work done in T2.2 and T2.3 (mapping of possible use cases and related discussions; selection of the use case of the network of environmental partners together with WPH).

The official kick-off meeting of T4.4 took place in the end of M6 (25 June 2024). T4.4 and its work plan for the co-development of the participatory staff engagement model were introduced and discussed with all task participants. The discussion also concerned the potential of NBI (nature-based infrastructure) in motivating staff engagement behaviour and its relation to ENGAGE (see Section 3.1.2).

Provision of information on the project and ENGAGE to the selected CoP, the network of environmental partners, started early on to ensure successful implementation of the co-development. LUT participated in the internal meeting of the network, providing information on the project, on 24 May 2024. The more detailed planning of ENGAGE's workshop series started together with WPH when the use case had been selected. A three-stage workshop series was designed.

A preparatory survey was conducted in M6-M8 to gain knowledge about the environmental partners' roles, experiences and needs, and about what challenges and successes they have encountered in their role. The results were utilised in designing the learning approach for engagement as well as in the planning of the co-development process, notably the first workshop that was held in M10, on 17 October 2024. An information package for the first workshop was prepared and other practical workshop preparations were taken care of in M9. After the workshop, a summary of it was provided to the whole CoP.

The first workshop informed the planning of the second workshop that was held in M11, on 25 November 2024. Similar preparations were conducted, including an invitation encouraging the CoP members to attend the second workshop. The dates of all workshops had been decided and communicated early on. Again, a summary was provided to all CoP members after the second workshop. It informed the planning of the third workshop that was held in M14, on 17 February 2025. A summary of the third workshop was also provided to all CoP members. (See also Section 4.3.) The preparations proceeded smoothly and there were no specific constraints that would have affected the co-development process.

During the design of the workshop series and the whole co-development process, special attention was paid to the three central phases of facilitation – planning, implementation and reflection (see Figure 15) – including focusing on the details of the following:

1. Objectives and content



2. Participants and roles
3. Timetable and structure
4. Methods and tools
5. Working environment
6. Leading and engaging participants
7. Preparing for implementation
8. Reflection and feedback
9. Follow-up and further action
10. Practical arrangements

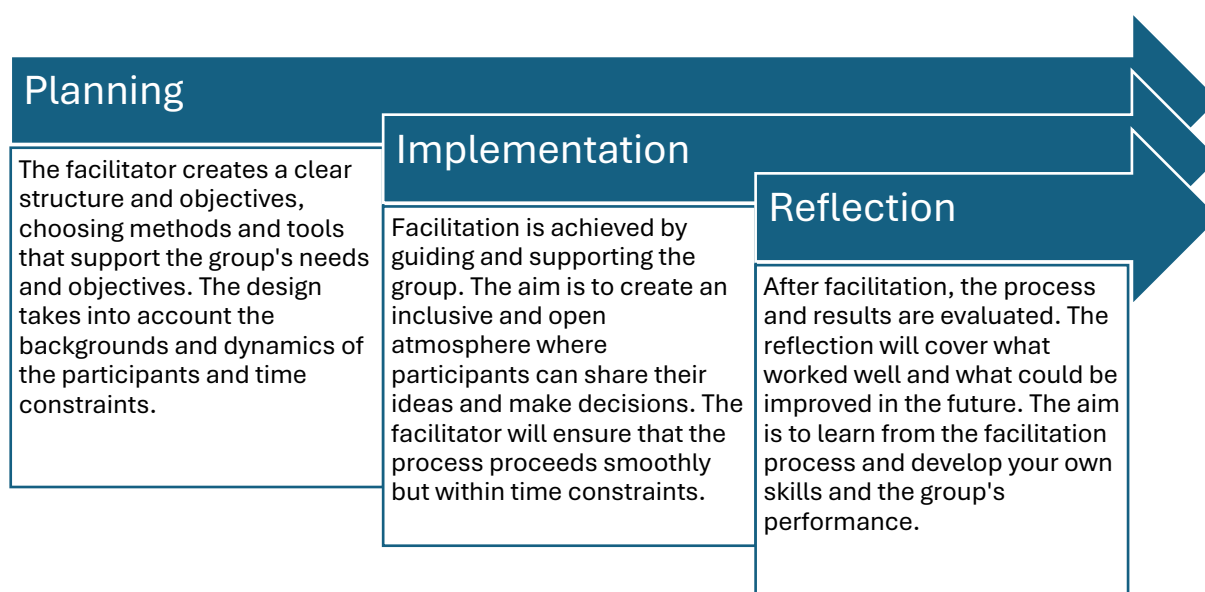


Figure 15. Facilitation process stages.

4.2.2 Survey on CoP members' roles, experiences and needs

The survey (conducted in M6–M8) aimed at the CoP members, the environmental partners, had the purpose to assess the challenges and successful practices encountered by these partners in their roles, particularly in promoting environmental awareness. It sought to gather insights on daily work situations where the partners had faced either challenges or successes while acting as environmental advocates.

4.2.2.1 Survey details

The survey was designed to be accessible via web browsers and mobile devices (Annex 3), taking approximately 15–20 minutes to complete. Responses were anonymous and were treated confidentially, providing valuable background information for collaborative planning of the co-development.

The survey included several questions to gather background information from participants, such as:

- Work experience throughout their career (estimated in years)
- Duration of service as an environmental partner (estimated in months)
- Size of their work unit (estimated number of employees)
- Whether they hold supervisory positions

Most of the questions were open questions. The survey explored *participants' experiences as environmental partners*, including:



- Identifying the three most important tasks they perform in this role
- Recognising effective methods or practices they have encountered
- Discussing challenges faced and potential solutions
- Listing the biggest challenges and successes experienced in their role

Participants were also asked about their *needs and wishes as environmental partners*, including:

- Experiences and needs for support from their own unit and from other units within or outside the County
- Plans for improving their skills as environmental partners

The survey concluded by addressing *the types of environmental matters participants have promoted and their aspirations for future initiatives*. It also sought to identify the *major obstacles they faced* in advancing environmental matters within their units, such as complexities in implementation, increased burden at work, too expensive or too time-consuming solutions. The survey gathered essential data that can also inform future strategies and enhance the effectiveness of environmental partnerships in the County.

4.2.2.2 Survey results

The survey included 11 respondents who provided insights into their work experience and roles as environmental partners. The respondents reported varying years of work experience, with some having as many as 28 years and others 7 years in total work experience. The duration of service as environmental partners varied significantly among respondents, with reported months ranging from 0 (newly started) to 14 months (since the establishment of the network). The size of the respondents' work units also varied, with estimates of employee numbers ranging from 4 to 600. Among the respondents, 18.2% identified as being in supervisory roles, while the majority, 81.8%, were not.

Respondents were asked to identify their three most important tasks as environmental partners. The top responsibilities included:

- Promoting environmentally responsible practices within their work communities (90%)
- Engaging in training and development of environmental skills (60%)
- Guiding colleagues towards environmentally responsible actions (80%)

Respondents shared various effective methods and practices they have recognised in their roles, such as:

- The importance of participation and appointing responsible individuals for changes to occur
- Successful recycling initiatives in office environments

The survey also highlighted several challenges encountered by respondents, including:

- Resistance to changing practices and a lack of motivation among some employees
- Difficulties in transitioning to digital tools and managing waste effectively

Respondents discussed potential solutions to the challenges faced, emphasising the need for clear communication and guidance. Support from their units varied, with some respondents indicating they received encouragement from supervisors to pursue development work. Support from outside their units was also noted, including guidance from sustainability leaders. Looking ahead, respondents expressed a desire to enhance their skills as environmental partners, focusing on sustainable development principles and practical applications within their workplaces.

Respondents reported various environmental initiatives they had promoted, such as improving waste sorting and recycling practices. They also indicated aspirations to continue developing these initiatives, particularly in waste reduction and energy efficiency. The survey concluded with insights into the major obstacles faced in advancing environmental initiatives, including the complexity of implementing effective practices and the perceived lack of importance placed on environmental responsibilities by some staff. Overall, the survey highlighted the diverse experiences and challenges faced by environmental partners, as well as their commitment to fostering sustainable practices within their organisation.



4.3 Description of activities performed with the CoP of WPH

4.3.1 Overview of the co-development activities

The ENGAGE model was iteratively co-developed with WPH, and the steps taken – in line with D2.1 – included the following:

- Designing the learning approach for engagement in health and care systems' Communities of Practice (CoP), with reference to the green transition
 - Description of the learning approach based on literature (see Section 3.2)
 - Co-development of the learning strategy for the green transition with the sustainability expert/leader of the CoP and staff
 - Preparation of the staff engagement plan in consultation with the above-mentioned participants
 - The ENGAGE process in action:
 - Determining the green transition thematics and compilation of knowledge related to it
 - Outlining, naming and illustrating the role, identity and tasks of the CoP (based on the existing network) together with the staff, and designing a visual form for it
 - Recognising/identifying problems related to green transition thematics and their root causes; forming questions about the problems and root causes as well as strengths and opportunities
 - Recognising and describing situations, practices, power relations and basic beliefs that cause the problems or provide the opportunities
- Testing the participatory staff engagement approach for the green transition with WPH using physical presence, in the local language, in workshops.
 - Collecting data (documentation of the planning of the co-development, workshop materials produced by the participants, observation notes and photographs, as well as reflection and evaluation materials) with the help of the participatory approach in workshops of the chosen CoP, including reflection of present situation and past paths to the present and future scenarios in staff engagement for the green transition in the health and care CoP
 - Continuous analysis of the data as part of the planning during the workshop process
 - Incorporating in the approach the potential of NBI to motivate staff engagement behaviour
 - See Section 3.1.2 concerning the process
 - NBI methods were utilised in workshop 3 (see Section 4.3.2.3)

The following later steps were informed by the WPH co-development process:

- Refining the approach and converting the methods into a library of participatory methods for staff engagement in the green transition context
- Designing and providing the guidelines for the piloting partners to apply participatory methods in their local circumstances and training (in English) to partners for using participatory methods in their circumstances (in their local languages), i.e., the chosen CoPs
- Compiling ENGAGE, the participatory staff engagement model, and preparation of the website to ease the use of the model and contribute to its sustainable use after the project.



4.3.2 Workshop process at WPH

A workshop process – a series of three workshops – was implemented to test and co-develop participatory staff engagement methods (for example, work stories, visual methods, nature-based methods) with the environmental partners (the CoP). Before the workshops, they were planned very carefully with the managers/facilitators of the network, and the survey was conducted on the environmental partners' roles, needs, experiences and challenges in their tasks and activities (see Figures 16 and 17 and Section 4.2). The key was the needs-based process in which LUT worked with WPH's "change agents" – the CoP members – who then engage their collaborators in their units – the aim was to support the agents' identity and empower them in their activities (see also Figure 16).

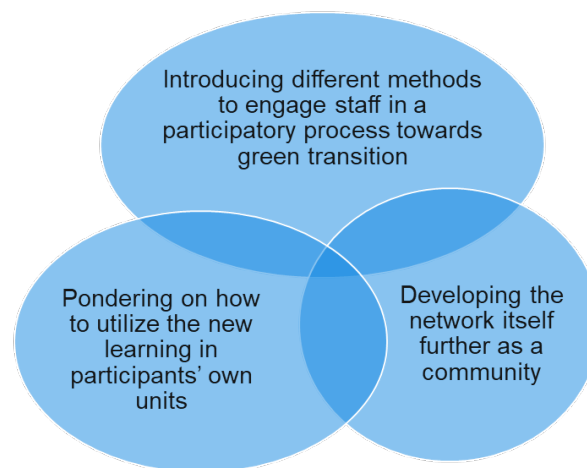


Figure 16. *The focus of the workshop process at WPH.*

The structure of the whole co-development process with WPH is shown in Figure 17.

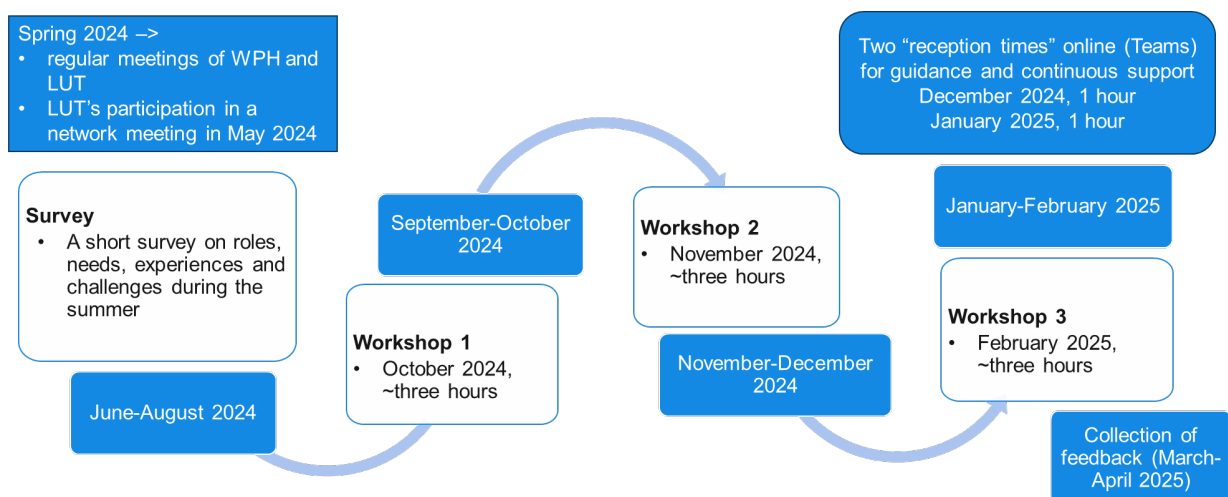


Figure 17. *The co-development process with WPH.*

The workshops formed a series that followed the general phases of a staff engagement process (see Figure 5 in Section 3.3.1).

Prior to the workshops, in addition to the close collaboration and careful planning with the CoP (the network's managers/facilitators), the facilitator's script was utilised in internal planning at LUT. There was encouraging communication to the CoP concerning each workshop, reminders were sent in several ways, and registrations were requested. This was done to attract participants and to "set the stage" together.



LUT researchers were external “researcher-facilitators” in this process. They came from a multiprofessional team and had both professional facilitator experience, health and care sector experience and research experience.

The whole series focused on supporting the identity of and empowering the environmental partners in the green transition, building up trust and interaction and co-creating knowledge in their network – the CoP. The topics of the three workshops were as follows:

- Workshop 1: Identifying together the problems they have faced when acting as environmental partners
- Workshop 2: Identifying how the environmental partners co-create knowledge
- Workshop 3: Drafting the action plan for how to interact and co-create knowledge

The generic structure of an individual workshop was as follows:

- Warming up and orientating to the topic
- Interpretative phase – focus on divergent thinking (expanding the perspective)
- Analytical phase – focus on convergent thinking (narrowing down, structuring)
- Closing – feedback and next steps in their own units

The participatory methods were tailored to each phase of each individual workshop. After each workshop, the researcher-facilitators reflected on what kind of discussions there had been, what phenomena were raised – and these were used as the foundation for preparing the facilitation script for the next workshop. The reflection took place also between the researcher-facilitators and manager-facilitators. It was thus an iterative process – while all the time keeping in mind the overall aim of the whole series. The descriptions of the individual workshops are as follows.

4.3.2.1 Workshop 1

The first three-hour workshop of the series titled “Environmental Partner as a Change Maker” took place on 17 October 2024 at Community House Fellmannia in Lahti. The primary goal of the workshop series was to support environmental partners in their daily work and introduce new perspectives. Themes of the first workshop were as follows:

- Support for being an environmental partner in the partners’ daily work
- New perspectives on other environmental partners’ work environments
- Raising the competences and challenges of being an environmental partner
- Exploring working methods and practices that deepen environmental awareness

There were 13 participants from WPH and 5 from LUT. Each LUT researcher-facilitator had a predetermined role (leading facilitator/ provider of theoretical inputs and framing/ note-taker/ observer and note-taker/ practicalities, ethical procedures and photography). The workshop was implemented as follows (see also Figure 18 in addition to the narration).

The workshop began with participants being guided into the workshop space by a red thread, symbolising the significance of the workshop and the shared purpose of finding a common thread in their work. After the welcome speech, participants raised green smoothie glasses and verbally accepted a working agreement designed to free them from self-assessment and the assessment of others, allowing space for all thoughts and opinions.

Participants then moved to a larger space to perform a sociometric map exercise, where they positioned themselves on a map to share who they were and where they had started their day. In small groups, they discussed their expectations for the workshop, and the responses were briefly reviewed with the entire group before returning to the workshop space. In the workshop space, the researcher-facilitators introduced the ENGAGE process for staff engagement and the results of the survey conducted among environmental partners during the summer of 2024.

The workshop continued with the work story method, where participants shared their work experiences related to environmental partnership. Each participant selected 1–3 images from theatrical images on display, which represented issues they felt were crucial in environmental partnership. They then paired



up and shared their personal experiences using the images, repeating the story with new partners each time. This process helped participants clarify their thoughts and recognise common challenges.

After the pair work, participants divided into two small groups to review all the images and discuss the connections between them. They wrote and drew arrows to highlight the key issues, with 20 minutes allocated for this task. Simultaneously, refreshments were served.

In the second phase of small group work, participants considered who could influence the identified challenges. They discussed different levels of influence, from individual actions to broader community support and structural decisions. The workshop concluded with a group discussion on what had been learned, where they had succeeded, and what could be done differently.

Participants appreciated the opportunity to meet colleagues, the varied working methods, and the constructive working atmosphere. They suggested that future workshops include outdoor activities and ideation techniques to encourage teamwork. The feedback highlighted the importance of creating a supportive and collaborative environment for environmental partners to share their experiences and learn from each other.



Figure 18. A photo collage of workshop 1.

The comprehensive workshop materials provided the basis for planning the second workshop. A 13-slide summary of workshop 1 was provided to the CoP members.

4.3.2.2 Workshop 2

The second three-hour workshop of the “Environmental Partner as a Change Maker” series was held on 25 November 2024 at LUT University, Niemi Campus in Lahti. Themes of the second training workshop were as follows:

- Deepening together what environmental partnership is now and in the future



- To reflect on what environmental partnership means (for the partner, for their work unit, for the County and for the planet).
- Exploring working methods and practices that deepen environmental awareness
- How to communicate on environmental partnership?

There were 12 participants from WPH and 5 from LUT. The workshop was implemented as follows (see also Figure 19).

During the first part, the participants were welcomed with a red vegan berry smoothie and nature-based images. LUT's researcher-facilitators briefly framed the workshop and described its themes. After that, several participatory methods were used:

- Sociometric map method: This method involved the participants reflecting on their experiences from the first workshop and discussing them through group work and discussions.
- Knowledge boxes exercise: The participants imagined four different “knowledge boxes” representing where knowledge resides within their work community and discussed their perspectives.
- Trust exercise: In pairs, the participants took turns guiding each other with closed eyes, symbolising leadership and change. This exercise aimed to explore the dynamics of leading and being led in the context of environmental partnership.
- Still-image technique: Participants created still images to depict scenarios of resistance to change. These images were then discussed to understand the underlying issues and dynamics.

During the second part, participants engaged in individual and group work on three themes:

- What is an “environmental agent” like
- Culture, practices and meetings of the network of environmental partners
- What and how to communicate about environmental partnership in different contexts

The results were displayed on whiteboards.

After that, next steps were discussed. The workshop participants were asked to consider the Top Ten development areas for the environmental partnership in their work community. What should be done next and when? The UN Sustainable Development Goals, for example, could be used as a starting point. The reflective sketchbook method was presented to support reflection. The participants received a reflective sketchbook to note their observations and ideas for environmental improvements. It supports discussions in their own work communities.

The participants were informed about two online sparring sessions that had been scheduled to support them in planning and finding practical ways to advance environmental matters in their units with the help of participatory methods and identifying development areas. In line with the first one, the second workshop also emphasised interactive and participatory methods to build trust, foster collaboration and encourage open discussions about environmental partnership and change. Again, the comprehensive workshop materials provided the basis for planning the third workshop. A 14-slide summary of workshop 2 was provided to the CoP members.



Figure 19. A photo collage of workshop 2.

The two online sparring sessions between the second and third workshops gathered only a few participants who did not yet have specific questions. The sessions were organised to support the CoP members, who were encouraged to participate to ask any questions they might have about staff engagement, use of participatory methods or their future plans as environmental partners. The one-hour sessions were organised on 16 December 2024 and 20 January 2025. In future processes, such sessions can be useful, especially in a large geographical area, but their aim and organisation could be reconsidered to respond better to the CoP members' needs.

4.3.2.3 Workshop 3

The third and last workshop of the series was held on 17 February 2025. The workshop involved 15 participants from WPH and 4 from LUT and was held at the Päijät-Häme Central Hospital and Lahti Health Forest. The workshop included various activities such as nature-based methods, discussions and reflections (see Figure 20).

After the introduction, the participants walked to Lahti Health Forest for the first part of the workshop that was implemented with the help of the nature-based methods. They were a significant part of the workshop and were designed to help participants connect with nature and reflect on their experiences. The key activities were:

- **Arrival at the Health Forest:** Upon arriving at the Lahti Health Forest, the sustainability manager of WPH introduced the possibilities and general principles of the Health Forest. The lead researcher-facilitator of LUT then took over and started the nature session by forming a circle where the participants could take a moment to relax and detach from work-related thoughts.
- **Breathing exercise:** The participants closed their eyes for a moment to focus on the present. They then performed a breathing exercise involving three deep breaths, with the last breath used to blow away their worries.
- **Group activity:** The participants were divided into groups of three and instructed to find three interesting details in the forest. These details were used to spark discussions within the groups.



- Personal reflection: Each participant found their own favourite spot in the forest and created a mental snapshot of it. This activity was designed to encourage personal reflection and connection with nature.
- Drifting method: The drifting method (Drifting/Dérive, Guy Debord, 1958, Situationists) was applied in a modified form. This method, typically used in urban planning, was utilised to observe and experience the significance of nature.
- Sharing experiences: After the time in the forest, the participants returned to the circle to share their feelings about the task and describe their favourite spots. This sharing session helped to reinforce the connection with nature and the insights gained from the activities.

These nature-based methods aimed to create a meaningful and reflective experience for the participants, helping them to connect with nature and each other in a supportive and open environment. (See also, for example, the method descriptions “Dérive” and “Nature-based empowering photography” in the library of participatory methods on the ENGAGE website on <https://www.engage-by-caringnature.eu/>.)

The participants then returned from the Health Forest to the meeting room at the hospital for vegan refreshments. LUT’s researcher-facilitators set the Karelian coffee table, where they had pre-invited two environmental partners to discuss, one by one. The aim was to share best practices and raise the challenges faced by environmental partners. The discussion covered, for example, how long they had been environmental partners and what motivates them, the challenges and successes of their own work community in promoting environmental issues, and their future goals and dreams.

The coffee table discussion method (see the ENGAGE website) is an informal and open discussion method that creates a safe and relaxed environment for sharing knowledge and experiences. The discussion takes place without formal structures, although the discussion themes and questions are predetermined together with the participants. The aim is to promote collective learning, peer learning and empowerment.

The feedback from the participants was collected at the end of the workshop series, reflecting on their experiences throughout the three workshops. The participants provided generally positive feedback, expressing a sense of progress and readiness to take action in their role as environmental partners. One participant, who attended all three workshops, described their experience as a journey from confusion to clarity and readiness to collaborate.

The participants chose theatrical images that represented their feelings about the workshops and wrote their thoughts on sticky notes. These reflections were placed along a red thread, symbolising the journey through the workshop series. The feedback highlighted the participants’ positive experiences and their readiness to move forward with the insights gained from the workshops. They appreciated the appreciative space created for sharing experiences and the collaborative approach.

A follow-up coffee meeting was scheduled for 22 August 2025 to share updates. The comprehensive workshop materials provided the basis for completing the co-development phase and planning the ENGAGE training for the piloting organisations. After the workshop, a 12-slide summary of workshop 3 was provided to the CoP members.



Figure 20. A photo collage of workshop 3.

4.4 Results of the use case

4.4.1 Overview

Results of the use case were in line with the goal of supporting the identity of and empowering the environmental partners – the selected CoP – in the green transition, building up trust and interaction and co-creating knowledge in their network. In this use case, the goal was thus not related to a specific green transition related topic, such as waste management or telemedicine use, but the CoP members will focus on such topics in their role in their work units and the whole County.

From the task leader's perspective, the results concerning the co-development were very positive – it proceeded smoothly and successfully, objectives were reached, and no constraints were faced. It provided a solid foundation for compiling the ENGAGE model, which was accomplished according to the given timeline, and even though a website was produced as well.

The results can be reflected also with the help of the evaluation materials (see Sections 4.4.2 and 4.4.3). Those materials provided information on both the outcomes of the co-development and the outcomes as seen by the workshop participants. However, changing the organisational culture is a long process that requires thorough contextualisation and tailoring of the activities for the organisation in question and its participants. These largely determine the outcomes from the organisation's internal perspective.

External researcher-facilitators had a different role and knowledge than internal facilitators would have had. As to individual participants, their work and work environments differ, and different personalities may lead to different preferences in method use, for example. External researcher-facilitators also cannot affect organisational decisions and choices such as use of working time. At WPH, the fact that the environmental partners could use their working time to attend the workshops was an excellent basis for the co-development.



4.4.2 Evaluation survey for environmental partners

The CoP members, the environmental partners, received an online feedback survey about one month after the last workshop. They thus provided their feedback in two phases – immediate feedback was requested at the end of the last workshop, with the help of images, and a later evaluation was requested with the help of the online survey (see Annex 4).

The survey questions concerned experiences of the workshops and the methods used (questions to workshop participants; part 1), questions for those who did not attend the workshops (part 2) and questions for all (part 3). Feedback was received from 11 respondents. The feedback focuses on their experiences and insights regarding workshops and their roles as environmental partners. In addition to open questions, there were a few statements to which respondents were asked to give a numerical assessment.

Respondents reported varying lengths of work experience, with responses ranging from 6 to 41 years. The average experience indicates a diverse background among participants, which may contribute to varied perspectives on environmental issues. The duration of involvement as environmental partners varied, with responses indicating periods from 6 months to 24 months.

Respondents reported a wide range of employee numbers in their respective work units, from 6 to 450 employees. This diversity in unit size may influence the implementation of environmental initiatives. Out of the respondents, 36.4% indicated they hold leadership positions, while 63.6% do not. This distribution may affect the perspectives shared in the survey. Respondents reported varying levels of participation in ENGAGE workshops, with 27.3% attending all three sessions, 36.3% attending two, and 27.3% attending one. Only 9.1% did not participate at all.

Respondents provided qualitative feedback on their workshop experiences, highlighting positive aspects such as increased cohesion and enjoyable interactions and good exchanges of ideas. However, some expressed a desire for more background information and clearer objectives for the workshops. Most respondents felt that the experiences gained from the workshops were beneficial in their roles as environmental partners, with many already applying new methods learned.

However, some expressed uncertainty about how to implement these methods effectively in their specific contexts. Respondents evaluated various methods used in the workshops, such as interactive discussions. Many found these methods effective for engaging participants, although some preferred more traditional approaches.

Respondents suggested that future workshops could benefit from more active participation (a higher number of participants, as not all environmental partners could attend) and clearer communication of objectives. They also emphasised the importance of addressing environmental issues in a more engaging manner.

The survey results indicate a diverse range of experiences and perspectives among environmental partners. The feedback highlights the need for continuous improvement in workshop design and implementation to enhance engagement and effectiveness in promoting environmental initiatives. Overall, the ENGAGE model has shown potential in fostering interaction and knowledge sharing among staff for the green transition.

According to the respondents, the co-development and use of the ENGAGE model reinforced interaction and transprofessional knowledge sharing for the green transition among the staff. Their average rating was 3.7 out of 5 for this statement. The survey emphasises the general importance of collaborative learning and sharing best practices to enhance environmental initiatives within organisations.

Participatory methods like the ENGAGE model can effectively promote environmental awareness and the green transition, but the selected methods need to be suitable for the work environment and unit in question. Overall, the results indicate that while the ENGAGE workshops were well-received, there are opportunities for improvement in terms of practical exercises and ongoing support for environmental initiatives at WPH. Lack of time was the reason for not attending the workshops – this kind of information was also specifically requested in the survey.

A few descriptive quotations from the survey are included below.

In the workshops (and among environmental partners in general), there were like-minded people who are interested in environmental issues. It has been quite easy to get to know others



in the workshops under the guise of various activities. The workshops have been interesting, if you compare them to hearing the same things in a two-hour lecture.

Certainly, all [participatory] methods work. It's good to use different ways because people work in different ways. And different approaches can also be better remembered and used again.

The methods helped me to understand others' views on sustainability but are not suitable for my own work community because of the mobile nature of the work.

[Important is] Supervisors' encouragement and facilitating the participation of frontline workers in the workshop. That it is seen as important in the work community.

[About embedding participatory methods] It certainly depends on the work community and the way you work.

4.4.3 Evaluation interview with manager-facilitators

An evaluation interview was conducted with WPH's two manager-facilitators on 16 April 2025, two months after the last workshop. The feedback focused on the experiences and feedback from these two participants. They participated in all the three workshops. The interview questions concerned both *the collaboration process* during the co-development, the *various preparations* as well as *all details related to the workshops*. In addition to open questions, there were a few statements to which the interviewees were asked to give a numerical assessment.

As to collaboration and preparation, the interviewees felt that the preparation process for the workshops was well-structured, with both teams, LUT and WPH's, contributing effectively. The proposals were well-prepared and structured. Teamwork was highlighted as a positive aspect, with both teams working well together. The structured schedules and receptive attitude towards ideas were also noted. A pre-workshop survey was conducted, which was a new and somewhat unfamiliar method for the environmental partners. Despite the relatively low response rate, the survey was considered necessary and participatory.

As to workshop experiences, the initial workshop was somewhat confusing for participants due to its newness, but by the third workshop, a sense of warmth and community had developed. Creative methods and props helped break the ice and foster a sense of community. Workshop logistics were also discussed. The length of the workshops was deemed appropriate, and the practical arrangements, including catering, were well-received. Holding workshops in different locations was also appreciated. Written summaries of the workshops were useful for recalling what happened, although there was some doubt about whether all environmental partners read them.

The methods used in the workshops were effective according to the interviewees, but in some exercises their purpose could have been clearer. The use of participatory methods like the Karelian coffee table and theatrical images was successful and they could be used in the future. The interviewees noted about environmental partners' attendance and participation that there were real reasons for absences, such as work shifts and sick leave. Ensuring one day per month for environmental partner tasks is essential for the network's existence, and it was an important enabler of participation in the workshop series.

According to the interviewees, the co-development and use of the ENGAGE model reinforced interaction and transprofessional knowledge sharing for the green transition among the staff. Their rating was 4 out of 5 for this statement. They plan to increase the use of participatory methods and would like to implement some of them also with their management.

ENGAGE has given the opportunity to improve competences that are essential for the environmental partners, as there is also resistance towards the green transition that they face. Participation in the workshops and getting to know each other has led to more intense communication in the network of environmental partners after the workshop series. They want to learn new ways of thinking and make a difference and achieve visible changes.

A few descriptive quotations are included below.

The first workshop was confusing because it was a new experience and the venue was new. The participants had not met face-to-face. By the third workshop, there was a sense of warmth and community. The participants started to understand the purpose of the workshops and felt more comfortable.



The methods were effective, but their purpose could have been clearer in some exercises.

The creative methods and props helped to break the ice and bring a sense of community.

4.5 Piloting and validation

The piloting of ENGAGE takes place in FPHAG, FPG, UKHD and 7HRC by the facilitators and staff (the CoPs – existing or new ones) in M17 – M30. After the planning phase, the workshop processes will be implemented from the autumn of 2025 onwards, until early 2026. The piloting organisations' descriptions are included in D2.1 (Section 6).

The piloting organisations' decisions on the use cases and their CoP development phase differ according to the information received during the ENGAGE training workshops. Initial information on the planned use cases was included in D2.1 (Sections 11.1.4.2–11.1.4.5). All the information on the piloting – including details concerning the selected CoPs – will be included in the refined version of this deliverable (D4.8, Participatory staff engagement model v2, due in M32).

The responsibility of the piloting organisations' facilitators is to choose the methods that are appropriate for their context and their CoP from the library of participatory staff engagement methods. LUT provides support but does not impose choices on the piloting organisations. The piloting occurs through the local participatory process, in workshops conducted in the local way, in the local languages. This all is designed to contribute to sustainability of the results of the piloting and the use of the ENGAGE model. Methods are tools, they do not work in a vacuum; it is all about the context. ENGAGE will be fine-tuned based on learnings from this piloting and validation phase.

4.5.1 The role of contextualisation

Sections 2.3, 3.1.2, 3.5.1.2 and 4.4.1 contain essential information related to the role of contextualisation and facilitation when the ENGAGE model is utilised – during the piloting and validation, or later. Given the importance of this information for the piloting organisations, it is summarised here.

As noted in Section 3.1.2, the co-development with WPH was led and proceeded in a certain manner specifically tailored and contextualised to WPH. Such contextualisation and tailoring are crucial for participatory staff engagement. As emphasised in Section 4.4.1, changing the organisational culture is a long process, which also leads to the need for thorough contextualisation and tailoring of the activities for the organisation in question and its participants.

The contextualisation and tailoring largely determine the outcomes from the organisation's internal perspective but also from the perspective of the piloting and validation of ENGAGE. Internal facilitators have a different role and knowledge base than external researcher-facilitators had at WPH or as the ENGAGE training providers.

As brought up in the written instructions for preparing for the ENGAGE training and piloting (Section 3.5.1.2), the key is, again, to plan according to the organisation's context, culture and practices in order to pilot and validate the ENGAGE model in a meaningful way. The piloting HCPs are entitled and encouraged to adjust everything into the context and culture of the organisation and their way of doing things. This is very much part of the ENGAGE model – any choices need to be in line with the situation in the piloting organisation in question. Imposing choices from outside does not lead to sustainable staff engagement practices for the green transition in health and care organisations.

Moreover, it is vital to organise an appreciative and sufficiently long-term process to gain sustainable results. The need for contextualisation also refers to different professions, for example, and even individual preferences. The role and opportunities of participatory staff engagement may differ according to service units and their staff, as shown by the evaluation of the co-development process at WPH.

Importantly, as written in Section 2.3, there are many factors that are outside of the influence of ENGAGE – which was already brought up in D2.1. While ENGAGE aims to improve health and care staff engagement in the green transition with the help of the use of participatory methods, the progress in the green transition, such as reduction in a HCP's CO₂e footprint is outside of the influence of the ENGAGE developers. Such a reduction depends on many organisational practices and decision-making at the highest managerial level.

Another factor that is to a large extent outside of the influence of ENGAGE is, for example, the relevance and usability of the model in a specific HCP and its CoP. Even though the model and its components



have been designed with a view of broad relevance and usability, careful contextualisation is always needed when implementing staff engagement with the help of participatory methods. Skilled facilitation is key in tailoring the activities to the organisation and the CoP in question. If tailoring is not done and the activities are not needs-based, the use of the model is not sufficient alone.

A potentially low level of attendance in the participatory workshops (contextual attraction power) is also outside of the influence of ENGAGE. The model contains numerous kinds of guidelines, also concerning practicalities, but its developers cannot affect, for example, organisational missions concerning sustainability, related strategic organisational decisions, staff engagement structures and practices – such as, very importantly, permission to use working time – management, workload and agendas (e.g., shift work) of the involved staff (see also D2.1).

4.5.2 Documentation instructions for the piloting

As part of the ENGAGE training, the piloting HCPs received instructions concerning documentation during the piloting. They are described in the following. Documentation plays an essential role in monitoring and assessing the piloting's success. Knowledge is compiled for fine-tuning the model.

In the piloting, it is a question of utilising participatory methods for advancing the issue/topic that the piloting organisations' facilitators and CoPs select to focus on. At least one idea generation method and one structuring method per event should be used. The ENGAGE training participants were encouraged to collect diverse forms of documentation during the piloting process and the events. These may be photos, case descriptions, participants' testimonies, Mentimeter results or alike gained during the events, etc.

It was emphasised that documentation must not become a burdening extra activity, but the aim is to support the implementation of the pilot. In particular, the following instructions were given during the ENGAGE training:

Documentation all through:

Focus: Clearly state the focus of your pilot.

Background: Provide context and background information about the pilot. Explain why it is important and what you aim to achieve. Use also visual aids like charts, graphs, tables and photos to illustrate your focus.

- Store your documents securely (ethics and permissions)

Participants: Describe who is involved in the pilot.

Collection of documentation: Detail how you will gather and record documentation via recording, photographing and participatory observation.

Analysis methods: Explain how you will analyse the documentation (e.g., summary, analysis, commenting by managers...).

Action plan: Outline the steps you will take to implement the pilot; please use the facilitator's script as a planning tool.

- Timeline: Provide a detailed timeline of the pilot phases.
- Activities: Describe the activities and interventions you will carry out.
- Arenas: Communication platforms (if necessary) and face-to-face interactions.
- Roles and responsibilities: Define who will be responsible for each part of the pilot.

Summarise the key findings and reflect on the success and lessons learned.

Communication between LUT and the piloting organisations was specified to the ENGAGE training participants as follows:

- Comments on the facilitation script and the use of methods in it: these will be given in the autumn; the date will be agreed on later.
- Reflection sessions during the winter: these will be held online; the dates will be specified in the autumn. Potentially also a joint one among the piloting organisations will be arranged.



Each piloting team will thus be consulted when they implement their own staff engagement process, using appropriate tools (e.g., evaluative reflection tools).

Importantly, just like organisational cultures and hierarchies affect any staff engagement activities, they may affect documentation, too – how documentation should be handled and feedback collected from the participants. Those cultures and hierarchies need to be carefully identified by the facilitators of the piloting in each organisation.

5 Ethical and data privacy aspects

T4.4 has been implemented in accordance with Section 4 (Ethics and Security Issues) of the Description of the Action as well as T1.4 (Ethics, data and legal aspects management).

Ethical and data privacy related aspects have been integrated, where appropriate, into the library of participatory methods and guidelines for using those methods. This is visible, for example, in the sections on “What is facilitation and a facilitator?” and “Facilitation as a process” on the ENGAGE website. In general, understanding any prospective ethical, privacy, legal, gender or social issues is key for participatory staff engagement.

Research ethical procedures were carefully determined for the co-development process with WPH. LUT prepared and provided an information sheet and two types of consent forms to the participants of the co-development process (the CoP). These documents were as follows:

Information sheet (4 pages, summarised below)

The document invites participation in the CARING NATURE research project, which aims to engage staff in sustainable health and care services. The project promotes a cultural shift towards environmentally friendly practices in the health and care sector.

- **Research purpose:** The study aims to develop and test inclusive methods to actively involve staff in the green transition within health and care services. It focuses on utilising staff insights to promote eco-friendly practices.
- **Involvement of partners:** The research will collaborate with the Wellbeing Services County of Päijät-Häme, and the ENGAGE model will be piloted across four other European health and care organisations.
- **Research implementation:** The first phase of the research will occur in autumn 2024 and spring 2025, involving workshops to gather staff perspectives and test developed methods.
- **Voluntary participation:** Participation in the study is voluntary, and individuals can withdraw at any time without consequences.
- **Data privacy:** Personal data collected will be handled confidentially and will only include necessary information for the research.
- **Results dissemination:** Findings will be published in two reports and shared through scientific articles and conferences.

A consent form for a scientific study

The document is an informed consent form for a scientific study, outlining the participant's understanding of the research, the collection and handling of personal data, and their rights regarding participation. It emphasises the voluntary nature of participation, confidentiality of personal information, and the participant's right to withdraw consent at any time without negative consequences. The participant also grants permission for their data to be used in future research related to the study and agrees to audio and visual recording during the research process.

A consent form for photography and filming

The document is a consent form where an individual agrees to be photographed and filmed during the ENGAGE workshops of the CARING NATURE project, organised by LUT University. The individual grants permission for the use of the images and videos in various reports, articles and communications related to the project without seeking compensation, acknowledging that the materials will be used in accordance with the university's ethical principles.



Other notes

Research ethical principles are also related to the ENGAGE website that aims to contribute to ethically and otherwise sustainable use of the model. Ethical principles are taken into account in LUT's activities during the piloting of ENGAGE (WP6). Moreover, WPH participants' faces are not shown in the workshop photos in this deliverable due to the type of consent that they gave.

6 Conclusion

The Participatory staff engagement model (ENGAGE) developed under the CARING NATURE project highlights the critical role of health and care professionals in driving the green transition. By actively involving staff in sustainability initiatives, the model aims to create a sense of ownership and responsibility towards environmental goals. It can represent a significant step towards integrating sustainability into health and care systems through participatory staff engagement.

The ENGAGE model was co-developed with a Community of Practice (CoP) – a network of environmental partners – at the Wellbeing Services County of Päijät-Häme (WPH), incorporating insights from literature reviews, stakeholder consultations and best practices in participatory methods. The ENGAGE model comprises several components, including a learning approach, a library of participatory methods, guidelines for application, training resources and an overarching engagement model. These components together are designed to empower health and care staff to take ownership of environmental initiatives and promote sustainable practices within their organisations.

Results of the WPH use case were in line with the goal of supporting the identity of and empowering the selected CoP – the environmental partners – in the green transition, building up trust and interaction and co-creating knowledge in their network. The CoP members will focus on green transition related topics such as waste management in their role in their work units and the whole County. The co-development phase provided a solid foundation for compiling the ENGAGE model.

The ENGAGE model includes a diverse range of participatory methods tailored to the green transition context. These methods are designed to facilitate collaboration, knowledge sharing and innovative problem-solving among health and care staff. The library of methods is divided into three parts: paradigm-preserving, paradigm-stretching and paradigm-breaking methods, according to how they change people's perceptions and understanding. The library is a core part of the ENGAGE website (<https://www.engage-by-caringnature.eu/>), where the model has been compiled, and it is ample and adaptable to cater for many kinds of users.

Guidelines for applying ENGAGE's participatory methods are also a core part of the ENGAGE website. The guidelines for health and care staff contain brief introductory and inspirational texts and audiovisual elements. The guidelines have been designed and provided so that they can serve both the users of the ENGAGE model during the piloting that takes place in WP6 of the project and any other users from health and care organisations after the end of the project. Special attention has thus been paid to the sustainability and sustainable use of the ENGAGE model itself.

This deliverable also brings up various challenges faced by health and care professionals in advancing environmentally sustainable practices in their workplace, such as time constraints, organisational culture and perceptions of added workload. It emphasises the need for supportive management and clear communication to overcome these barriers. When organising staff engagement with the help of participatory methods, the key is to plan according to the organisation's context, culture and practices. This is emphasised in the ENGAGE model.

The ENGAGE model will be implemented across partner health and care organisations at the next phase of the project. This piloting will allow to gather feedback on the model and refine it. These refinements will be reported in D4.8 due in M32. Training and documentation instructions have been provided to the piloting organisations. Ongoing communication with them and the documentation that they produce will be instrumental in the research leading to the refinements of the ENGAGE model.



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Annex 1: Library of participatory methods

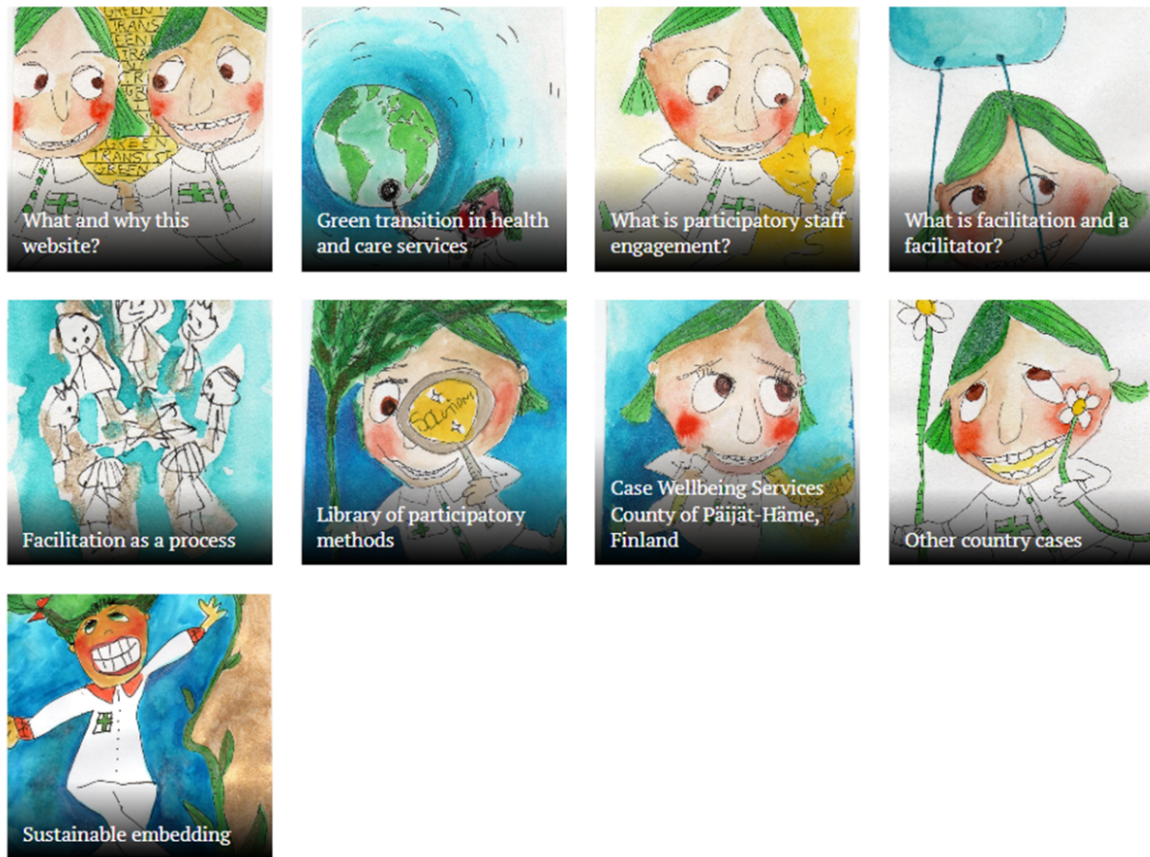


Figure 21. Screenshot of the structure of the website, where the library of participatory methods is included.



Library of participatory methods



The ENGAGE model is built on fostering green transition in health and care organisations by engaging all staff, enhancing awareness of environmental issues and strengthening networks for sustainable practices. It emphasises participatory methods that support Communities of Practice (CoPs), which facilitate interaction, knowledge sharing and collaborative problem-solving to co-create solutions for green transition in practical settings. The library of participatory methods within the ENGAGE model is categorised into three types:

1. Paradigm-preserving methods (e.g., SWOT analysis, stakeholder mapping) operate within existing frameworks to refine ideas and strategies without disrupting current structures.
2. Paradigm-stretching methods (e.g., personas, scenario planning) broaden perspectives and encourage innovative thinking by exploring new approaches and frameworks.
3. Paradigm-breaking methods (e.g., storytelling, visual methods) challenge traditional ways of knowing, fostering creativity and intuitive understanding.

Each method in the library is described with detailed guidance on its purpose, requirements, difficulty level, time, materials, participants and implementation steps. By utilising these methods, the ENGAGE model aims to empower staff through collaboration, knowledge-building and transformative approaches to green transition.

A core component of the ENGAGE model is the library of participatory methods. The foundation of ENGAGE is on **advancing green transition as a key responsibility of all staff, building transprofessional knowledge and awareness in environmental matters and building or strengthening networks for green transition in health and care organisations.**

When developing the ENGAGE model, the considerable body of **research and practice on participation** (such as pioneering work of Arnstein, 1969) was carefully considered, while building on understanding the role of **situated learning and informal learning** when creating spaces for staff engagement. Better advancement of the green transition in health and care organisations was supported by directing ENGAGE's methods to **support engagement in and between Communities of Practice (CoPs)**. CoPs have important potential in reinforcing interaction and knowledge sharing and building a sense of belonging among staff when co-designing and mainstreaming innovative solutions for green transition in the practical circumstances in health and care organisations and systems.

Figure 22. Screenshot of part of the library of participatory methods on the ENGAGE website.



Paradigm-preserving methods:



Figure 23. Screenshot of the list of the paradigm-preserving methods on the ENGAGE website.



Paradigm-stretching methods:

- SOCIOMETRIC MAP
- SHARED BREATHING EXERCISE
- BeWeDöð
- PHOTOVOICE
- DISCUSSION CARDS
- KARELIAN COFFEE TABLE DISCUSSION
- REFLECTIVE SKETCHBOOK
- PERSONAS
- CUSTOMER JOURNEY

Figure 24. Screenshot of the list of the paradigm-stretching methods on the ENGAGE website.



Paradigm-breaking methods:

- WORK STORIES
- TRUST EXERCISE
- GIVING AND RECEIVING GIFTS EXERCISE
- STILL IMAGE EXERCISE
- DÉRIVE
- NATURE-BASED EMPOWERING PHOTOGRAPHY
- DRAMA METHODS
- HIDDEN THOUGHTS
- VISUAL METHODS

Pässlä, A. 2025.

Figure 25. Screenshot of the list of the paradigm-breaking methods on the ENGAGE website.



Annex 2: Basics of the ENGAGE participatory methods by category

Table 3. Basics of the participatory methods of ENGAGE (source: Anne Pässilä).

Category	Name	Website	Introduction
Paradigm-preserving methods - techniques used to analyse and generate ideas within the context of existing frameworks or assumptions - help the staff to make informed decisions, innovate and refine strategies while remaining grounded in established ways of thinking without disrupting current structures	'Why, What, Where, When' technique in group work	www.engage-by-caringnature.eu/why-what-where-when-technique-in-group-work/	The Why, What, Where, When technique is a simple and effective method for structuring and deepening green transition related ideas. It allows health and care staff to look at an environmental topic from different perspectives, encouraging creative thinking and systematic brainstorming. The method is structured around four basic questions: Why? What? Where? When? These help the group of health and care professionals to clarify objectives, identify problems and opportunities, and develop new solutions.
	Plus 5 technique	www.engage-by-caringnature.eu/plus-5-technique/	The Plus 5 technique is a simple and effective method that helps to expand and deepen original ideas. It encourages participants to think further by adding at least five new perspectives, additional possibilities or refinements to the original idea. This technique is well suited for creative problem solving, idea generation and green transition related development work, as it challenges health and care participants to look at the topic in a more nuanced way and enriches the discussion.
	Informal and formal arenas for interaction	www.engage-by-caringnature.eu/informal-and-formal-arenas-for-interaction/	This method helps participants to structure how and where to discuss and generate ideas on the green transition in a health and care organisation. The working questions are (1) what are the informal and formal arenas for interaction in the organisation, (2) what kind of informal and formal arenas for interaction are needed to discuss green transition related issues, and (3) how do individuals and the community interact and influence each other in these arenas? This analysis will help to identify the most effective ways of communicating, making decisions and building green transition related cooperation in different settings.
	SWOT analysis of the green transition	www.engage-by-caringnature.eu/swot-analysis-of-	SWOT analysis is one of the best-known and most widely used strategy and decision-making tools. It is based on an assessment of an organisation's or individual's internal Strengths, Weaknesses, Opportunities and



	the-green-transition/	Threats. In the context of the green transition, the SWOT analysis helps to provide a holistic view of the environment and the health and care organisation and to outline the direction in which development should be steered.
Fishbone diagram (Ishikawa diagram) for the green transition	www.engag-e-by-caringnature.eu/fishbone-diagram-ishikawa-diagram-for-the-green-transition/	The fishbone diagram, or Ishikawa diagram, is a visual tool for analysing cause and effect relationships. It can be used to systematically identify and structure the root causes of the problems hindering or slowing down the green transition in a health and care organisation. The method is particularly suitable for problem solving and process analysis. The fishbone diagram will help participants to understand what factors influence the outcome of the green transition and how they can be taken into account in the development of solutions.
The Blue Ocean strategy 2 x 2 matrix for analysing operating environments of the green transition	www.engag-e-by-caringnature.eu/the-blue-ocean-strategy-2-x-2-matrix-for-analysing-operating-environments-of-the-green-transition/	The Blue Ocean Strategy 2 x 2 matrix is a tool that helps organisations or teams to analyse their operating environment and develop innovative solutions. It is based on Kim and Mauborgne's (2005) Blue Ocean Strategy model. In the context of the green transition, the 2 x 2 matrix is applied to and emphasises the creation of new possibilities for action, rather than remaining stuck in existing ways of doing things. The matrix can be used to identify which existing policies or practices should be eliminated and which should be reduced, as well as which policies should be raised, and which new policies should be created to build a new policy environment for the health and care organisation or system.
If everything were possible: A model for structuring idea generation on the green transition	www.engag-e-by-caringnature.eu/if-everything-were-possible-a-model-for-structuring-idea-generation-on-the-green-transition/	In promoting the green transition in health and care services, time and costs are factors that first come to mind. This method focuses on these factors to help with decision-making and prioritisation. Grouping and structuring ideas on a time and costs axis helps to clarify, group and prioritise ideas effectively. The idea generation phase is kept free of assessment and aims to generate as many different ideas as possible. In the structuring phase, ideas are grouped and then further refined and prioritised.
A four-field structuring model for idea	www.engag-e-by-caringnature	The four-field structuring model is an effective method for grouping and assessing ideas related to the green transition. It helps to



	generation on the green transition	e.eu/a-four-field-structuring-model-for-idea-generation-on-the-green-transition/	visualise and prioritise ideas using a four-field structure, where the axes can represent, for example, impact and implementability. The method can be adapted to different needs related to the green transition in a health and care organisation.
	Stakeholder analysis	www.engag-e-by-caringnature.eu/stakeholder-analysis/	Stakeholder analysis is a method used to identify and analyse various stakeholders that influence an organisation or a project. In the context of the green transition and health and care services, the method helps to identify key actors, their interests, influence and roles, which aids in planning effective communication and stakeholder relationship management.
	Brainstorming	www.engag-e-by-caringnature.eu/brainstorming/	Brainstorming is a creative ideation method aimed at generating as many new ideas as possible in a short amount of time. In the context of the green transition, the method encourages free thinking, where all ideas are welcome and not immediately judged. It is suitable for use with large participant groups in a health and care organisation. Brainstorming is useful in the early stages of problem-solving, innovation processes and development projects.
	Integrating environmental matters into daily work life	www.engag-e-by-caringnature.eu/integrating-environmental-matters-into-daily-work-life/	This method combines three different situations where environmental matters are presented to members of the Community of Practice. The methods support the development of environmental awareness and sustainable practices in the health and care organisation and the community. Weekly and/or monthly meetings contain discussions on current environmental issues, the themes of work wellbeing events focus on combining environment and well-being, or a meeting in a natural environment provides an opportunity to discuss environmental perspectives in the midst of nature. These solutions are used in the daily operations of health and care services.
	Green transition idea box	www.engag-e-by-caringnature.eu/green-transition-idea-box/	This method aims to create a system where staff can participate in and influence the development of the health and care organisation's green transition. The method utilises an "Idea Box" where employees can submit development ideas related to the green



			transition and encourages and enables staff participation in green transition related training. Additionally, job roles are expanded to incorporate green transition related development work into daily customer service tasks.
Paradigm-stretching methods - techniques to expand our thinking or change the way we approach problems, typically by presenting new perspectives and frameworks - help individuals or teams to understand complex situations or organisational challenges	Sociometric map	www.engag-e-by-caringnature.eu/sociometric-map/	A sociometric map can be used in facilitation in many ways, particularly to understand group dynamics, improve interaction and develop collaboration. In the context of health and care and the green transition, it can be used, for example, when a work team is reflecting on the topic.
	Shared breathing exercise	www.engag-e-by-caringnature.eu/shared-breathing-exercise/	The purpose of the Shared Breathing exercise is to focus attention on one's presence and being in the group. It helps to create a shared unrushed rhythm in the situation, giving permission to focus on the 'now' moment. At the same time, a symbolic experience of shared breathing is created. Presence as a shared space allows concentration on the theme at hand and encourages creative indulgence when focusing on green transition related issues in a health and care organisation.
	BeWeDō® method	www.engag-e-by-caringnature.eu/bewed-o-r/	The BeWeDō® method, a dialogic method based on aikido philosophy, focuses on controlling the opponent's strength and restoring balance without direct violence or harm. It was created by PhD and designer Mark Bradford. In the context of the green transition, the BeWeDō® method inspires participants, health and care professionals, to address and examine resistance or challenges of change in a bodily way. The physical exercise aims to identify the forces of resistance while creating a common tune for interaction.
	Photovoice	www.engag-e-by-caringnature.eu/photovoice/	Photovoice is a participatory method that uses photographs to highlight the experiences, perspectives and stories of individuals and communities. It brings out diverse viewpoints and enables deep reflection. It is often used in research, community development and decision-making support. Caroline C. Wang and Mary Ann Burris developed the Photovoice method in 1997. In the context of the green transition, photovoice combines photography and verbal expression (written and spoken) to observe the environment. The settings can be



			one's own workplace in the health and care services or natural surroundings, with the goal of documenting and analysing one's environment, such as everyday challenges. The implementation involves using mobile devices, specifically taking photos with a smartphone.
	Discussion cards	www.engag-e-by-caringnature.eu/discussion-cards/	The use of discussion cards is a method that employs question cards to support conversation and knowledge sharing in workplaces or groups. Through such cards, participants can share their experiences, perspectives and opinions on various themes, enabling deeper interaction and community building. In the context of the green transition, this method can strengthen the environmental agency and identity of the health and care work community. The method helps the work community to learn a dialogic way of working.
	Karelian coffee table discussion	www.engag-e-by-caringnature.eu/karelian-coffee-table-discussion/	The coffee table discussion is an informal and open discussion method that creates a safe and relaxed environment for sharing knowledge and experiences within a Community of Practice. It also serves as a peer learning environment where participants can freely share their experiences and perspectives. The discussion takes place without formal structures, although the discussion themes and questions are predetermined together with the participants. The aim is to promote collective learning, peer learning and empowerment within a health and care Community of Practice specialising in environmental issues. This method is useful for discussing challenging or emotionally charged topics where it is important to share and listen to different perspectives.
	Reflective sketchbook	www.engag-e-by-caringnature.eu/reflective-sketchbook-method/	The purpose of the reflective sketchbook method is to observe the health and care work environment from an environmental perspective and record observations, environmental issues, effective practices, and ideas. The sketchbook is a tool for discovering and opening new perspectives. It is a free-form means to deepen and develop one's environmental thinking. Visual elements such as drawings, images, diagrams and mind maps are combined with written reflections, enabling a versatile reflection process.



	Personas	www.engag-e-by-caringnatur.e.eu/personas/	The personas method is a tool for design and development that helps to better understand the needs, motivations and behaviours of target groups. The method is based on creating persona types from research and observation data. Personas represent typical users of green transition related solutions, customers or other key stakeholders. In the context of the green transition, personas help to concretise different roles related to development of environmental practices and policies. Using personas can make visible, for example, positive change actions and resistance related to the development of environmental solutions in a health and care organisation.
	Customer journey	www.engag-e-by-caringnatur.e.eu/customer-journey/	The customer journey method helps to understand the health and care customer's experience, needs and pain points throughout the entire customer journey. The method maps the customer's journey with a service, solution, product or organisation at various touchpoints. In the context of the green transition, this visual and narrative approach helps to identify areas for improving sustainable solutions and practices, enhance customer experience and design environmentally friendly, customer-centric solutions (e.g., digital services using telemedicine solutions, energy-efficient devices).
	Work stories	www.engag-e-by-caringnatur.e.eu/work-stories/	The work stories method is a storytelling-based tool that allows health and care professionals to share their experiences, learn from each other and reflect on their work. Participants use the method to structure complex work situations, such as issues related to the green transition and sustainable development in their own unit of the health and care organisation.
Paradigm-breaking methods - techniques that challenge traditional ways of knowing and understanding - tap into non-verbal, intuitive and creative dimensions of human experience	Trust exercise	www.engag-e-by-caringnatur.e.eu/trust-exercise/	The trust exercise can be applied for various purposes. In the context of the green transition, its aim is to examine the forces related to change, such as collaboration and resistance, and to consider ways to influence them. Through the exercise, health and care participants explore roles related to change and the dynamics of change agents. This enables discussion about what happens in collaboration and resistance, and how to react and respond to these forces. Specifically, it



			considers how collaboration can be strengthened, how to navigate and tack in resistance, and how solutions can be found when there is resistance. Participants can then reflect on their own feelings and the dynamics of the change process, finding ways to promote collective progress and support the process of change.
	Giving and receiving gifts exercise	www.engag-e-by-caringnature.eu/giving-and-receiving-gifts-exercise/	The Giving and Receiving Gifts exercise is one of Keith Johnstone's improvisation theatre exercises. It is based on the associative continuation and enrichment of a given idea without a predetermined goal. In the exercise, participants can also practice an accepting attitude with "yes, and in addition...". The counterpart to this spontaneous acceptance is rejection, where the associative idea is not continued but cut off. Applied to the context of the green transition, the exercise focuses on the idea of recognising opportunities and continuing and elaborating emerging ideas. At the end of the exercise, during the reflection phase, health and care participants can make free associations related to their daily work, expertise in environmental activities and mental models related to the green transition. For example, this can be future-oriented visioning of various reactions and the impact of behaviour, roles related to the development of green transition related practices, and the expectations and emotions related to the green transition.
	Still image exercise	www.engag-e-by-caringnature.eu/still-image-exercise/	In the still image method, participants create a still image or a frozen picture from a sequence of events that illustrates the emotions, statuses and power dynamics related to a situation. The still image method is one of Augusto Boal's theatre techniques. In the context of the green transition, health and care participants create two still images in small groups: (1) resistance related to change and (2) the desired future image during change. The exercise encourages participants to examine and structure emotions, roles and interactions in change situations, as well as to verbalise and make sense of the challenges and opportunities brought by change.
	Dérive (drifting, wandering)	www.engag-e-by-caringnature.eu/derive/	Drifting, or dérive, is a method developed by the French Situationist movement (1950s–1970s) where the environment is explored and



		caringnature.eu/derive/	experienced through spontaneous wandering. The method encourages critical thinking, creativity and the examination of the different dimensions of the living or working environment. In the context of the green transition, the method can be used to strengthen the relationship with nature. This involves free and aimless movement. The direction and rhythm of movement are guided by detailed observations of nature. This way, health and care participants break free from familiar routes and movement goals and gain a reason and impulse to observe nature and move in new ways. The method also allows for a broader planetary perspective.
	Nature-based empowering photography	www.engage-by-caringnature.eu/nature-based-empowering-photography/	This method utilises a nature-based approach, appreciating the concept of Empowering Photography developed by photographer Miina Savolainen in 1998. Empowering Photography is a pioneering example of arts-based social innovation. In the context of the green transition, smartphone photography is used as a tool for observation. Health and care participants observe what they observe, thus structuring and organising their own and their colleagues' meta-awareness in a natural environment. Participants can examine themselves, their surroundings and their role in nature. Photography offers participants the opportunity to explore and strengthen their environmental identity through images, creating connections to nature and their inner selves.
	Drama methods	www.engage-by-caringnature.eu/drama-methods/	Drama methods are participatory and bodily approaches based on theatre and improvisation techniques. In the context of the green transition, they are used to enhance environmental awareness and support interaction and change. These methods can be utilised in identity work of the health and care Community of Practice, group dynamics development, emotional processing and organisational changes related to the green transition. Drama methods can help participants to empathise with different perspectives and deepen their understanding of the environmental theme being addressed.
	Hidden thoughts	www.engage-by-caringnature.eu/	The Hidden Thoughts method is a working approach that helps to bring out the hidden thoughts, feelings and perspectives of



		e.eu/hidden-thoughts/	members of a health and care Community of Practice in the context of the green transition. It is based on the idea that people often have silent or unexpressed thoughts that can be significant in collaborative work and decision-making. The method supports safe discussion and allows for the sharing of different experiences without direct personal exposure.
	Visual methods	www.engag-e-by-caringnature.eu/visual-methods/	Visual methods utilise pictorial approaches to organise knowledge, thoughts and processes. In the context of the green transition, they can be used to illustrate complex systems, make thinking visible and support creative work in a health and care organisation. Visualisation helps to clarify ideas, identify connections and improve communication in group work.



Annex 3. Background survey for WPH's CoP members

CARING NATURE



Päijät-Hämeen hyvinvointialueen ympäristökumppaneille

Tämän kyselyn tarkoituksena on toimia alkukartoituksena Päijät-Hämeen hyvinvointialueen ympäristökumppanien roolissaan kohtaamien haasteiden kirjoon sekä onnistuneisiin käytänteisiin. Kyselyllä kartoitetaan muun muassa työarjen tilanteita, joissa olet kokenut joko haasteita tai onnistumisia toimiessasi ympäristökumppanina ja edistäessäsi ympäristöasioita.

Kysely toimii verkkoselaimessa sekä mobiilissa. Kyselyyn vastaaminen kestää noin 15-20 minuuttia. Vastaaminen tapahtuu nimettömästi ja vastaukset käsitellään nimettöminä ja luottamuksellisesti. Vastauksesi antavat tarpeistasi ja kokemuksistasi arvokasta taustatietoa, joka otetaan huomioon syksyllä jatkuvan yhteistyömme suunnittelussa.

Kysely on osa CARING NATURE -hanketta, jonka tavoitteena on edistää kulttuurista muutosta terveys- ja hoiva-alalla ja näin tukea kehitystä kohti kestäviä, ympäristöystävällisiä terveys- ja hoivajärjestelmiä. LUT-yliopisto vastaa hankkeessa henkilöstön osallistamismallin kehittamisestä. Malli yhteiskehitetään Päijät-Hämeen hyvinvointialueen kanssa, minkä jälkeen sitä testaavat ja arvioivat neljä muuta eurooppalaista terveys- ja hoiva-alan organisaatiota.

CARING NATURE -hanke on saanut rahoitusta Euroopan unionin Horizon Europe -tutkimus- ja innovaatio-ohjelmasta (sopimus nro 101137340).

Lämmin kiitos osallistumisesta!

Helinä, Anne, Satu & Riika
LUT-yliopiston hanketiimi

Figure 26. Screenshot of the first page of the background survey for WPH's CoP members.



CARING NATURE

Osa 1. Kokemukset ympäristökumppanina toimiessa

5. Valitse rastittamalla kolme mielestäsi tärkeintä tehtävääsi ympäristökumppanina

Edistän ympäristövastuullista toimintakulttuuria omassa työyhteisössäni.

Kouluttaudun tehtävääni sekä ylläpidän ja kehitän ympäristöosaamistani.

Selvitän työpaikkani ympäristöasioiden tilan.

Osallistun ympäristötavoitteiden asettamiseen.

Opastan ja kannustan työyhteisöni jäseniä ympäristövastuulliseen toimintaan, kuten energiansäästöön, kulutuksen vähentämiseen ja kestävään liikkumiseen.

Tiedotan ympäristötavoitteiden etenemisestä työyhteisölleni säännöllisesti.

6. Millaisia toimivia menetelmiä tai käytäntöjä tai toimintatapoja olet tunnistanut toimiessasi ympäristökumppanina?

7. Entä millaisiin haasteisiin olet törmännyt? Miksi?

8. Oletko löytänyt haasteisiin ratkaisuja? Millaisia?

9. Nimeä suurimmat haasteet toimiessasi ympäristökumppanina (suurin ensin):

1. suurin

2. suurin

3. suurin

10. Nimeä suurimmat onnistumisesi toimiessasi ympäristökumppanina (suurin ensin):

1. suurin

2. suurin

3. suurin

Figure 27. Screenshot of part of the background survey for WPH's CoP members.



Annex 4. Evaluation survey for WPH's CoP members



Palautekysely ympäristökumppaneille koskien ENGAGE-työpajaproessia (CARING NATURE -hanke)

Toteutimme henkilöstön osallistamismallin (ENGAGE:n) yhteiskehittämistä varten kolme työpajaa, kaksi syksyllä 2024 ja yhden helmikuussa 2025. Työpajoihin kutsuttiin kaikki ympäristökumppanit. Tämän kyselyn kysymykset kartoittavat kokemuksiasi työpajoista ja koko prosessista (mikäli olit mukana useamman kerran) sekä näkemystsi osallistavista menetelmistä ja ympäristökumppanitoiminnasta tällä hetkellä, prosessin jälkeen. Pyydämme Sinua vastaamaan kyselyyn siinäkin tapauksessa, että et ole osallistunut työpajoihin, koska tiedot syistä ja muut näkemyksesi ovat meille tärkeitä mallin jatkokehittämistä sekä hankeraportointia varten.

Kysely toimii verkkoselaimessa sekä mobiilissa. Kyselyyn vastaaminen kestää noin 15-20 minuuttia. Vastaaminen tapahtuu nimettömästi ja vastaukset käsitellään luottamuksellisesti. Vastauksesi antavat kokemuksistasi arvokasta tietoa, joka otetaan huomioon ENGAGE-mallin jatkokehittämisessä muiden maiden käyttöön sekä ympäristökumppanitoiminnan jatkokehittämisessä. Vastaathan kyselyyn viimeistään 28.4.2025.

Kysely on osa CARING NATURE -hanketta, jonka tavoitteena on edistää kulttuurista muutosta terveys- ja hoiva-alalla ja näin tukea kehitystä kohti kestäviä, ympäristöystävällisiä terveys- ja hoivajärjestelmiä. LUT-yliopisto vastaa hankkeessa henkilöstön osallistamismallin kehittämisestä. Malli yhteiskehitetään Päijät-Hämeen hyvinvointialueen kanssa, minkä jälkeen sitä testaavat ja arvioivat neljä muuta eurooppalaista terveys- ja hoiva-alan organisaatiota.

CARING NATURE -hanke on saanut rahoitusta Euroopan unionin Horizon Europe -tutkimus- ja innovaatio-ohjelmasta (sopimus nro 101137340).

Lämmin kiitos osallistumisesta!

Helinä, Anne, Satu & Riika

LUT-yliopiston hanketiimi



Figure 28. Screenshot of the first page of the evaluation survey for WPH's CoP members.



CARING NATURE: Ympäristökumppanien palautekysely

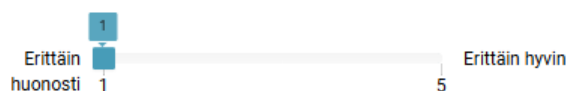
📌 Pakolliset kysymykset merkitty tähdellä (*)

KYSYMYKSET KAIKILLE

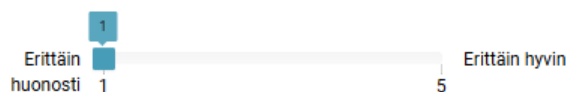
Kysymyksissä 17-20 kysytään mielipidettäsi erilaisiin väittämiin. Vastaa lukuarvo väliä 1-5, sen mukaan mikä kuvaa parhaiten näkemystäsi.

- 1 = Erittäin huonosti
- 2 = Melko huonosti
- 3 = Ei huonosti eikä hyvin
- 4 = Melko hyvin
- 5 = Erittäin hyvin

17. ENGAGE-yhteiskehittämismallin osallistavien menetelmien kehittäminen ja käyttö vahvistivat vuorovaikutusta ja ammattirajat ylittävää tiedon jakamista henkilöstön keskuudessa vihreän siirtymän hyväksi. *



18. ENGAGE-yhteiskehittämismallin kaltaiset osallistavat menetelmät voivat kohentaa henkilöstön ympäristötietoisuutta ja lisätä motivaatiota edistää vihreää siirtymää. *



19. ENGAGE-yhteiskehittämismallin kaltaiset osallistavat menetelmät soveltuvat käytettäväksi erilaisissa työympäristöissä ja -yksiköissä. *

Figure 29. Screenshot of part of the evaluation survey for WPH's CoP members.



Annex 5. Evaluation survey on the ENGAGE training



To ENGAGE training participants at FPHAG, FPG, UKHD and 7HRC

Feedback survey to the participants of the ENGAGE training (regarding the Participatory Staff Engagement Model developed in the CARING NATURE project)

LUT University designed and provided the ENGAGE training to the piloting health and care providers – FPHAG, FPG, UKHD and 7HRC – during May–June 2025. Facilitators who will pilot the ENGAGE model in each country in late 2025–early 2026 were invited to these two-day training events.

This survey aims to explore your experiences of the training as well as your views on participatory methods. Your views are important for the further development of the ENGAGE model and for project reporting.

The survey works in a web browser and on mobile. It takes about 10-15 minutes to complete the survey. Responses are anonymous and will be treated confidentially. Your answers will provide valuable information about your experience. Please respond to the survey within a week.

The survey is part of the CARING NATURE project, which supports the progress towards sustainable, environmentally friendly health and care systems. LUT University is responsible for developing the participatory staff engagement model ENGAGE. The model was co-developed with the Wellbeing Services County of Päijät-Häme in Finland, and will be piloted by FPHAG, FPG, UKHD and 7HRC.

The CARING NATURE project has received funding from the European Union's Horizon Europe research and innovation programme (Grant Agreement no. 101137340).

Warm thanks for your participation!

Helinä and Anne & the whole LUT team




Next

Figure 30. Screenshot of the first page of the evaluation survey on the ENGAGE training.



CARING NATURE

 Mandatory questions are marked with an asterisk (*)

EXPERIENCES FROM THE TRAINING AND THE METHODS USED

5. What are your experiences from the training? What went well, and what could have been done differently? Why?

6. Do you feel that the training was beneficial for you as a facilitator in your work community? Why?

7. Various methods were used in the training, such as theatrical images and storytelling. Do you find the methods used effective? Which methods are effective, and why? Which are not, and why?

Figure 31. Screenshot of part of the evaluation survey on the ENGAGE training.