



Co-funded by
the European Union



GreenHive

Setting Up a **Green**

Comb: A How-to Guide





Authors: Gianluca ABBRUZZESE, Nicoleta ACOMI, Ovidiu ACOMI, Marta Burgos GONZALEZ, Miriam LANZETTA, Angela MANGIULLO, Anastasia MARAVELAKI, Dimitra SOFIANOU

Version: 1.0 – March 2024

Acknowledgement

This publication has received funding from the European Commission under the Grant Agreement number 2022-2-IE01-KA220-VET-000097215, Erasmus+ Cooperation Partnership project *Green Hive*.

Disclaimer

The European Commission's support for the production of this publication does not constitute an endorsement of the content which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Copyright notice



This work is licensed under the Creative Commons Attribution-Non-Commercial 4.0 International License. You are free to copy, share, adapt, and use the material for non-commercial purposes, as long as you meet the following conditions:

- Attribution: You must give appropriate credit, provide a link to the licence, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests that Right to Remain endorses you or your use.
- Non-commercial: You may not use the material for commercial purposes.



Table of Contents

<i>List of Abbreviations</i>	6
<i>Introduction</i>	7
1. The Green Hive Project	9
2. The Green Combs	13
2.1 Process of Setting Up a Green Comb.....	15
3. Governance & Organisation	16
3.1 Governance.....	16
3.1.1 Purpose.....	17
3.1.2 Leadership Structure.....	18
3.1.3 Integration with Institutional Policies.....	20
3.1.4 Goals.....	20
3.1.5 Financial and Physical Resources.....	23
3.1.6 Performance Measurement and Evaluation.....	25
3.1.7 Compliance and Accountability.....	26
3.2 Organization.....	28
3.2.1 Team Formation and Roles.....	28
3.2.2 Intervention Strategy.....	30
3.2.3 Curriculum Development and Integration.....	35
3.2.4 Training and Capacity Building.....	37
3.2.5 Partnership Development.....	40



3.2.6	Project Management and Implementation	41
3.2.7	Monitoring and Feedback Mechanism	43
4.	Community Management	45
4.1	Member Profile	45
4.1.1	Internal and External Stakeholders	45
4.1.2	Potential partners and strategies for collaboration	47
4.1.3	Establishing and maintaining strong partnerships	48
4.1.4	Creating an inclusive environment.....	49
4.1.5	Member eligibility criteria	51
4.2	Strategies for Member Outreach & Onboarding.....	52
4.3	Engagement Strategies	53
4.3.1	Communication channels and platform	53
4.3.2	Conflict resolution.....	54
4.4	Development Journey & Mentorship.....	54
4.4.1	Member Development and Active Participation.....	54
4.4.2	Mentorship program	55
4.4.3	Learning paths	55
5.	Activities	56
5.1	Internal activities	57
5.2	Activities with external participants	58
5.2.1	Indoor Activities.....	58
5.2.2	Outdoor Activities.....	62
5.3	Conclusions	63



6. Tools	64
6.1 Thinking Tools	65
6.1.1 Concept map.....	66
6.1.2 Connection circles	68
6.1.3 Iceberg Model.....	72
6.1.4 Decision matrix.....	74
6.1.5 Ishikawa Diagram	76
6.1.6 Evaporating Cloud.....	78
6.1.7 Inversion	80
6.1.8 Hypothesis Trees.....	81
6.1.9 Ecosystem Map.....	84
6.1.10 System scenario	86
6.1.11 Impact Journey	88
6.1.12 Back casting	90
6.1.13 Second-order thinking.....	92
6.1.14 First principles.....	94
6.1.15 Levels of abstraction	96
6.2 Digital Tools	98
6.2.1 Communication and Collaboration Tools	98
6.2.2 Project Management.....	100
6.2.3 Educational Tools.....	101
6.2.4 Survey and Feedback Tools	103
6.2.5 Document Management and Sharing tools.	106



6.2.6 Knowledge Management & Dissemination Tools	107
7. Relationship with the Hive	110
7.1 Communication and Collaboration with the Hive	111
7.1.1 Identifying and Mapping existing stakeholders.	111
7.1.2 Channels of Communication	111
7.1.3 Communicating the Vision of the Hive	112
7.1.4 Methods of Communication	113
7.1.5 Nurturing Continuous Communication Channels	114
7.1.6 Sharing Resources	115
7.1.7 Measuring Impact of Hub Communication	117
7.2 Collaboration with Other Hubs	117
7.2.1 Ecosystem Analysis	117
7.2.2 Methods of Communication	117
7.2.3 Encouraging Community Engagement Events	119
7.2.4 Nurturing Communication Channels	120
7.2.5 Outcomes	120
Conclusions	121



List of Abbreviations

Abbreviation	Definition
VET	Vocational education and training
KPI	Key Performance Indicator
SDG	Sustainable Development Goal
NGO	Non-Governmental Organization
MOU	Memorandum of Understanding
NDA	Non-Disclosure Agreement
IT	Information Technology
UN	United Nations
EU	European Union
SWOT	Strengths, Weaknesses, Opportunities, Threats



Introduction

Welcome to the publication of our comprehensive "Setting up a Green Comb: How-to Guide". In the quest for sustainable development and environmental stewardship, the Green Hive and its Combs emerge as dynamic hubs dedicated to fostering collaboration, learning, and impactful initiatives. This guide serves as a roadmap, offering detailed insights into the essential elements of Green Combs, from governance and organization to community management, activities, tools, and relationships with the larger ecosystem.

Within these pages, you'll discover practical strategies for creating a real and visual hub. The guide emphasizes the importance of open communication, continuous learning, and collaborative initiatives for sustainable community development. Whether you're a seasoned community builder or just embarking on this journey, this How-to Guide provides actionable steps, illustrative examples, and a wealth of knowledge to empower you in building and nurturing a thriving Green Comb community within VET institutions. Let's embark on this transformative journey together, creating a greener and more connected future.

The purpose and structure of this publication. The publication collects the results of the Working Groups that were implemented in each partner country and provides the instructions of how to build multi-stakeholder sustainability hubs in VET institutions. The development of the publication was conducted in the scope of the "Green Hive" project - a cooperation partnership co-funded by the European Union under the Erasmus+ Programme.



Chapter 1, "The Green Hive Project", presents the project's rationale, objectives and expected results, providing an insight into the context of this Guide.

Chapter 2, "The Green Combs", presents the localised hubs for sustainability education that will be established within VET institutions.

Chapter 3, "Governance and Organization", presents the contents and components about Governance & Organisation of the localised hubs (Green Combs).

Chapter 4, "Community Management", presents how to guide, engage, and foster a sense of belonging among members of the Hubs.

Chapter 5, "Activities", presents the activities that Green Combs are going to implement in order to offer opportunities and co-design innovative sustainability solutions.

Chapter 6, "Tools", presents a variety of tools the Green Combs can use to enhance communication, collaboration, and the overall effectiveness of their sustainability initiatives.

Chapter 7, "Relationship with the Hive", the relationship of the Combs with the "Hive".



1. The Green Hive Project

Green Hive is a Cooperation partnership in the Vocational Education and Training (VET) field co-funded by the Erasmus+ Programme of the European Union. Implemented by a consortium of five entities, such as the *Technological University of the Shannon: Midlands Midwest-TUS* (Ireland), the companies *Lascò* (Italy) and *Femxa* (Spain), and the non-profit and non-governmental organisations *KEAN-Cell of Alternative Youth Activities* (Greece) and *Team 4 Excellence* (Romania), the project aims to increase the capacity of VET providers to prepare learners for the green transition by developing a **European platform-based ecosystem for sustainability education** called the "Green Hive".

The Green Hive will consist of localised hubs for sustainability education, namely the "Green Combs," established within VET providers. While the Hive will be an open and cross-sectoral long-term cooperation network dedicated to innovation, continuous improvement and co-creation in sustainability education, the Combs will make VET providers the managing centre of networks of local stakeholders (i.e., companies, representatives of universities, civil society organisations and professional associations) for learning, networking and cooperating on sustainability challenges.

Hence, the project promotes the establishment of permanent VET co-creation structures where students will be enabled to think in systems, understand the interconnectedness of the economy, society and environment, and ultimately develop their systemic and critical thinking competencies by collaborating with other students and external stakeholders.



Main results of the project:

- a "**Methodological Framework**" for developing a VET sustainability education ecosystem and localised hubs to facilitate the transfer of local experience, knowledge and innovation in the field of the implementation of the **European Sustainability Competence Framework "Green Comp"**, and encourage collective actions of VET providers, learners and external stakeholders to co-create solutions for sustainability.
- a "**Toolkit for the setup and management of Green Combs**", including this how-to guide and canvases to support VET providers in setting up, managing and growing internal hubs for sustainability education.
- "**Educational resources for Green Combs**", including guidelines to implement open spaces for discussion around learner-generated topics among members of localised hubs, micro-learning videos, workshop scenarios and project-based learning experiences in the four competence areas of the Green Comp.
- the "**Green Hive**" **platform**, connecting the hubs through the Internet and providing capacity-building opportunities and digital tools for VET institutions, knowledge-transfer spaces, and co-creation activities for its members. By the end of 2025, the Green Hive is expected to host and connect at least 15 localised hubs and 200 VET learners in 5 countries.

Learn more at greenhiveproject.eu



Hence, the Green Hive will be a European-wide platform-based network of localized sustainability education hubs established within VET institutions. The Hive will connect educators, learners and other stakeholders to enhance the transfer of local experience, knowledge and innovation for sustainability competence development, and encourage collective actions to co-create solutions for sustainability. The figure in the following page provides a visual representation of the overall Methodological Framework behind Green Hive.



Co-funded by the European Union



METHODOLOGICAL FRAMEWORK

A EUROPEAN PLATFORM-BASED ECOSYSTEM FOR SUSTAINABILITY EDUCATION

COMPONENTS & FUNCTIONS OF THE ECOSYSTEM



INTERACTION BETWEEN THE PARTIES & WORK FACILITATION



RESOURCES NEEDED FOR THE GREEN COMBS

TOOLKIT TO SET UP AND MANAGE THE COMBS

A How-to Guide, a set of canvases and a MOOC for VET providers, detailing the processes, tools and methods to set up a Green Comb in six development domains, such as **Governance, Organization, Community, Activities, Tools, and Relationships with the Hive.**

EDUCATIONAL RESOURCES

Activities and tools to foster learners' sustainability competencies. For instance: guidelines for **open spaces, microlearning videos, workshops** and **project-based learning experiences** for students, covering the twelve sustainability competences addressed by the twelve GreenComp Framework.



2. The Green Combs

The project aims to introduce substantial changes in VET practices, particularly in the VET ecosystem-building practices and teaching and learning processes. The consortium produced the tools to build a European ecosystem ("Green Hive") of localised hubs for sustainability education ("Green Combs"). The Green Hive will be a European platform-based network of localized Sustainability Education Hubs ("Green Combs") established within VET institutions. The platform will connect the Hubs through the Internet, in order to facilitate the transfer of local experience, knowledge and innovation in the field of the implementation of the EU sustainability competence framework (Green Comp).

While the Hive will be an open and cross-sectoral long-term cooperation network dedicated to innovation, continuous improvement and co-creation in Sustainability Education, the Combs will make VET providers the managing centre of networks of local stakeholders (i.e., companies, representatives of universities, civil society organisations and professional associations) for learning, networking and cooperating on sustainability challenges.

Green Combs are going to provide information, insights, and inspiration on sustainability challenges. They will connect people and build a local community around sustainability through events. They will offer learning opportunities to students and external stakeholders and also provide opportunities to design innovative solutions through open challenges and workshops.

The project promotes the establishment of these permanent VET co-creation structures where students will be enabled to think in systems, understand the interconnectedness of the



economy, society and environment, and ultimately develop their systemic and critical thinking competencies by collaborating with other students and external stakeholders.

The next chapters how to establish Green Combs, considering five key domains:

- (1) Governance & Organisation (e.g., developing a Charter and the core management team, goal and vision setting, pathway towards impact).
- (2) Community (managing members' outreach, engagement and development journey).
- (3) Activities (e.g., how to structure co-creation processes to design learning activities).
- (4) Tools (e.g., integrating IT tools for communication and collaboration).
- (5) Relationships with the Hive (communication and collaboration system with the other localised hubs and with the ecosystem).



2.1 Process of Setting Up a Green Comb





3. Governance & Organisation

This Chapter presents the contents and components about Governance & Organisation of the localised hubs (Green Combs). In general, Governance refers to the system of processes, rules, and decision-making structures that guide and control the Green Combs, while Organization refers to the structure and arrangement of the elements within the Combs defining the roles, responsibilities, and relationships to achieve their goals efficiently. In other words, the governance is strategic in essence, while the organization rests at the operational level.

In this context, a well-established governance framework ensures that Combs exist with integrity, transparency, and accountability. The organizational part, on the other hand, focuses on the practical aspects of goal setting, collaboration and continuous improvement to drive positive environmental and community impact. The synergy between effective governance and well-organized operations is crucial for the success of initiatives like Green Combs.

Furthermore, it is essential to highlight that this document is not prescriptive but rather serves as guidance. Acknowledging the diverse landscape of organizations, countries, and VET institutions, levels of maturity considering their varied sizes, the content is designed to adapt to these distinctions and offer a flexible framework suitable for them.

This adaptability ensures that the principles and guidelines outlined herein remain applicable and effective across a spectrum of contexts, promoting the successful implementation of sustainability education through initiatives like Green Combs.

3.1 Governance



The governance structure for VET (Vocational Education and Training) internal hubs for sustainability education - Green Combs, serves several important purposes, helping to ensure the effective planning, implementation, and sustainability of education initiatives within VET institutions.

The below section is intended to support and guide the VET providers to set up the governance structure of internal hubs for sustainability education – The Green Combs.

3.1.1 Purpose

The governance structure helps to define the long-term vision and strategic direction of the Green Comb - internal hub for sustainability education within the broader context of the VET institution.

Mission, Vision, Values

A clear vision and mission for Green Combs shall be aligned with the overall sustainability goals of the VET institution.

- The vision serves as a beacon, outlining the desired future state where everyone in the Green Comb is committed to being environmentally aware, socially responsible, and economically sustainable.
- The mission articulates the roadmap for achieving this vision. It guides the internal hub's daily activities, emphasizing the integration of sustainability principles into the VET curriculum, the empowerment of students through hands-on projects, and the establishment of collaborative networks with local businesses and community organizations.
- Formulation of values ensures that the internal hub operates ethically and consistently, emphasizing inclusivity, transparency, and a commitment to continuous improvement.



The mission, vision, and values of Green Combs not only provide strategic guidance but also inspire a collective commitment to advancing sustainability education and fostering positive impacts within the VET institution.

Guiding Principles

Guiding principles help establish a foundation of values that underpin the internal hub's mission and activities. They articulate the ethical and moral standards that guide decision-making, ensuring that sustainability education aligns with the institution's core values. In addition, they are providing a clear and shared direction for the internal hub's efforts in sustainability education.

The guiding principles of Green Combs may include sustainability integration, inclusivity and diversity, continuous learning and adaptability, collaboration and partnerships, a student-centric approach, transparency and accountability, community engagement, innovation and creativity, measurable impact, adherence to ethical practices, flexibility and resilience, and global awareness.

3.1.2 Leadership Structure

The leadership structure plays a vital role in guiding and shaping the activities of Green Combs, providing a framework for effective decision-making, coordination, and implementation of sustainability education initiatives within the VET institution.

Core Management Team

Having a core management team for Green Combs is important because the team plays a central role in guiding the strategic direction, overseeing key functions, and ensuring the



success and sustainability of sustainability education efforts. The specific composition of the core management team may vary based on the institution's context and needs.

However, a typical Green Comb shall be headed by a coordinator, which shall provide overall leadership and strategic direction for the internal hub. The coordinator shall have not only management skill, responsibility and authority, but also have a level of competence in education and training, as well as in the sustainability area.

These Green Combs are thought to be agile and well-integrated within the VET institution, such that they will benefit from the support of the larger host organization. Support may be provided in the accounting, IT, administration and human resource areas, for example.

To ensure their support and sustainability, the Green Combs shall identify and cooperate with a so-called sponsor, someone who champions the Comb and helps, formally and informally, to remove obstacles that might harm its overall success. Project sponsors typically are members of senior management (of the VET institution) who carry a respectable level of influence and authority.

At last, but not at least, the core management team shall include the top management of the VET institution. While these sit above the Green Comb and are not expected to get involved in the every-day operations of the Comb, they will take a stand in major strategic decisions.

Decision Making Process

The core management team is responsible for decision-making related to program design, resource allocation, and overall strategy. The team shall designate individuals who will lead discussions, gather information, and facilitate the decision-making sessions. Utilization of decision-making models such as consensus-building, majority vote, or expert input based would be in line with the nature of the decision and aligned with the collaborative culture of Green Combs.



Clear decision-making processes and accountability structures help ensure that decisions are well-informed, inclusive, and aligned with the overall mission and vision of the sustainability education initiative. Moreover, critical decisions will be subject to approval by the management of the VET provider, ensuring consistency with broader educational goals.

3.1.3 Integration with Institutional Policies

The integration of Green Combs with institutional policies is essential for ensuring the alignment of sustainability education initiatives with the broader mission and values of the VET institution. This alignment not only secures institutional support in terms of recognition and resource allocation but also promotes consistency in decision-making processes, reducing the risk of conflicts or non-compliance.

Adhering to established institutional policies enhances Green Combs' credibility and trust among stakeholders, fostering effective communication and engagement. Moreover, integration facilitates synergy with other institutional initiatives, contributing to a holistic educational approach that encompasses sustainability across various aspects of institutional life. By complying with institutional regulations and contributing to strategic planning, Green Combs ensure their long-term sustainability and become active participants in shaping the overall educational strategy of the institution.

Institutional integration is foundational to the success, credibility, and lasting impact of Green Combs in promoting meaningful sustainability education within the VET institution.

3.1.4 Goals

Formulating clear and specific goals for VET (Vocational Education and Training) internal hubs for sustainability education is essential for Strategic Direction, Measurable Outcomes, and Alignment with Vision and Mission.



Objectives

To illustrate, here are examples of specific objectives that a VET internal hub for sustainability education might formulate based on broader goals:

- Integrate sustainability principles into at least 80% of VET programs by the end of the academic year.
- Establish partnerships with at least five local businesses and two community organizations to enhance collaborative sustainability initiatives.
- Implement student-led sustainability projects in each VET program, fostering hands-on experience and leadership skills.
- Provide sustainability-focused professional development workshops for at least 90% of educators annually.
- Increase awareness about sustainability education within the local community by organizing at least three outreach events or workshops per semester.
- Implement a comprehensive monitoring and evaluation framework to assess the impact of sustainability education initiatives, with bi-annual reviews and adjustments.
- Increase the internal hub's online presence and visibility by achieving a 20% growth in social media followers and engagement within the next year.

Without specific objectives, Green Combs would lack a clear focus for its sustainability education efforts. Specific objectives are the backbone of Green Combs, as they provide direction for its sustainability education initiatives.

Estimated Results

As part of the governance of Green Combs, forecasting estimated results is essential for setting realistic expectations, measuring progress, and ensuring accountability. The estimated



results should align with the overarching goals and objectives of Green Combs, focusing on both short-term and long-term outcomes. Example of the anticipated results are:

- Integration of sustainability principles into a specified percentage of VET programs within a defined timeframe.
- Establishment of collaborative partnerships with a targeted number of local businesses, community organizations, and other relevant stakeholders.
- Implementation of a certain number of student-led sustainability projects each semester.
- Provision of sustainability-focused professional development opportunities for a specific percentage of educators annually.
- Implementation of a comprehensive monitoring and evaluation framework with scheduled reviews and adjustments.

These estimated results serve as benchmarks for evaluating the success and impact of Green Combs' governance and sustainability education initiatives. Regular monitoring and evaluation against these anticipated outcomes will provide insights into the effectiveness of the Green Comb's governance structure and its contribution to the broader goals of sustainability education within the VET institution.

Expected Impact

The expected impact of the Green Combs extends beyond specific outcomes to encompass broader, transformative changes within the VET institution and the community. The governance structure shall contribute to a positive and sustainable influence on various levels. Some of the expected impacts are:

- Institutional culture transformation by embedding sustainability principles into the core values and practices of the VET institution.



- Integration of sustainability concepts across various VET programs, ensuring that students from different disciplines receive a holistic education in sustainability.
- Enhanced stakeholder collaboration between the VET institution, local businesses, community organizations, and other stakeholders, creating a network that actively supports sustainability education initiatives.
- Student empowerment - opportunities for active engagement in sustainability projects, fostering a sense of responsibility, leadership, and environmental stewardship.
- Continuous professional development of educators being equipped with the skills and knowledge needed to effectively integrate sustainability principles into their teaching methods.
- Measurable improvements in students' sustainability competencies, reflected in their ability to think systemically, understand interconnectedness, and apply critical thinking to real-world challenges.

Overall, the expected impact of Green Combs' governance is to create a lasting legacy of sustainability education that extends beyond individual initiatives to shape the institution's values, practices, and contributions to the broader community.

3.1.5 Financial and Physical Resources

This part refers to the generation and allocation of financial resources, as well to the management of physical resources, to ensure that Green Combs achieve their objectives and produce the desired results and impact.

Financial resources are crucial for Green Combs to sustain their governance and operations, as well as to fund their projects and programs. Without adequate financial resources, Green Combs would not be able to motivate staff, pay for utilities, or cover other expenses that are necessary for their functioning and growth. To obtain financial resources, Green Combs can



seek various sources of funding, such as grants, donations, sponsorships, fees, or revenue from services or products. They can also collaborate with other stakeholders, such as the VET institution administration, students, alumni, or external partners, to leverage their financial support and resources.

Financial resources should be managed responsibly by Green Combs to ensure that they are used efficiently and effectively for their intended purposes. To do so, Green Combs should follow some basic principles, such as:

- **Planning and budgeting:** Green Combs should have a clear and realistic plan and budget for their financial needs and goals, based on their mission, vision, and objectives. They should also monitor and review their financial performance regularly and adjust their plan and budget accordingly.
- **Transparency and accountability:** Green Combs should maintain accurate and complete records of their financial transactions and report them to their stakeholders, such as the VET institution administration, staff, students, funders, and partners. They should also adhere to the financial policies and regulations of the VET institution.
- **Sustainability and diversification:** Green Combs should seek to secure long-term and stable sources of funding that support their sustainability agenda and align with their values and principles. They should also diversify their funding sources and avoid over-reliance on one or a few donors or sponsors. They should also explore ways to generate income from their own activities, such as organizing fundraising events.

Physical resources are essential for Green Combs to implement their sustainability initiatives, such as reducing waste, improving energy efficiency, and enhancing green spaces on campus. Without adequate physical resources, such as equipment, materials, and infrastructure, Green Combs would not be able to (something is missing here)



By implementing these approaches, Green Combs can ensure a transparent, efficient, and adaptive approach, creating a comprehensive network of support and maximizing the impact of sustainability education initiatives within the VET institution.

3.1.6 Performance Measurement and Evaluation

Effectively managing performance measurement and evaluation helps Green Combs to assess the impact of its sustainability education initiatives. Below are some key steps and strategies for managing this process:

- Define clear and measurable performance metrics aligned with the goals and objectives of Green Combs (define metrics for each of the expected results).
- Create a comprehensive monitoring and evaluation framework that outlines the processes, indicators, and tools for assessing performance. This framework should be aligned with the mission and vision of Green Combs.
- Identify specific Key Performance Indicators (KPIs) that reflect the success of sustainability education initiatives. KPIs may include student achievement, community awareness, stakeholder satisfaction, and curriculum integration rates.
- Collect baseline data before implementing sustainability initiatives to serve as a reference point for measuring progress.
- Regularly collect data and evaluate the effectiveness of sustainability education programs and adjust strategies accordingly.
- Celebrate and recognize achievements and successes resulting from sustainability education initiatives. Acknowledge the positive impact on individuals, the institution, and the broader community.

Green Combs can establish a system for performance measurement and evaluation adapted and integrated into the organizational processes, enabling the internal hub to assess the



effectiveness of its sustainability education initiatives and make informed decisions for continuous improvement.

3.1.7 Compliance and Accountability

For the effective governance of Green Combs, ensuring compliance with relevant regulations and standards related to sustainability education is essential. To ensure compliance, Green Combs shall establish mechanisms for accountability, including regular reporting and audits to track progress and address challenges are some of the strategies.

Legal and Regulatory Framework

All activities and initiatives of Green Combs shall comply with relevant local, regional, national and international laws and regulations pertaining to education and sustainability.

This commitment extends to following the international and European frameworks, including:

- Green Comp, developed by the European Commission as a reference framework on sustainability competences at the EU level. It provides a general reference model that individuals engaged in lifelong learning can utilize to design, review, and adapt their vision and practices concerning teaching and learning. The framework aims at developing sustainability competences and assessing progress in supporting education and training for sustainability.
- Sustainable Development Goals (SDG), adopted by the United Nations as a universal call to action to balance social, economic and environmental sustainability. This can be applied to Green Combs as a foundational element in sustainability education.
- United Nations Global Compact, a non-binding United Nations pact to get businesses and firms worldwide to adopt sustainable and socially responsible policies, and to report on their implementation. By incorporating the Ten Principles of the UN Global Compact into



strategies, policies, and procedures, Green Combs uphold their responsibilities to people and the planet, setting the stage for long-term success.

- EU Green Policies, the European Union's comprehensive set of laws, regulations, and policies for sustainability. This includes the European Green Deal goals and the European Climate Law, Renewable Energy Directive, Single-Use Plastics Directive, etc.
- The European Green Deal, a package of policy initiatives, sets the EU on the path to a green transition with the objective of achieving climate neutrality by 2050. The initiatives cover climate, environment, energy, transport, industry, agriculture, and sustainable finance, emphasizing their interconnectedness.

Along with local and country-specific laws and regulations, these international and European frameworks collectively constitute a robust legal and regulatory architecture governing Green Combs. This ensures not only local compliance but also positions Green Combs as active contributors to global sustainability initiatives, embodying the highest standards of environmental responsibility.

Reporting

Green Combs shall implement a system of regular reporting to stakeholders, presenting key metrics, achievements, and challenges. This reporting mechanism enhances accountability and keeps stakeholders informed about Green Combs' progress.

If Green Combs receives external funding through grants or partnerships, they shall ensure strict compliance with the terms and conditions outlined in grant agreements and fulfil reporting requirements and demonstrate the impact of funds received.

Green Comb shall conduct periodic reviews of the governance structure and processes, to assess the effectiveness of governance mechanisms, identify areas for improvement, and adapt the structure to changing circumstances.



3.2 Organization

The organizational framework of VET internal hubs dedicated to sustainability education, known as Green Combs, plays a pivotal role in facilitating efficient planning, implementation, and sustainability of educational initiatives within VET institutions. This structure defines how elements within the Green Combs are arranged and organized, clearly outlining roles, responsibilities, and relationships among team members. The emphasis is on fostering efficiency and effectiveness in goal achievement, ensuring that the educational objectives are met systematically and seamlessly.

3.2.1 Team Formation and Roles

The team formation and roles within Green Combs are strategically designed to ensure the effective implementation and sustainability of sustainability education initiatives. This involves creating a diverse and skilled team that brings together individuals with varied expertise in the field of sustainability education.

Structure

The structural organization of Green Combs should be carefully planned to facilitate seamless collaboration and coordination among team members. This structure is instrumental in creating an environment where each member's skills and expertise can be effectively utilized for the successful implementation of sustainability education initiatives.

Depending on the needs and maturity of the VET institution and the internal Green Comb, the chosen structure may span from pyramidal to flat, matrix or functional. In smaller Combs, people may wear multiple hats. As such, Green Combs may incorporate the following functions: management, curriculum design, training, capacity building, partnership development and project management.



Roles, Responsibilities and Authorities

Roles and responsibilities within Green Combs are clearly defined to ensure that every team member contributes meaningfully to the objectives of sustainability education. Diverse teams must be formed, each member equipped with specific skills and expertise relevant to the field. This strategic alignment enhances the overall effectiveness of the team in achieving its goals. Within the structure of Green Combs, roles and responsibilities should be clearly defined to ensure efficiency, accountability, and the achievement of project goals.

Operational team roles and responsibilities within Green Combs may include:

- Hub coordinator: Oversees the overall functioning of the Green Comb, including program coordination, communication, and collaboration with VET institutions.
- Curriculum Designers: Focus on creating a comprehensive sustainability curriculum aligned with VET educational goals, incorporating hands-on experiences and real-world projects.
- Trainers and capacity builders: Facilitate ongoing training for Green Comb members, ensuring they stay updated on sustainability trends, teaching methodologies, and effective communication strategies.
- Partnership developers: Seek and establish partnerships with external organizations, businesses, and NGOs involved in sustainability, leveraging these collaborations to enhance Green Combs' impact.
- Project managers: Manage the effective implementation of sustainability-related events, workshops, and campaigns, ensuring alignment with goals, efficient resource utilization, and timely execution.

Based on their specific size, goals, objectives, and capacities, each Green Comb will be able to choose the roles, responsibilities, and authorities that best suit their needs and aspirations.



This will allow them to customize their sustainability education initiatives according to their local context and target audience.

Code of Conduct and Ethics

A stringent code of conduct and ethics must be developed to guide the actions and behavior of all individuals involved. Code should emphasize integrity, transparency, accountability, respect, and a commitment to facilitate a positive and inclusive learning environment. Adhering to ethical principles ensures that Green Combs will operate with the highest standards of professionalism and contributes to the success and credibility of the sustainability education initiatives.

3.2.2 Intervention Strategy

Intervention strategies within Green Combs are strategically employed to drive the successful implementation of sustainability education initiatives. This involves a comprehensive approach that includes both internal and external analyses, as well as a thorough assessment of the current state as a baseline for future initiatives.

Internal and External Analysis

Green Combs employ a strategic intervention strategy that involves a comprehensive analysis of both internal and external factors, ensuring a nuanced understanding of the context in which sustainability education is implemented. Internally, Green Combs evaluate their strengths, weaknesses, opportunities, and threats to sustainability education initiatives. Externally, the strategy considers factors such as sustainability trends, stakeholder engagement, and potential collaborations. This dual analysis provides valuable insights that



inform decision-making and enhance the overall effectiveness of sustainability education interventions.

Internal analyses may include:

- **Strategic Capability Assessment:** Green Combs may conduct strategic capability assessments to determine their physical, human, and financial competences and resources that are relevant for sustainability education initiatives. Physical competences and resources include the facilities, equipment, technological infrastructure, teaching materials, and collaborative spaces that the organization can use to deliver sustainability education programs. Human competences and resources include the staff, volunteers, and trainers who have the necessary skills, knowledge, and motivation to implement sustainability education activities. Financial competences and resources include the sources, amounts, and allocation of funding that the organization can access and manage to support sustainability education projects. The strategic capability assessment aims to identify and optimize the available and potential competences and resources that enable the organization to achieve its sustainability education objectives.
- **Competence Analysis:** Green Combs may also evaluate internal competences, which include skills, knowledge, and abilities within the organizational strategic capability framework. Applying VRIO questions, the organization may assess the Value, Rarity, Imitability, and Organization of these competences to ensure compatibility with and enhancement of sustainability education initiatives. This assessment aims to pinpoint capabilities that are valuable, rare, challenging to replicate, and well-organized, ensuring the Green Combs significantly enhance their strategic capability of sustainability education. The process may also involve identifying strengths, areas for improvement, and ensuring a diverse skill set relevant to sustainability education. This comprehensive analysis may cover areas such as pedagogical methods, curriculum design, and assessment tools.



- **Knowledge and Learning Capacity:** Green Combs shall evaluate their knowledge and learning capacity, with a focus on the organization's adaptability to new information, technologies, and methodologies. This evaluation aligns with the concept of organizational learning within the framework of organizational strategic capability.

This comprehensive internal analysis empowers Green Combs to make strategic decisions, capitalize on strengths, address weaknesses, and optimize the impact of sustainability education interventions.

External analyses may include:

- **Macroenvironmental analysis,** using specific tools, such as PESTEL, timeline assessments, and scenario preparedness tools. This approach provides insights into political, economic, social, technological, environmental, and legal factors that could impact sustainability education initiatives. Additionally, timeline and scenario tools enhance preparedness for future developments and challenges.
- **Critical success factors analysis,** where each factor is carefully assessed, including a description and Green Combs' position in relation to it. This analysis guides the organization in prioritizing key elements crucial for the success of sustainability education initiatives.
- **Stakeholder analysis,** encompassing VET institutions, local communities, businesses, NGOs, and policymakers. Utilizing tools for example, such as Strategy Maps and Stakeholder Matrices, the organization identifies key partners and potential collaborators within the sustainability education ecosystem. This analysis is instrumental in fostering strategic partnerships that enhance the impact of sustainability initiatives.
- **Educational area review** for better understanding the broader educational area. Green Combs may analyse trends, policies, and developments in vocational education and training to align sustainability initiatives with educational goals.



Drawing from the internal and external analyses, Green Combs may conduct a SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis to identify and prioritize the internal factors that influence sustainability education initiatives. Strengths are positive aspects that give the organization an advantage, such as expertise, reputation, or network. Weaknesses are negative aspects that hinder the organization's performance, such as lack of funding, staff, or resources. Opportunities are external factors that create favourable conditions for the organization, such as emerging trends, partnerships, or grants. Threats are external factors that pose challenges or risks for the organization, such as competition, regulations, or changing demands. The SWOT analysis aims to leverage strengths and opportunities, minimize weaknesses and threats, and formulate strategic goals and actions.

Current State Assessment Baseline

A critical component of the intervention strategy is the assessment of the current state as a baseline for future initiatives. Green Combs may conduct a thorough examination of existing sustainability education practices, resources, and capabilities, which will provide a clear understanding of the current state of sustainability education within VET institutions and the surrounding external environment. This assessment serves as the foundation step in the intervention strategy for setting realistic goals, identifying areas for improvement, and establishing benchmarks to measure the success of future interventions.

The current state assessment may include:

- **Curricula review:** Green Combs assess the existing sustainability curriculum within VET institutions to identify gaps, strengths, and areas for improvement. This review guides the development of a targeted intervention plan.
- **Training needs analysis:** By conducting a needs analysis, Green Combs identify the training requirements of educators and other stakeholders involved in sustainability



education. This ensures that training programs align with the specific needs of the VET community.

- **Impact assessment:** Evaluating the impact of past sustainability initiatives helps Green Combs understand what has worked well and areas that require enhancement. This assessment informs the refinement of future interventions for maximum effectiveness.
- **Current levels of sustainability education in the target community:** Green Combs may conduct situational analyses to examine the current state of sustainability education in the relevant area and target groups.

The State Assessment Baseline is a valuable tool for Green Combs to monitor and evaluate the progress and impact of their intervention strategies. It provides a benchmark for measuring the changes in sustainability education practices and outcomes over time, as well as identifying areas for further improvement.

Developing intervention strategies

Green Combs shall develop intervention strategies to meet the unique context and needs of VET institutions. These strategies focus on empowering educators and learners, fostering a sustainable culture within the institutions. Approaches may encompass diverse methods, for example training workshops, mentoring programs, learning communities, and online platforms. These interventions actively support the implementation of sustainability curricula, aligning with the broader goals of sustainability education.

The design of intervention strategies is guided by the principles of participatory action research, which involves collaborating with the VET community. This involves a collective effort to identify challenges, devise solutions, and evaluate outcomes. Through this participatory approach, Green Combs will ensure that intervention strategies are not only



impactful but also resonate with the VET community, embodying relevance, effectiveness, and long-term sustainability.

Some examples of intervention strategies may include, but not limited to:

- **Mentoring programs:** Establishing mentoring programs where experienced educators guide and support their peers in incorporating sustainability into their teaching practices.
- **Learning communities:** Creating communities of practice where educators, learners, and other stakeholders come together to share knowledge, experiences, and best practices related to sustainability education.
- **Online platforms:** Developing online platforms or portals that offer resources, materials, and a collaborative space for educators to engage in discussions and share innovative ideas for sustainability education.
- **Curriculum development support:** Providing assistance and resources for VET institutions in developing and enhancing their sustainability curricula, ensuring alignment with educational goals.
- **Community engagement initiatives:** Launching initiatives that involve local communities, businesses, NGOs, and policymakers in sustainability education, fostering a sense of shared responsibility.
- **Action research projects:** Collaborating with VET institutions on action research projects that explore effective strategies for implementing sustainability education, with a focus on continuous improvement.

These strategies, implemented in a participatory and collaborative manner, contribute to the overall goal of enhancing sustainability education within VET institutions.

3.2.3 Curriculum Development and Integration



In alignment with the educational objectives of Vocational Education and Training (VET) institutions, Green Combs embark on the development of a comprehensive sustainability curriculum. This curriculum is designed to integrate seamlessly with the goals of VET, fostering a holistic approach to sustainability education.

Curriculum development strategy is rooted in creating a comprehensive sustainability curriculum that caters to the unique needs of VET institutions. This involves identifying key sustainability concepts, defining learning objectives, and designing engaging content that promotes a deep understanding of environmental and social issues. The curriculum should be continuously refined to stay current with emerging trends and ensure its relevance in the dynamic field of sustainability education.

To achieve this, the sustainability curriculum is enriched by integrating practical experiences and real-world projects. This hands-on approach allows learners to apply theoretical knowledge in practical settings, ensuring a deeper understanding of sustainability principles. By engaging in real-world projects, students develop problem-solving skills and gain valuable insights into the application of sustainable practices in various contexts. This integration enhances the overall learning experience and prepares students for the challenges of implementing sustainable solutions in their future careers.

The sustainability curriculum may adopt a multidisciplinary framework, incorporating elements from diverse fields such as environmental science, business studies, and social sciences. This approach ensures a well-rounded understanding of sustainability. The curriculum may be structured around thematic modules, each focusing on a key aspect of sustainability, such as environmental conservation, social responsibility, and economic viability.

In designing curricula, Green Comb professionals may consider a range of methods which ensure that learners gain in-depth knowledge and skills within specific sustainability



domains. These may include practical workshops, guest lectures, field trips, project-based learning, formative and summative assessments, and industry-related practices.

Finally, Green Combs are thought to work closely with VET institutions to seamlessly integrate the sustainability curriculum into existing educational frameworks. This approach ensures a smooth transition and alignment with broader educational objectives.

3.2.4 Training and Capacity Building

Green Combs shall be dedicated to providing the continuous growth and development of its members through targeted training and comprehensive capacity-building initiatives. The organization recognizes the dual importance of professional development for individuals and capacity building for the collective strength of the organization itself. This commitment underscores the emphasis on the professional development of people and the concurrent capacity building of organizations, ensuring a holistic and integrated approach to advancing sustainability education within the community. Green Combs strive to enhance the knowledge, skills, and competencies of its members, acknowledging that the collective capacity of the organization is equally vital for the successful implementation and sustainability of its sustainability education goals.

Professional Development

Members of Green Combs shall be provided with opportunities for continuous learning in various aspects of sustainability education. Green Combs shall actively invest in the professional development of its members, ensuring they remain well-informed about sustainability trends and proficient in effective teaching methodologies and communication strategies.

Various options to facilitate continuous learning may include:



- **Workshops and Seminars:** Regular sessions led by experts in sustainability and education provide Green Combs members with valuable opportunities for professional growth.
- **Guest Speakers:** Inviting guest speakers from academia, industry, and environmental sectors offers insights into cutting-edge practices and trends.
- **Online Courses:** Access to online courses and webinars ensures flexibility in professional development, allowing members to explore diverse areas of sustainability education.
- **Active Engagement in Green Hive and Sustainability Communities:** Members are encouraged to actively participate in the Green Hive and other sustainability-driven communities, fostering a collaborative learning environment and expanding networks.
- **Membership in Organizations:** Promoting membership in relevant organizations to further enrich members' exposure and engagement in the sustainability education landscape.
- **Peer Learning:** Creating opportunities for members to exchange best practices, insights, and challenges with each other and learn from their peers' experiences and feedback.
- **Mentoring and Coaching:** Providing guidance and support to members through mentoring and coaching relationships that help them grow professionally and personally.
- **Networking and Collaboration:** Facilitating connections and partnerships among members and with other stakeholders in the sustainability education sector, such as schools, universities, NGOs, and government agencies.

In fostering a culture of continuous learning and growth, Green Combs aims to empower its members through diverse avenues, ranging from workshops and seminars to networking opportunities and recognition initiatives. As a result, the Green Combs community strives to create an environment where each member can thrive, contribute, and champion



sustainability education, ensuring a collective commitment to excellence in the dynamic landscape of sustainable learning.

Capacity Building

As leading organizations in sustainability education, Green Combs strive to be role models and catalysts for change in the sector. By strengthening their internal systems and processes, Green Combs increase their resilience and adaptability in the face of emerging challenges and opportunities in the field of sustainability education. Thus, organizational capacity development is essential for Green Combs to fulfil their mission and vision of creating a more sustainable world through education.

Relevant areas in which the Green Combs can enhance their organizational capacity are:

- **Leadership and Governance:** Developing and implementing effective governance structures and processes that ensure accountability, transparency, and alignment with the organizational vision and values.
- **Strategic Planning and Management:** Setting clear and realistic goals and strategies for the organization and monitoring and evaluating their progress and impact.
- **Financial Management and Sustainability:** Securing and managing diverse and adequate sources of funding and ensuring financial stability and efficiency.
- **Communication and Advocacy:** Communicating the organization's vision, mission, and achievements to various audiences and stakeholders and advocating for sustainability education policies and practices.
- **Innovation and Creativity:** Encouraging and fostering a culture of innovation and creativity within the organization and among its members and partners.



- **Diversity and Inclusion:** Promoting and celebrating diversity and inclusion within the organization and in its programs and activities and addressing the needs and perspectives of different groups and communities.
- **Collaboration and Partnership:** Building and maintaining strong and mutually beneficial relationships with other organizations and institutions that share the vision and mission of the Green Combs and support its work.
- **Learning and Development:** Providing and facilitating opportunities for learning and development for the staff, members, and partners of the organization and ensuring that they have the skills and competencies to fulfil their roles and responsibilities.

These aspects of organizational capacity can help the Green Combs to improve their performance, credibility, and influence in the sustainability education sector. While investing in their own capacity development, the Green Combs can also inspire and support other organizations to do the same.

3.2.5 Partnership Development

Green Combs recognizes the importance of collaboration and actively seeks to establish meaningful partnerships with external organizations, businesses, and NGOs that share a commitment to sustainability. Our approach to partnership development is strategic, aiming to enhance the educational experience and opportunities for Green Comb members.

To achieve this goal, Green Combs engage in the following approaches:

- **Identifying Strategic Partnerships:** Conducting thorough research to identify external partners that align with our mission and goals. These could include environmental organizations, sustainable businesses, and non-profits actively involved in sustainability initiatives. By carefully selecting partners, Green Combs ensures that collaborations are mutually beneficial and contribute to the overall success of sustainability education.



- **Leveraging Expertise and Resources:** Strategic partnerships bring valuable expertise, collaborative opportunities and resources to Green Combs. Through collaborations, aimed to bring in guest speakers, mentors, and subject matter experts who can provide insights and inspiration to our members. Additionally, partnerships may open doors to collaborative projects that enhance the practical aspects of sustainability education, facilitate the exchange of resources, research findings, and best practices, contributing to the continuous improvement and growth of sustainability education initiatives.
- **Facilitating Collaborative Projects:** Collaborative projects are a key outcome of partnership development approaches. These projects provide Green Comb members with hands-on experiences, connecting them to real-world sustainability initiatives, ensuring relevance and practicality. Whether it's participating in community-based projects or contributing to research endeavors, these collaborations enrich the educational journey of our members.
- **Community Engagement:** Outreach to a local community strengthens the connection between Green Combs and the communities it serves, fostering a sense of shared responsibility for sustainability education.

While actively seeking and nurturing partnerships, Green Combs ensure a dynamic and interconnected learning environment that goes beyond the boundaries of traditional education. Through these partnerships, the Green Hive members gain exposure to diverse perspectives, broaden their networks, and contribute to a collective effort toward a sustainable future.

3.2.6 Project Management and Implementation

Effective project management is at the core of Green Combs' ability to organize and implement intervention strategies, sustainability-related events, workshops, and campaigns, for



example. The approach ensures that every initiative is executed seamlessly, meeting established timelines, utilizing resources efficiently, and achieving outcomes aligned with its goals.

Steps:

1. Detailed Planning and Coordination

Before embarking on any project, detailed planning sessions have to be conducted to outline objectives, timelines, and resource requirements. This includes identifying key points, assigning responsibilities, and establishing clear communication channels. Through proper coordination, we ensure that all team members are aligned with the project's vision and goals.

2. Resource Optimization

Efficient resource utilization is a priority. Whether it's human resources, materials, or technology, we strive to optimize every aspect to maximize impact. This involves assessing the needs of each project, identifying potential challenges, and proactively addressing resource constraints to ensure smooth execution.

3. Continuous Monitoring and Control

A robust monitoring and evaluation framework is employed to assess the impact of sustainability projects. This includes gathering data, analysing results, and deriving insights that inform future strategies. Throughout the project lifecycle, progress tracking, evaluation of outcomes, and making the necessary adjustments to address new opportunities or challenges is a necessary practice. This iterative approach ensures that our initiatives remain responsive to evolving circumstances.

4. Stakeholder Engagement

Engaging stakeholders is integral to project success. Green Combs actively involves stakeholders, including team members, partners, and the community, in the planning and



implementation process. By providing open communication and collaboration, we enhance the overall impact of our sustainability-related projects.

5. Timely Execution:

Adhering to timelines is critical for the success of sustainability projects. Green Combs employs efficient scheduling and monitoring mechanisms to ensure that each phase of a project is executed promptly.

Through effective project management and implementation, the goal is to deliver impactful and well-executed initiatives that contribute to our mission of advancing sustainability education.

3.2.7 Monitoring and Feedback Mechanism

Establishing a robust monitoring and feedback mechanism is essential to track the progress and effectiveness of Green Combs within VET institutions. This involves implementing systems to systematically collect, analyse, and interpret data related to sustainability education initiatives, ensuring that the objectives are being met and adjustments can be made in real-time.

The dynamic nature of sustainability education requires continuous evaluation to adapt and enhance programs. A monitoring and feedback mechanism serves as a diagnostic tool, offering insights into the impact of Green Combs on students, the VET institution and the broader community. It helps identify successful practices and, at the same time, provides early detection of potential challenges, enabling proactive measures to maintain the integrity and effectiveness of sustainability initiatives.

Feedback may be actively collected from various stakeholders to ensure a comprehensive understanding of the impact and relevance of Green Combs. This includes students, whose experiences and perceptions are crucial in shaping the educational journey. Teachers,



trainers and other Comb members may provide insights into the integration of sustainability principles within the curriculum. School directors could provide insights on the alignment of Green Combs with the overall institutional strategy. Collaboration with businesses provides valuable perspectives on the practical applicability of sustainability education in the professional sphere. Local public bodies offer insights into community needs and broader societal impacts. Engaging with and collecting feedback from other relevant stakeholders, such as NGOs and sustainability experts, ensures a well-rounded assessment that captures the diverse perspectives shaping the success of Green Combs. Regular feedback loops with this diverse range of stakeholders contribute to a holistic and inclusive approach to sustainability education.

To measure and monitor the effectiveness of sustainability education, Green Comb may employ the following tools, methods and approaches:

- Regular surveys and questionnaires to gather feedback from students, faculty, and stakeholders; posing questions that assess the perceived impact of sustainability education, the relevance of the curriculum, and suggestions for improvement.
- Periodic focus group discussions with Green Comb members and participants to delve deeper into their experiences, exploring their perspectives on the strengths and weaknesses of the programs, allowing for qualitative insights.
- Regular review meetings involving Green Comb leadership, VET institution, and stakeholders. Discuss achievements, challenges, and proposed improvements to foster a collaborative environment.
- Online platforms and technological tools to facilitate real-time feedback collection. These may be discussion forums, feedback forms on the Green Hive portal, or dedicated apps that may be accessible channels for participants to share their thoughts.



- Structured activity, project and program-level reporting that presents data in an actionable format. These may include dashboards or reports that highlight trends, areas of success, and potential areas for improvement, facilitating informed decision-making by the Green Comb leadership.

Implementing a comprehensive monitoring and feedback mechanism ensures that Green Combs remain dynamic, responsive, and aligned with the evolving needs of sustainability education within VET institutions. Regular feedback loops not only enhance the quality of programs but also foster a culture of continuous improvement and innovation.

4. Community Management

Community management within Green Combs involves strategically guiding, engaging, and fostering a sense of belonging among its members. Effective community management is essential for ensuring active participation, collaboration, and the overall success of sustainability initiatives.

It should be dynamic, responsive, and focused on creating a collaborative and supportive environment. By fostering strong community connections, Green Combs can leverage the collective efforts of its members to achieve sustainable outcomes and positively impact the local ecosystem.

4.1 Member Profile

4.1.1 Internal and External Stakeholders

The members of the communities encompass individuals from various fields, representing the entire system of local and national communities. Their involvement ensures that the Hub's



efforts are truly representative of the interests and needs of the local population. These diverse stakeholders can be involved internally and externally.

Internal stakeholders can include:

- Members of the core management team responsible for overseeing the activities and decision-making of the Green Combs.
- Community Members/Leaders, such as residents and individuals who are active within their local community and recognized for their contribution.
- Educators and trainers/experts in sustainability education and training that can apply sustainability methods, facilitate workshops, training programs and initiatives to promote sustainability in the community.
- Volunteers who can contribute their time and skills for amplifying the impact of Green Combs.

External stakeholders:

- Non-Governmental Organizations (NGOs) that are active in sustainable development of communities and environment, including human rights and environmental conservation.
- Corporate Organizations: Businesses committed to sustainable development and aligning with the Sustainable Development Goals (SDGs). This collaboration may include initiatives such as green partnerships, shared resources, and capacity building programs.
- Local Businesses: Small and large businesses operating within the community with sustainable goals. They can contribute to Green Combs through partnerships, sponsorships and by adopting sustainable business practices.
- Government Agencies and public offices: Local and national government bodies responsible for environmental sustainability, agriculture and community



development. These stakeholders have a significant influence on decision-making and resource allocation.

- **Policymakers:** The Hub collaborates with policymakers and public offices at local, regional, and national levels. By engaging with policymakers, the Hub can advocate for supportive, sustainable policies and influence public policies that align with its goals.
- **Environmental Experts and Consultants:** Professionals with expertise in environmental sustainability that apply sustainability methods in their practices. These individuals can contribute to the development of the credibility and the effectiveness of the Combs' sustainability initiatives.
- **Agricultural Training Centers:** Institutions specializing in agricultural education and training. They can provide expertise and resources to enhance sustainable agricultural practices within the community.
- **Farmers as teams:** farmers, farm enterprises and social enterprises with a farm subject, with a focus on sustainable agriculture. They can contribute to projects, share best practices, and participate in sustainable community-wide initiatives.

In conclusion, the Hub involves a wide range of stakeholders, both internal and external, in its operations. By engaging with the various stakeholders, the Hub can ensure that the interests and needs of all stakeholders are considered. This collaborative approach ensures that the Hub's efforts are comprehensive and impactful, contributing to sustainable development at the local, national, and global levels.

4.1.2 Potential partners and strategies for collaboration

Collaboration with partners, organizations and development of strategies for collaboration are keys to success of Green Combs in implementing sustainable initiatives. By strategically collaborating with a diverse set of partners, Green Combs can tap into a wider pool of



resources, expertise and support, ultimately enhancing the impact of its sustainability initiatives within the community. Here are some potential partners:

- **Educational Institutes Network:** Identify key educational institutes relevant to your cause, such as agricultural universities, environmental science departments, or institutions with expertise in sustainable development. Establish partnerships through Memorandum of Understanding (MOU) agreements. This could involve joint research projects, knowledge-sharing sessions, and collaborative educational programs.
- **Farmers Network:** Connect with local and regional farmer networks, agricultural cooperatives, and community-based farming organizations. Foster partnerships through workshops, training sessions, and knowledge exchange programs. Develop initiatives that directly benefit farmers, such as sustainable farming practices or access to new technologies.
- **Trans-Professional Unions/Organizations for Sustainable Development:** Identify unions or organizations that focus on sustainable development across various professions. Establish partnerships through joint events, conferences, and collaborative projects.
- **SDGs Representatives:** Connect with individuals or organizations actively working towards achieving Sustainable Development Goals (SDGs). Collaborate on projects aligned with common SDGs.

4.1.3 Establishing and maintaining strong partnerships

Building and maintaining strong partnerships is an ongoing process that requires dedication, open communication, and a commitment to shared goals. By fostering collaborative relationships, Green Combs can maximize its impact and contribute to a more sustainable and resilient community. This can be achieved through:



- **Networking and Upgrading Education/Meetings:** Institutes gain access to real-world challenges, while partners benefit from cutting-edge research and updated curriculum. Organize regular meetings, workshops, and conferences to facilitate networking and continuous learning.
- **Accelerating Activities Implementation and Enhancing Systemic Growth:** Partners collectively expedite project implementation and contribute to systemic growth. Develop a project roadmap with clear milestones. Encourage regular feedback and adjustments to enhance efficiency.
- **Exchange Knowledge and Increase Opportunities for Actions:** Partners gain diverse perspectives, and opportunities for joint initiatives increase. Establish knowledge-sharing platforms, webinars, and collaborative forums. Encourage the exchange of ideas and experiences, fostering a culture of continuous improvement.
- **Engagement to a Common Goal with Clear Purpose:** Shared vision leads to stronger collaboration and collective impact. Clearly define the community's goal and purpose. Regularly assess progress and adapt strategies based on evolving needs and challenges.

4.1.4 Creating an inclusive environment

Establishing inclusivity within Green Combs is pivotal for nurturing diversity, equity, and a sense of belonging among community members. It ensures that everyone, irrespective of their background, feels esteemed, respected, and has equal opportunities to engage in the organization's mission. Here are key strategies for creating and sustaining an inclusive environment:

1. **Simple Language and Inclusive Material:**
 - Utilize clear and accessible language in all communication materials.
 - Present information through videos with subtitles for diverse understanding.



- Develop materials in various formats like easy-to-read documents, audio content, and visual aids.
- Ensure content is available in multiple languages.

2. Practices for Disabled Individuals:

- Prioritize accessibility by integrating practices that cater to the needs of disabled individuals.
- Provide transcripts for videos, ensure website accessibility, and choose physically accessible venues for events.
- Use inclusive imagery that represents individuals with various abilities.

3. Utilizing Social Media:

- Leverage social media platforms audience.
- Share inclusive content and actively engage with diverse communities.
- Respond promptly to comments and messages, fostering an online community that values diversity of thought.

4. Promoting Equality and Acceptance:

- Instill a culture of equality and acceptance within the community.
- Clearly communicate and reinforce values of equality and acceptance.
- Address any discriminatory behavior promptly.
- Celebrate diversity through events.

A diverse representation within Green Combs ensures that the Hub mirrors the demographic composition of the local community, promoting resonance and relevance. Diverse perspectives help in understanding and respecting cultural nuances, ensuring that



sustainability initiatives are culturally sensitive, well-received and are the result of a combination of different mindsets. Diversity and equality in terms of expertise in sustainability initiatives are also of huge importance.

4.1.5 Member eligibility criteria

Defining member eligibility criteria is crucial for ensuring that the community attracts individuals who align with its goals and values. Examples of these criteria could be:

- Demonstrated experience in implementing sustainable farming practices.
- Formal education or training in agriculture/sustainability or related fields.
- Active involvement in environmental or agricultural sustainability initiatives.
- Demonstrated involvement in community-based projects or activities.
- Shared values with the community regarding sustainable practices, environmental responsibility, and community development.
- Involvement in e-commerce platforms or ownership of a company or organization related to farming products or services related to sustainable farming.
- Roles as vocational teachers in farming schools or attendees in vocational programs related to agriculture. Professors with expertise in agriculture, sustainability, or related fields.
- Holding political office with responsibilities related to agriculture or the environment.
- Affiliation with non-governmental organizations (NGOs) dedicated to sustainable practices.

Some Filtering questions could be:

- What motivated you to seek membership in our community?
- What specific expectations do you have for your involvement in the community?
- How do you envision contributing to the goals of our community?



- Can you provide examples of your commitment to sustainable and environmentally conscious practices?
- How do you see yourself actively participating in community activities and initiatives?

4.2 Strategies for Member Outreach & Onboarding

Member outreach is a critical component of engaging and maintaining an active and diverse community within Green Combs. Effective outreach ensures that community members are informed, involved, and feel a sense of belonging. In order to achieve that, the Hub can incorporate AI demos and tools for demonstrations, to showcase community capabilities or can use subclusters depending on the interest. Here are strategies for member outreach:

- Organizing regular networking events to facilitate connections and relationship-building, like themed networking events that align with stakeholder interests (e.g., sustainable agriculture, environmental conservation).
- Actively participate in conferences dedicated to sustainable development, in local and international level.
- Conduct targeted outreach to companies, fostering one-on-one interactions. Identify companies with a vested interest in sustainable practices or alignment with community goals.
- Establish partnerships with civil society organizations through open-house events and joint initiatives. Invite representatives from civil society organizations to visit the hub.
- Build strong relationships with key stakeholders. Identify and reach out to governmental bodies, environmental agencies, and influential figures in sustainable development.
- Maintain consistent and transparent communication with stakeholders. Establish a communication plan to provide regular updates on community activities,



achievements, and upcoming events. Encourage feedback and suggestions to foster a sense of inclusivity and collaboration.

4.3 Engagement Strategies

Establish clear and formalized agreements with key stakeholders by developing simplified Memorandums of Understanding (MOUs) and Non-Disclosure Agreements (NDAs) outlining roles, responsibilities, and expectations.

Streamline the paperwork process to ensure ease of understanding and quick execution. Digital platforms can be useful for document sharing and signing to expedite approvals.

Establish a comprehensive timeline outlining key milestones and deadlines. Timelines should be communicated to all stakeholders for transparency and coordination of activities.

Regularly review and update agreements to adapt to changing circumstances and review and refine procedures for further simplification.

Consistent and structured communication should be established through regular meetings with stakeholders. Establish a culture of open communication to foster collaboration and trust.

Use feedback from open discussions to improve processes and enhance cooperation.

Maintain ongoing and transparent communication. Establish a centralized communication platform for updates and announcements. Share regular progress reports. Encourage stakeholders to share updates and relevant information. Utilize various communication channels, including email, newsletters, and social media.

4.3.1 Communication channels and platform

Green Combs can enhance collaboration by using user-friendly tools. Platforms like Google Drive for document sharing, Zoom for virtual meetings, LinkedIn for networking, and Asana



or Trello for task organization ensure efficient teamwork. Slack enables real-time communication, while newsletters offer regular updates. Microsoft Teams supports collaborative document editing, Discourse fosters open discussions, and social media platforms aid in visual storytelling. WhatsApp groups and podcasts provide instant messaging and audio content, while SurveyMonkey gathers feedback. Facebook Groups support community engagement.

4.3.2 Conflict resolution

Establish clear terms and community rules from the outset to prevent and address conflicts: Inclusion in MOU, embed specific terms and community rules that members sign upon participation. Clearly outline expectations for behavior, communication, and dispute resolution. Define a structured mediation process for conflict resolution, involving neutral parties if necessary.

4.4 Development Journey & Mentorship

4.4.1 Member Development and Active Participation

Development and Participation of the members of the Green Combs should be some of the key priorities of the Hub. That's why some practical tools should be created such as a guide for welcoming new members and targeted training programs to ensure all participants understand the benefits to be gained from their active participation in the program.

Step-by-step welcoming guide: Welcoming new members to Green Combs is a crucial step in fostering a sense of community and ensuring that they are aligned with the organization's values, goals, and activities. Drafting a concise and clear "contract" or set of guiding principles



is a great way to ensure that all members understand and align with the core values and expectations of the Green Combs program.

Curriculum/ schedule for ongoing educational programs: Designing an ongoing educational program and skill-building workshops for Green Combs involves a thoughtful combination of sustainability-focused topics and practical skills. When developing this program, disabled people should be taken under consideration.

4.4.2 Mentorship program

Provide a mentoring service to ensure the supervision, guidance, and counselling of participants throughout the duration of the program to enhance active participation and the sharing of good practices, experiences and knowledge.

Include a Mentorship Memorandum of Understanding (MOU). It is a crucial step in formalizing the mentorship program, setting clear expectations, and ensuring a smoother integration of mentors and participants.

Encourage mentorship and peer-to-peer learning within Green Combs. It is a strategic approach to foster a culture of continuous improvement.

4.4.3 Learning paths

Green Combs can enhance continuous learning and skill development by implementing structured learning paths and effective progress tracking. The suggested learning paths cover key areas such as sustainability fundamentals, community development skills, effective communication, organic farming, leadership, and digital tools. Resources include online courses, workshops, webinars, and community engagement projects. Progress tracking methods encompass individual learning plans, assessments, project participation, webinar attendance, community engagement metrics, skill demonstrations, peer reviews, learning



logs, certificates of completion, feedback surveys, mentorship impact assessments, and recognition for learning challenges. This comprehensive approach aims to create a dynamic and supportive learning environment within Green Combs, fostering continuous improvement and skill acquisition among community members.

4.4.4 Belonging and collaboration

Foster a sense of belonging and collaboration by sharing examples of successful community-building initiatives and events. For that purpose, encompass experiential workshops, training sessions, reporting of case-studies/ good practices and an online platform.

Maintain open communication and regular community gatherings to foster a thriving community dedicated to sustainability. Transparent communication creates a platform for educators, mentors, stakeholders, and workers to collaboratively raise awareness and promote sustainable attitudes. These channels are vital for sharing good practices, information, and educational materials, as well as enhancing project management skills and facilitating international cooperation. The dissemination of tools and practices through these channels supports the collective growth of the community, ensuring a strong foundation for sustainability initiatives and promoting a culture of continuous learning and collaboration.

5. Activities

This Chapter presents the activities that Green Combs are going to implement in order to offer opportunities and co-design innovative sustainability solutions. The activities of Green Combs are designed to align with its mission and vision, promoting sustainability, community



engagement, and positive environmental impact. These activities are going to vary, providing educational opportunities and open challenges.

The activities have been divided into two categories: internal activities that will be completed by the staff members or volunteers managing the Green Combs, and activities that will involve external participants.

It is important to note that the activities carried out with participants are those in which the most suggestions and ideas have been collected from the attendees to the co-creation sessions. In this context, internal activities would help maintain the functioning of the Green Combs, organize and schedule activities with participants and ensure that content is given to hubs, thereby contributing to being part of the ecosystem. The activities with external participants would be the essential point of the Green Combs and to which greater attention has been dedicated in the co-creation sessions.

It is also crucial to emphasize that this text is meant to be a guide. This content is created to adjust to the resources since depending on the circumstances, ecosystem and environment the activities must be adapted and may differ between the different Green Combs.

5.1 Internal activities

Internal activities are those activities carried out to maintain the structure of the Green Combs and to manage the activities carried out with the participants. Depending on the resources, structure and ecosystem, they could be implemented by staff or by volunteers in some tasks.

As previously indicated, these are the activities on which the attendees have focused the least apart from communication activities where ideas have been proposed. These types of activities would include management activities, administrative activities or communication



activities. They are closely linked to the maintenance of the Green Comb structure itself. As communication activities, we also find relations with other entities and organizations that are part of the Green Combs ecosystem. One of the communication activities that could be implemented is to create a digital product (for example a video) that follows two protagonists with different lifestyles, the first one leading an “ecological” lifestyle, and the second a non-ecological underlining the differences in terms of quality of life, environment and future scenarios.

Creative marketing and communication in the Green Combs should help to increase the spirit of initiative for sustainable development in the public.

5.2 Activities with external participants.

The activities with external participants and students have generated a lot of interest among participants. Ideas for indoor and outdoor activities have been presented.

5.2.1 Indoor Activities.

More generally, sustainability-related conferences, brainstorming activities, awareness-raising workshops or the creation of working groups have been identified as activities to be carried out in the Green Combs. The aim of these activities would be to give content to the Green Combs and thus contribute to the development of green competences. These activities would be considered as the minimum number of activities to be maintained.

Below is a list of activities that can be taken into consideration for the implementation of Green Combs:



1. Icebreaker activities. The main objective of this type of activity is to get to know each other among the different participants in the group with which we are going to start any type of activity. It is proposed to provide special attention to cultural aspects or non-verbal language to build trust between the members of the group who will later carry out different activities. It is also proposed to use different types of materials to introduce different themes, such as recycling.

2. Creative activities and workshops within the Green Combs. The idea is to present different creative activities linking creativity, environment and culture to deal with transversal aspects with the participants. Among these activities, several types of activities are proposed:

- Activities for the creation of a shared story created with different materials. The purpose of this activity is to create stories and a sense of belonging to the group while giving a new life and usefulness to different materials.
- "Double bubble" mind mapping activities. This type of activity is of great added value when there is cultural diversity within the group. It consists of working on elements of a culture, and looking for aspects that unite us with other cultures.
- Reuse objects to make craft products. This activity aims, in addition to promoting creativity, to raise awareness among attendees in the use of objects that will initially be discarded with the aim of creating art.
- Recycling bottles and rubbish and make sculptures. This activity would be another of the activities proposed in relation to creativity. In this case, instead of creating handicraft products, works of art, such as sculptures, are created using everyday objects, such as bottles that would be thrown away.
- Activities related to imagining the future. The objective of this activity is to imagine and be able to think about alternative futures taking into consideration environmental aspects



compared to scenarios that do not take these aspects into account. In this way, participants become aware of the impact of their own behaviours and lifestyles.

- Building a sustainable city from recyclable materials-rock, shells, papers. This would be another of the activities related to creativity and that would contribute to working together with other people, since the final result would be a small-scale city built by all the participants with different materials, both recycled and found in nature itself.

3. Reuse and recycling workshops. The objective of this activity is above all to raise awareness among participants in relation to reuse and recycling of various materials, such as furniture, clothing or other types of everyday objects that can be used for new way. Give new life to old items of clothing and try to use it in a new way helps reduce waste and find new paths to sustainability.

4. Activities and workshops on how to sort their waste and recycle materials such a paper, plastic. Activities and workshops in relation to the classification of materials and their recycling processes constitute one of the essential activities to develop green competencies in the Green Combs.

5. Workshops to raise awareness of environmental impact of daily behaviours. One of the activities that have been considered essential is awareness workshops. For this reason, this activity can be considered one of the essential activities to be carried out in the Green Combs. The objective of this activity is to help raise awareness of the impact that our behaviours have on the environment. To develop this activity, a series of daily behaviours would be selected, such as mobility in the city or consumption habits, with the aim of determining their impact.



6. Best practices workshops. Other activities that have been proposed as essential within the Green Combs have been the best practices workshops on different topics that can be changed periodically (monthly, quarterly) depending on the resources of the Hub.

- One of the proposed activities has been to collect the amount of plastic used weekly in rankings and find strategies to lower level, just as an example to illustrate some of the topics that could be covered in this type of activities.
- Another of the activities proposed as best practices would be knowledge of energy efficiency tricks that could be used in laboratories in schools and VET institutions.
- The valorisation of some waste resulting from the culinary production activity. This activity proposes good practices in the culinary sector with the enhancement and new uses of some of the waste that is produced when cooking.

7. Activities that are related to lifestyles and one's own personal image. This type of activities would be more developed with the behaviour of the participants and would contribute to creating a positive and fashionable image of leading healthy lifestyles and developing environmentally friendly behaviours. The following activities have been contemplated within this group.

- Choose the “ecological snack” for example one a week bring homemade products and glass crockery or cloth napkins (which will be washed in turn). This activity would be included as one of the themed activities that may change periodically depending on the Green Comb's own capabilities.
- Swipe clothes party. Periodically, and with the aim of being able to create synergies between the participants or between other institutions that are part of the ecosystem, an open themed party, "swipe clothes party", has been proposed. Although the theme can be changed



depending on the number of meetings of this type that the Green Comb holds. Recycling and sustainable practices would be the main theme of this type of parties and meetings to be held at the Green Combs.

8. Sorting and donation clothes. Another of the activities proposed within the Green Combs is to become a clothing collection site, where these clothes can be classified and reused, even in other activities proposed throughout this guide. This activity may be carried out depending on the space and resources available in the Hub.

9. Activities based on draws with only a center: raising awareness of sustainability. Different types of give-aways have been proposed with the aim of engaging with the ecosystem and increasing sensitivity to environmental issues. Some of the products to be raffled could be works of art or other creations that have been made within the framework of the creative activities developed previously.

5.2.2 Outdoor Activities

Green Comb activities do not have to be subscribed solely and exclusively to a closed space, but many activities can be carried out outside the Hub spaces. In this line, different types of activities will be developed outdoors. In this way, on the one hand, a greater impact is achieved, since we take the Green Combs activities to the street, in places close to citizens, and on the other hand, an approach that can be more playful for the participants is presented. Again, the implementation of these activities will depend on the conditions and available resources of the Green Combs. Among the outdoor activities, the following ones can be stressed:



1. Creation of small vegetable garden, where each plant is "assigned" or "adopted" by a student so that becomes aware of the necessary care and what and how to take care of it. The purpose of these activities is to work on responsibility and the need to take care of our environment.
2. Creation a vegetable garden together. This activity constitutes a variation of the previous activity, although the objective would be to work together so that transversal skills, such as teamwork, are also worked on.
3. Activities of recycling and art. A rubbish collection activity on beaches and rivers to show people how much rubbish ends up in nature, and then use some of them to create art. This activity has two objectives: on the one hand, cleaning common spaces of garbage and on the other, taking advantage of the waste collected from an artistic point of view with the aim of giving them new uses. The creation of works of art can also be done outdoors, as a joint activity that can be shared with other citizens, thus contributing to achieving a greater impact on the Green Combs ecosystem.
4. Composting programs. Many of the outdoor activities are related to plant care or garden creation. Carrying out composting activities linked to plant care is one of these activities that seek to raise awareness about another use of waste and teach participants how to use it. In this case, gardening participants have the opportunity to plant and care for their vegetables and flowers.

5.3 Conclusions



As has been mentioned throughout this chapter, the objective is not to implement all the activities presented here by the Green Combs, but rather for them to have a list of activities that they can choose or develop based on their own capabilities and resources.

A distinction has been made between internal activities, intended for the operation of the Green Combs themselves, and activities carried out with external participants.

The internal activities are related to the management of the Green Combs, highlighting the communication activities where some activities have been proposed.

In relation to the activities carried out with the participants, indoor activities and outdoor activities have been shown,

Indoor activities include activities aimed at breaking the ice, activities linked to creativity, activities linked to recycling, awareness, best practices, lifestyles, clothing donations, or giveaways.

Among the outdoor activities, gardening activities and cleaning common spaces stand out, bringing the activity closer to people outside the Green Combs spaces, creating a greater impact on the ecosystem.

6. Tools

This chapter introduces a set of tools to support Green Combs in their operations, activities and workflows. It is divided into two main sections, each dedicated to a distinct category of tools:

1. **Thinking Tools:** This section presents a collection of thinking instruments, frameworks and models aimed at broadening perspectives in framing problems and



solutions. These tools aim to enhance understanding of the interconnectedness within ecosystems, encouraging a holistic view rather than a narrow focus on individual components.

2. **Digital Tools:** This section explores a suite of digital resources to foster communication, collaboration and the sharing and integration of knowledge across the members and other relevant stakeholders of the Green Combs.

6.1 Thinking Tools

This section delves into a curated collection of thinking tools designed to enhance system and design thinking approaches within Green Combs. Each tool serves as a lens through which complex situations can be analysed, enabling the formulation of solutions that are both effective and sustainable. The following thinking tools will be analysed in the upcoming pages:

- Concept map
- Connection circles
- Iceberg Model
- Decision matrix
- Ishikawa Diagram
- Evaporating Cloud
- Inversion
- Hypothesis Trees
- Ecosystem Map
- System scenario
- Impact Journey



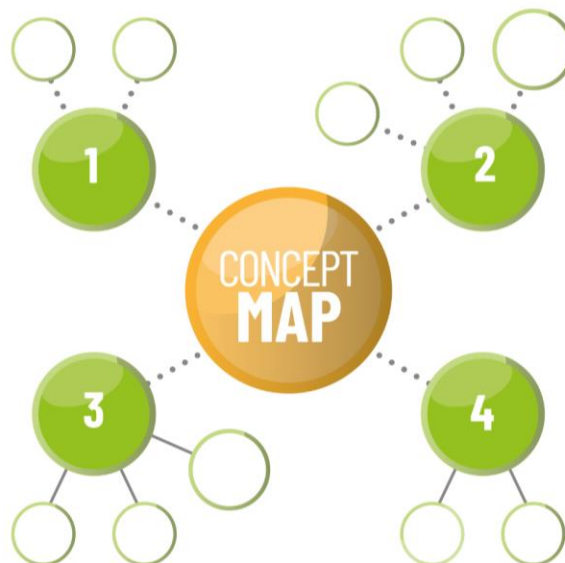
- Back casting
- Second order thinking
- First principles
- Levels of abstraction

Templates for each tool will be presented in the following paragraphs. The templates were designed by Lascò and included in Green Hive's *Canvas Collection* for Green Combs.

6.1.1 Concept map

TOOLS 01 Concept Map

Concept mapping is a useful technique for illustrating the connections between the elements of a concept or system and aiding in their visualisation and understanding.



WHY **Concept mapping** is a useful technique for illustrating the connections between the elements of a concept or system and aiding in their visualisation and understanding.



HOW To ensure that a concept map is accurate, it is necessary to immerse oneself in a subject of knowledge that is well-known before beginning to create one. Being an absolute expert is not necessary, but it is helpful to have a good foundation of knowledge.

1. Choosing a core question

Concept maps benefit from having a clear context, and defining the map's purpose can be achieved by developing a primary question. Asking yourself questions like "**How does X work?**" or "**In what context does Y fit?**" can give you a clear direction and help you determine which component of the topic to focus on by allowing you to investigate it from several angles.

2. Determine the essential elements

Determine the essential elements—people, places, processes, actions, and methods—within your purview and in relation to your central query. For simpler conceptions, a list of 15–25 components is sufficient, but it can be expanded for more intricate ideas.

3. Arrange the elements

Sort the elements from the most general to the most specific before starting to generate the map. This stage makes the map's hierarchical structure easier to understand.



4. Create the map

Using post-it notes, write the discovered components on a virtual chalkboard. It's essential to have the option to move them in order to define relationships. Draw lines between the components and indicate the links in detail with annotations ('contributes to', 'consists of', etc.).

5. Finishing the Map

Next, every combination of elements ought to create a significant statement that characterises their connection. Until the map is finished, keep adding and changing components. This procedure might identify knowledge gaps that must be filled in order to move on.

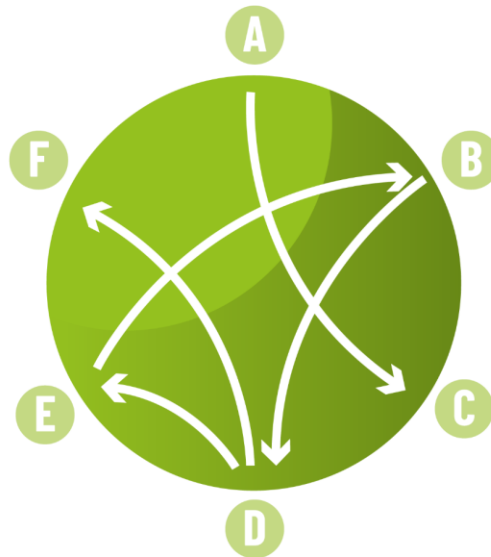
6.1.2 Connection circles



TOOLS 02

Connection Circles

Recognize connections between things and feedback loops in systems. A tool for visualizing relationships in a system or story is a connection circle. They aid in your comprehension of complexity by illustrating the system's sources and effects.



WHY Recognize connections between things and feedback loops in systems. A tool for visualising relationships in a system or story is a connection circle. They aid in your comprehension of complexity by illustrating the system's sources and effects.

HOW

1. Draw a circle on a sheet of paper to begin.
2. List the essential components of the system you are studying. How do you identify the essential component? It satisfies these requirements:
 - It is crucial for systemic improvements
 - Systemic increases or reductions



- Describable by a noun
 - Don't incorporate more than ten of these items while writing them around the circle
3. **Seek out the causes and effects.** Which elements are directly responsible for the increase or reduction of other elements?
 4. **Make an arrow connecting these components.** For the second factor in each relationship, indicate a decrease (draw a "-") or an increase (draw a "+").
 5. **Determine every cause-and-effect connection.** These could be based on information, or they could be conjectured.
 6. **Seek for components whose connections result in closed loops.** These are cycles of feedback. The Balancing feedback loop and the Reinforcing feedback loop are the two main types of feedback loops. Let us look at what they mean and how they can be used with Connection Circles, a way to see how things in a system relate to each other and how they work together.

Balancing feedback loop: These loops try to keep or recover a state of equilibrium by cancelling out or lessening the effects of a change in the system. They work by stopping people from going against a norm or goal that is wanted. Self-regulating processes can't work without them.



Take the case of a home's heating system that is controlled by a thermostat. The heater is turned on to raise the temperature if it drops below a certain level. The warmth stops when the goal temperature is reached, keeping the temperature in a comfortable range.

Reinforcing feedback loops make changes in the system even bigger, which can cause exponential growth or collapse. Depending on the way of the feedback, they can speed up progress towards a good or bad goal.

When a business puts its profits back into more production capacity, it can create a positive feedback loop: more capacity leads to more profits, which can then be used to buy more capacity.

7. **Look for patterns.** Once you have found the connections between the elements you have discovered, look for patterns where the elements affect each other in a circle. If the interactions between the parts of a cycle keep the system steady or help it reach a goal, then the cycle is balanced. A cycle is reinforcing if the interactions make a change stronger, which can lead to growth or decline.

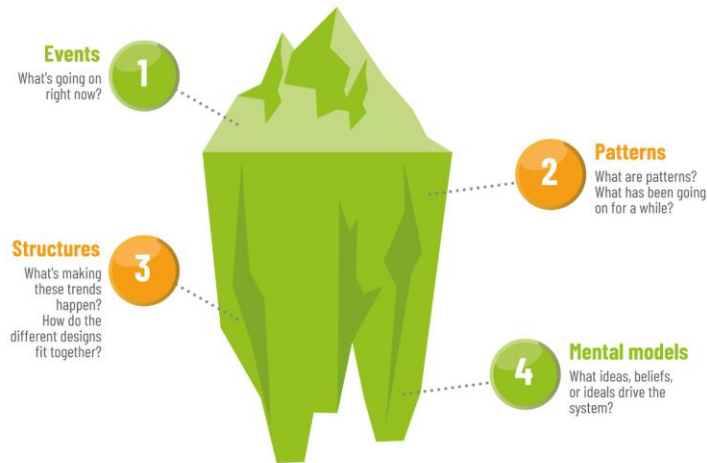


6.1.3 Iceberg Model

TOOLS 03 Iceberg Model

Examine hidden levels of abstraction to identify the underlying reasons of occurrences. It's not always enough to just deal with problems at the event level. Most of the time, the real reasons are hard to see.

The iceberg model is a way to change your point of view and look past the instant events that everyone sees. For example, it helps you figure out why those things happen. That's possible if you look at the system at more abstract levels that aren't clear at first glance.



WHY Examine hidden levels of abstraction to identify the underlying reasons for occurrences. It's not always enough to just deal with problems at the event level. **Most of the time, the real reasons are hard to see.** The iceberg model is a way to change your point of view and look past the instant events that everyone sees. For example, it helps you figure out why those things happen. That's possible if you look at the system at more abstract levels that aren't clear at first glance.

HOW The iceberg model has four levels:



1. Events;
2. Patterns;
3. Structures;
4. Mental models.

Patterns, or long-term trends, can be seen below individual events. They show us how to figure out the structures of the systems that cause those trends. Structures are how things in a system are connected and how feedback works. On the other hand, these structures are built on how people think and feel. Patterns and events tell you what's going on. Structures and mental models help you understand what's going on.

Look into all four levels.

Feel free to use these questions to help you understand each level of a problem or issue.

- **Events:** What's going on right now?
- **Patterns:** What are patterns? What has been going on for a while?
- **Structures:** What's making these trends happen? How do the different designs fit together?
- **Mental models:** What ideas, beliefs, or ideals drive the system?

It's important to keep in mind that finding answers to these questions will probably take some time and work. More so when it comes to mental models that are hard to write down and even harder to see.



6.1.4 Decision matrix

TOOLS 04 Decision Matrix



Sometimes it's hard to decide what to do. Even more so when there are more things that go into making them. The decision matrix is a tool that can help you make a choice by helping you think about all the important things. It makes the process more clear.

It works best when you have a lot of choices and need to pick one based on a lot of different factors.

	1	2	3	4
About
Function
Number				

WHY Sometimes it's hard to decide what to do. Even more so when there are more things that go into making them. The decision matrix is a tool that can help you make a choice by helping you think about all the important things. It makes the process clearer. It works best when you have a lot of choices and need to pick one based on a lot of different factors.

HOW A decision matrix is a simple table that shows your choices and the things that affect your choices. The goal is to give each choice a score based on its factor



scores. You can decide what to do based on the score.

Here are the key steps to make a choice matrix:

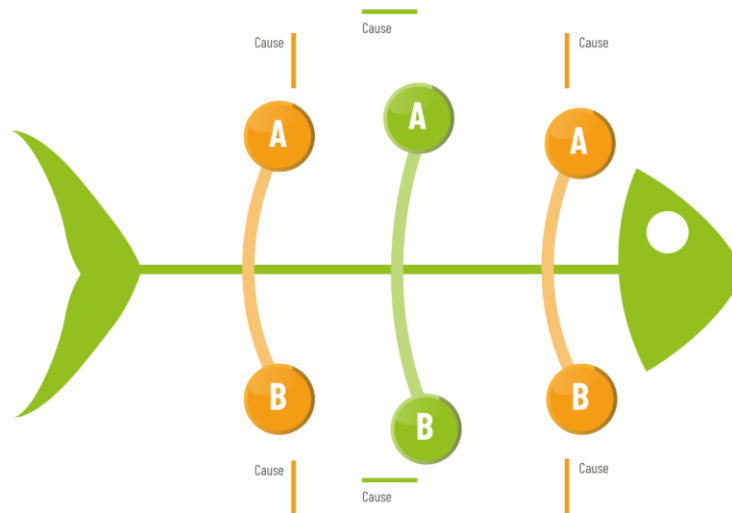
1. Make a note of the choice you need to make.
2. List the things you want to think about.
3. Give each choice a score on each factor.
4. Give the factors more weight.
5. To find the scores for the choices, multiply each score by the factor weight and then add them all up.
6. Pick the winner, which is the choice with the most points.



6.1.5 Ishikawa Diagram

TOOLS 05 Ishikawa Diagram

The Ishikawa diagram is a great way to find the root reasons for problems and solve them. It was made by a Japanese professor named Kaoru Ishikawa and is also known as a cause-and-effect diagram or a fishbone diagram. It works especially well for solving hard tasks.



WHY The Ishikawa diagram is a great way to find the root reasons for problems and solve them. It was made by a Japanese professor named Kaoru Ishikawa and is also known as a cause-and-effect diagram or a fishbone diagram. It works especially well for solving hard tasks.

HOW There are a few easy steps to follow to finish this design. This works just as well when you do it by yourself as when you do it with a group.

1. **Explain the issue** - First, describe the problem. Then, draw a line to the left or right of it, depending on what you want. In the next step, the



line will be used to add factors.

2. **List the causes or groups that contributed** - Make a list of all the things that could be causing the problem you're trying to solve. Line them up with the main line. You can make up your own factors, or you can use the following general groups: *People*, *Tools*, *Methods*, *Measurement*, *Materials*, and *Environment*. Putting things into groups is a great way to simplify problems and see them from different points of view.
3. **Look for possible reasons that are linked to each factor** - Find out, "Why is this happening?". Each thought should be written as a line next to the thing it pertains to. The "Five Whys" method and other first-principles thought can help here. Think about the fact that the issue may not have just one cause, but several. That's why it's important to write down everything that could help explain the problem, even if it's only some of it.

You should have a full model at this point, but not yet a clear answer.

4. **Take a look at the picture** - The most important step is to think of all the possible reasons and figure out what they mean. Now that you have the plan, your most important thoughts and next steps can be organised.



You can do a lot of different things at this point. You might want to get more information or proof for each possible root cause, or you could pick the most likely one right away and work on fixing it right away. This will depend on the problems you're having and the possible reasons you've found.

6.1.6 Evaporating Cloud

WHY It's important to be careful how you handle disagreements. The "Evaporating Cloud" or "Conflict Resolution Diagram" is a tool that can help you settle disagreements quietly while meeting the needs of both sides. It's a way of thinking that **Eliyahu Goldratt** came up with as part of his Theory of Constraints.

HOW If you are in a disagreement that you can't seem to solve by taking either side's offer, this tool will be most useful. This can be a disagreement with someone else or with yourself. It can be for work or for fun. **You can think about the image or draw it on a whiteboard or piece of paper.**

There are only three parts to the design, which is very simple:

- The conflict comes from the demands and plans of the two sides being unable to work together.
- Deep-seated needs or wants of both sides.



- A common goal or purpose that drives the wants.

You work the picture backwards, from right to left in this case.

- Find out what each side is arguing for, or what their requests or suggestions are.
- Find out what the other side wants to do. What do I need to do?
- Explain why each side is taking the position they are.
- Ask yourself what needs the plan from each side meets.

Figure out what the common goal is: *What will happen if the wants of both sides are met?*

This part is very important. Most of the time, both groups want to reach a higher goal but have different ideas about how to get there. Know that you're all working together to reach that goal.

To find an answer that works for everyone, you need to figure out what the common goal is.

Talk about the assumptions that went into the original proposals. This generally sheds light on the fact that both sides wanted the same thing, which led to the conflict.

From this point on, you can make a new answer. The goal this time is to meet the wants of both sides and work towards a common goal.



That's why the disagreement can be solved:

- by trying to find things that bring both sides together.
- the right way: by working together to find an answer that works for everyone and helps everyone reach the goal.

6.1.7 Inversion

TOOLS 07 Inversion

When you need to see a problem from a different point of view, inversion can help. It can help you see things from a different angle and picture the worst that could happen.



WHY When you need to see a problem from a different point of view, inversion can help. It can help you see things from a different angle and picture the worst that could happen.

HOW The question "*Am I only thinking of ideal solutions or scenarios?*" can help you



figure out if inversion can help you. Then you can think about the problem or an answer backwards. Here are the steps you need to take:

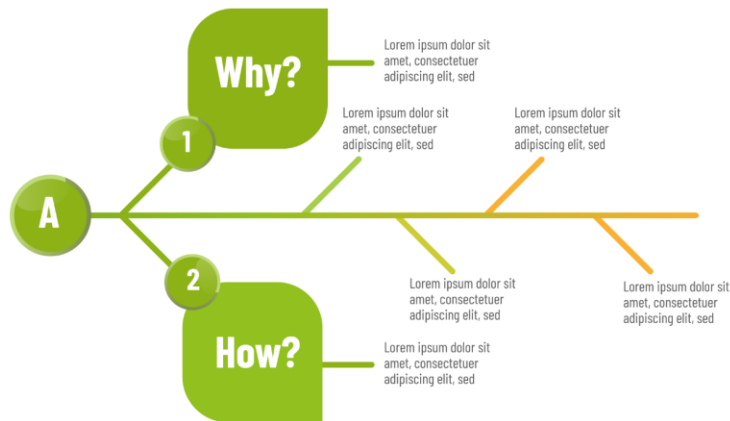
- What would be the worst thing to do or choice to make in this situation?
- Why would it be bad? Make a note of those reasons.
- Now, look at the reasons why a bad choice would be a bad idea and try to come up with a good choice or answer.

6.1.8 Hypothesis Trees

TOOLS 08 Hypothesis Trees



Problems are mapped out on a Hypothesis trees. They make the problem you need to solve easy to understand and plan how to solve it. They help you divide a big issue into smaller, easier-to-handle ones and decide which parts of the issue are most important. This means they can help with the "divide and conquer" plan.



WHY Problems are mapped out on Hypothesis trees. They make the problem you



need to solve easy to understand and plan how to solve it. They help you divide a big issue into smaller, easier-to-handle ones and decide which parts of the issue are most important. This means they can help with the "divide and conquer" plan.

HOW Because they show a picture of the problem, Hypothesis trees are also great for talking about a problem with other people.

Hypothesis trees come in two main types:

- Problem trees are made by asking "Why?"
- Solution trees are made by asking, "How?"

Problem trees

A good Hypothesis tree should show the whole situation. It needs to be strict. These are some general rules for making a Hypothesis tree.

1. Start dividing the hypotheses into different groups or parts.
2. Use the MECE principle: things that can't happen together can't happen at the same time.
3. It means that different parts of the tree don't interact with each other. They cover the whole problem, which means they are collectively thorough.
4. Do not get into specifics (hypotheses); instead, focus on getting the big ideas that make up the problem.
5. Follow the 80/20 rule: pay attention to the few most important parts of



the problem.

6. This should be based on facts instead of your own ideas.

Solution trees

Once you know which parts of the problem you want to work on, you can make a solution tree.

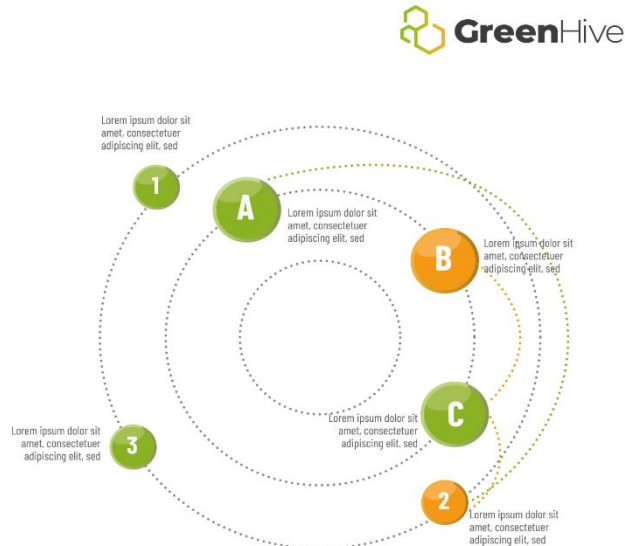
1. Ask, "How might we improve/fix this?" on the part of the problem you want to focus on.
2. Make a list of possible types of solutions.
3. Come up with ideas for each group.
4. Working with limits will actually help you come up with more ideas, which is an advantage of this organised way of thinking.



6.1.9 Ecosystem Map

TOOLS 09 Ecosystem Map

Describe all the things, flows, and connections that make up the environment that you want to analyse. It is a made-up picture of all the important jobs that affect the user, the organisation, and the service environment. To make the ecosystem map, all the groups are first shown, and then they are linked together based on the kind of value they trade.



WHY Describe all the things, flows, and connections that make up the environment that you want to analyse. It is a made-up picture of all the important jobs that affect the user, the organisation, and the service environment. To make the ecosystem map, all the groups are first shown, and then they are linked together based on the kind of value they trade.

HOW

- 1. List all the people and organisations that are involved in providing and delivering the service or problem** - Find out a lot about the people who work behind the scenes and the people who aren't directly involved with the service but still have an effect on it.
- 2. The user should be in the middle of the worksheet, and the other people should be spread out around them.** In the middle, try to put the ones that are most important to the person. Once everyone is on the



map, start looking for links between the user and other players, and then between players. In order to **show different types of relationships**, such as the exchange of information or money, use different types of lines (look, colour, stroke).

3. Take a step back and look at the picture. **Are there any things that are missing?** If you're not by yourself, talk with the rest of the team. You can add handwritten notes that can be erased or use Post-its to keep track of new ideas and conversations.
4. **Use the new information to draw attention to trouble spots or holes in the map.** This action helps you figure out what needs to be fixed or looked into more, and it also lets you share your ideas with other people on the team or with stakeholders. Keep picturing any new information you see on the map, like adding more colours or splitting the people into smaller groups.

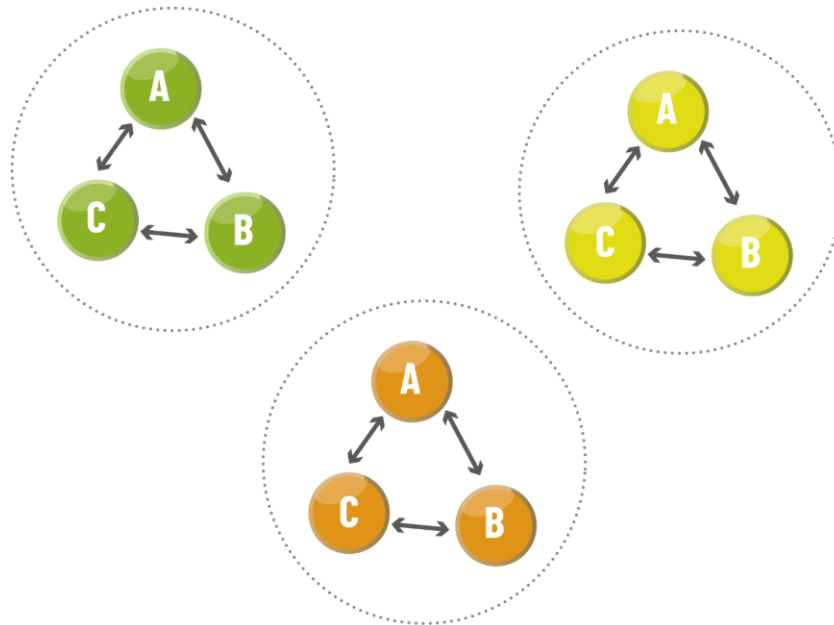


6.1.10 System scenario

TOOLS 10 System Scenario

Look at different scenarios and how they affect the system and try to picture how it changes or grows. A standard system or ecosystem map shows how a system works as a whole in a single artificial picture (synchronous). System scenarios, on the other hand, add a dynamic level of analysis (diachronic) by looking at things through the lens of time and showing the different things that could happen.

Using system examples is a more in-depth way to look at the system and figure out how it works and how the different parts of it interact in different situations. To make a system scenario, you have to watch how the system acts in different situations and think about the people who are responsible for those behaviours. This lets you think about what the system could be designed or changed to work better in those situations.



WHY Look at different scenarios and how they affect the system and try to picture how it changes or grows. A standard system or ecosystem map shows how a system works as a whole in a single artificial picture (synchronous). System scenarios, on the other hand, add a dynamic level of analysis (diachronic) by looking at things through the lens of time and showing the different things that could happen. Using system examples is a more in-depth way to look at the system and figure out how it works and how the different parts of it interact in different situations. To make a system scenario, you have to watch how the system acts in different situations and think about the people who are



responsible for those behaviours. This lets you think about what the system could be designed or changed to work better in those situations.

HOW

1. Figure out the most likely events that could happen and how they might affect the system's growth.
2. Figure out who the main players are in that situation and give them more weight than the others.
3. Make the links between the people who are involved in the exchange flows that are happening in a series of events that describe the chosen scenario.
4. Take out the parts that deal with problems and chances and remember that the same people could be involved in more than one situation and act in each one differently.



6.1.11 Impact Journey

TOOLS 11 Impact Journey

Look at the effects of a certain service experience and come up with ways to make it last longer. The effect Journey aims to bring together a step-by-step account of the user experience with an analysis of the service effect at each stage of the journey.

The effect could be studied by looking at various areas, like Environment, Society, Economy, etc., that could be affected in good or bad ways as the experience grows, depending on the types of connections, actions, and activities that happen. This study could help people come up with new ideas and make better choices during the planning or implementation phase, which could make the good things that happen because of the service delivery even better.



WHY Look at the effects of a certain service experience and come up with ways to make it last longer. The effect Journey aims to bring together a step-by-step account of the user experience with an analysis of the service effect at each stage of the journey. The effect could be studied by looking at various areas, like Environment, Society, Economy, etc., that could be affected in good or bad ways as the experience grows, depending on the types of connections, actions, and activities that happen. This study could help people come up with new ideas and make better choices during the planning or implementation phase, which could make the good things that happen because of the service delivery even better.

HOW 1. First, make a journey map of the service experience and quickly describe each step.



2. List the most important areas that might be interesting to look at in terms of how they affect the service (for example, Environment, Society, Economy, etc.). To make a kind of matrix, write them down below the journey (on the vertical line).
3. As you go through the matrix, ask yourself what good or bad outcomes might happen that could affect these important parts of human life and the world.
4. Fill out the Impact Journey to share concerns about the service's long-term effects and ability to last. If people are more aware of the effects of their choices, they might try to avoid bad outcomes.

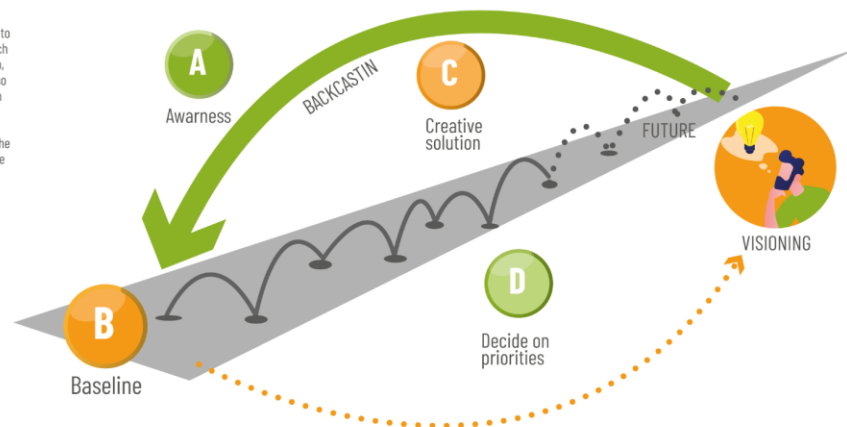


6.1.12 Back casting

TOOLS 12 Backcasting



The Backcasting can be used in workshops or group events to help people think about how the choices they make affect the future. It starts with a review of one or more possible futures and works backwards to figure out the steps that need to be taken to connect those futures to the present, which can be a person, a service, or a system. So, designers and other participants could also think about the different ways that certain groups, goods, services, or projects might grow, and pull out ideas that could affect their work right now, helping them make the future they want or stay away from the one they don't want.



WHY Back casting can be used in workshops or group events to help people think about how the choices they make affect the future. It starts with a review of one or more possible futures and works backwards to figure out the steps that need to be taken to connect those futures to the present, which can be a person, a service, or a system. So, designers and other participants could also think about the different ways that certain groups, goods, services, or projects might grow, and pull-out ideas that could affect their work right now, helping them make the future they want or stay away from the one they don't want.

HOW 1. Choose a subject or a service industry, get ideas from recent news



stories (signals) about it, and choose how many and what kinds of possible, plausible, probable, or preferred futures you want to create. Once you have thought of at least one possible future, pick a made-up year and write a short piece for each one (title and short description).

There should be a few links or news stories from the present to help people understand where the ideas for the future come from.

2. Choose the best tool from the personas, service description, and system scenario to write the story for the "today" part. Don't forget to mark all the important details that could change what happens in the future.
3. List at least one step that needs to be taken to connect each possible future to the present. Make a list of the things that stop and allow you to do each step so that you can quickly find the most important parts.
4. Figure out the quick wins that will help you get closer to your goal.



6.1.13 Second-order thinking

TOOLS 13 Second order thinking

The Backcasting can be used in workshops or group events to help people think about how the choices they make affect the future. It starts with a review of one or more possible futures and works backwards to figure out the steps that need to be taken to connect those futures to the present, which can be a person, a service, or a system.



WHY You might think you're winning when you make a choice, but in the long run, you lose. In the end, something that looks like an investment at first becomes a debt. What seemed like a good choice before is now a bad one. Second-order thinking can help you think about how your choices will affect things in the long run. Most people think only at the first level. If you want to make choices that will last, you need to use second order thinking. We need to make sure that the choices we make today won't bother us in the long run.

HOW There are two ways to use second order thinking: in your mind only, or on paper.



Think about a choice you need to make. First, look at the effects that will happen right away as a result of this choice. This is the first order.

Ask yourself, "*And then what?*" for each result. That's how you look at the second set of effects this choice will have. You can do this again and again for as many sales as you can handle.

You could also think about the choice in terms of different times. Ask yourself, "What will happen if I make this choice?"

- Ten minutes?
- Ten months?
- Ten years?

You can then think about what your choice will mean in the short, medium, and long run.

Second-order thinking can be used for both big choices (like buying a car) and small ones that don't seem important (like eating a burger). It's a very useful tool that can be used in business, in daily life, or when making policy.



6.1.14 First principles

TOOLS 14 First principles

It's a great way to solve problems. You can come up with creative answers to problems if you can figure out what the problems are really about.

A first principle is a basic truth or principle that can't be broken down any further. When you use first-principles thought, you dig deeper into a problem until you get to its very core.



The Five Why

WHY?
We completed the activity late
WHY?
The activity took longer than estimated
WHY?
We couldn't procure enough material
WHY?
We didn't purchase on time
WHY?
We didn't analyze the work schedule

Questioning like Socrates



What do you mean by...?"
The question "What could we assume instead?"
Asking for proof or reasons: "Why do you think this is true?"
Things that could happen "What effect would that have?"
Views that are different "What would be an alternative?"
"What was the point of this question?" is a question about the original question.

WHY It's a great way to solve problems. You can come up with creative answers to problems if you can figure out what the problems are really about. A first principle is a basic truth or principle that can't be broken down any further. When you use first principles thought, you dig deeper into a problem until you get to its very core.

HOW Start from your issue and do these two things:

- Simple it down to the most important facts (first principles).
- Use those ideas to build a new answer.



To really get to the bottom of a problem and find those first principles, you need to think carefully about what you're saying. Below are some techniques that can help you.

The Five Why

In this common method of user research, the researcher digs deeper by asking "why" questions over and over again. It helps you find the reasons why things are going wrong. But you don't have to stop at five. Most of the time, it's enough to find a first premise.

Questioning like Socrates

A structured way of asking questions that helps you think critically. To get to the bottom of something, you can ask six different kinds of questions:

- "What do you mean by...?"
- The question "What could we assume instead?"
- Asking for proof or reasons: "Why do you think this is true?"
- Things that could happen—"What effect would that have?"
- Views that are different—"What would be an alternative?"
- "What was the point of this question?" is a question about the original question.



6.1.15 Levels of abstraction

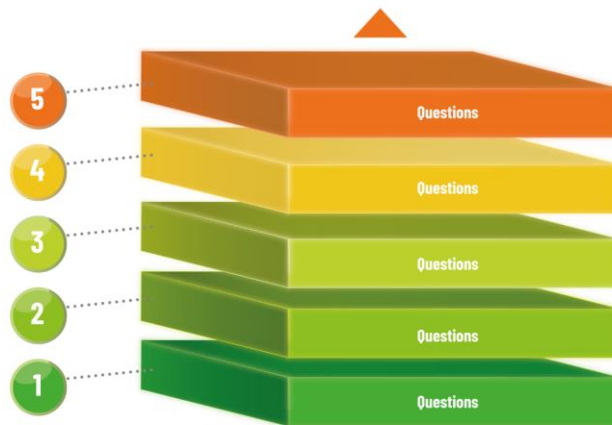
TOOLS 15 Levels of abstraction



One way to better frame problems is to use abstraction laddering. It helps you get a better idea of the problem you need to fix. It helps you go further than just stating the problem.

With this tool, you can learn how to ask the right questions to move up and down the ladder.

By moving up, you can "see the forest for the trees" and get a bigger picture. Move down to come up with real answers.



WHY One way to better frame problems is to use abstraction laddering. It helps you get a better idea of the problem you need to fix. It helps you go further than just stating the problem.

With this tool, you can learn how to ask the right questions to move up and down the ladder. By moving up, you can "see the forest for the trees" and get a bigger picture. Move down to come up with real answers.



HOW In the middle of the ladder, write down your first problem statement.

- To get more general problem statements, ask "why" questions. This might help you look at the problem in a different way.
- To move towards a clearer statement or answer, ask "how" questions. Making new problem statements from the first one you came up with is helped by this. It helps you come up with new ways to solve problems.

One great thing about this tool is that you can use it at any point in the project. With just a few minutes of work, you can use it quickly, whether you're working alone or with your team in a workshop.



6.2 Digital Tools

6.2.1 Communication and Collaboration Tools

This section provides an overview of some useful communication and collaboration tools that can be used in supporting each Green Comb working remotely when tasked with outlining the procedures in their domain. These tools offer additional features such as screen sharing, file sharing, collaborative document editing, and virtual whiteboards. These features contribute to a more interactive and collaborative meeting experience.

Google Drive

It allows the creation of a 60-minute meeting that can accommodate up to 100 participants.

To use Google Meet, you typically need a Google account. Meetings can be initiated through the Google Meet website, the dedicated mobile app, or directly from Google Calendar, as it perfectly integrates with Google Workspace apps such as Gmail or Drive. While working, participants can share their entire screen or specific application windows or collaborate on Google Docs, Sheets, and Slides in real-time.

Zoom

Zoom is a communications platform that allows users to connect with video, audio, phone, and chat. Most new users want to start by creating an account and downloading the Zoom Client for Meetings. It allows the creation of a 40-minute meeting that can accommodate up to 100 participants. Zoom Whiteboard offers teams a collaboration platform for brainstorming, planning, and learning. Teams can easily share their ideas with sticky notes, drawing tools, comments and polls

Cisco Webex

Cisco Webex offers a range of tools and services to facilitate online meeting and collaboration among teams. It allows the



creation of a 40-minute meeting that can accommodate up to 100 participants. It supports virtual events with features like registration Q&A; participants can share their entire screen or specific application windows to facilitate presentations and collaboration. Users can share files and collaborate on documents in real-time. Webex integrates with various productivity tools and applications, including Microsoft Teams and Google Workspace.

Microsoft Teams

Microsoft Teams integrate with Microsoft 365 as a comprehensive solution for teams looking to collaborate in a digital environment. Users can share files directly within Teams and collaborate in real-time using Office 365 apps like Word, Excel, and PowerPoint. Teams are organised into channels, which are dedicated spaces for specific projects, departments, or topics.

Meetings can include screen sharing, file sharing, and live captions. It allows the creation of a 60-minute meeting that can accommodate up to 100 participants.

Jitsi Meet

Jitsi Meet is an open-source video conferencing platform offering a range of virtual collaboration features without the need for user accounts or proprietary software. Participants can simply join meetings using the provided meeting link. Participants can share their entire screens or specific application windows, such as the platform-provided whiteboard, facilitating collaboration and presentations.

Skype

Skype is a telecommunications application that provides video chat, voice call, and instant messaging services. Skype offers instant messaging functionality, enabling users to send text messages, emojis, files, and multimedia content to their contacts in real-time. The platform includes a screen-sharing



feature, enabling users to share their computer screens with others during a call. This is useful for presentations, technical support, and collaborative work.

European School Education Platform

ESEP aims to create a common European educational space, it focuses on cooperation and exchange between European countries in areas such as quality assurance, recognition of qualifications, and the promotion of language learning. Individual European countries may have their own education platforms or initiatives, and there might be regional collaborations or projects aimed at fostering educational development.

6.2.2 Project Management

This set of tools can provide numerous benefits for WGs involved in various domains. It helps organise tasks, timelines, and project-related information in a centralised location. Project management tools make it easier for team members to access and track project details. Adopting project management tools simplifies project workflows, enhances communication, and contributes to successful collaboration.

Trello

A visual project management tool that uses boards, lists, and cards to organise tasks. It's intuitive and widely used for managing projects of varying complexity.

ClickUp

An all-in-one productivity platform that includes project management, document collaboration, and goal tracking. It's known for its flexibility and customisation options.

Todoist

A popular task management tool that helps users organise and prioritise tasks. It's simple to use and offers features like due



dates, labels, and project organisation.

Wrike

A versatile project management tool, it offers features for task management, collaboration, and real-time project tracking. It supports Gantt charts, Kanban boards, and more.

Slack

Slack is a popular team collaboration and messaging platform that facilitates communication and collaboration within organisations. It provides a centralised and organised space for teams to communicate, share files, and integrate with other productivity tools.

Any.do

This is a popular task management and productivity app designed to help users organise their to-do lists, set reminders, and manage their daily tasks effectively. Users can set reminders for tasks to receive notifications at specified times. This feature helps users stay on top of their commitments and deadlines.

6.2.3 Educational Tools

The principal function of Green Combs is to offer high-quality sustainability education programmes. To achieve this objective, it is fundamental to create and share innovative teaching materials, educational resources, and interactive tools to engage students in learning about sustainability effectively. In this section are collected platforms helpful in creating courses and learning opportunities that enable students to acquire practical skills related to sustainability.

Canva

Canva provides a user-friendly platform, offering a variety of templates and design elements for various purposes. It is a web-



based platform accessible from any device with an internet connection and allows real-time collaboration. Multiple users can simultaneously contribute to a design enhancing collaborative workflows.

Thinglink

ThingLink is a powerful tool for creating engaging and interactive visual content. It provides a user-friendly platform for building immersive experiences. It supports the creation of 360° VR content, such as interactive tours.

Piktochart

Piktochart is an online graphic design tool that allows users to create visually appealing infographics, presentations, posters, reports, and other visual content. It provides a variety of templates for different types of visual content, including infographics and presentations. It supports collaborative work, allowing multiple users to contribute to a project simultaneously.

Coggle

Coggle is a web-based mind mapping and collaborative brainstorming tool that allows users to visually organise thoughts, ideas, and information. Mind mapping is a graphical technique that helps individuals represent concepts, ideas, and tasks in a non-linear and visual format.

Conceptboard

Conceptboard is an online collaboration tool designed for visual collaboration. It is centred around visual collaboration, allowing teams to work together on digital whiteboards. Users can create visual boards, add content, and collaborate in real time. Multiple users can edit boards simultaneously, enabling real-time collaboration. This is especially useful for brainstorming sessions, project planning, and other collaborative activities.

Genially

Genially is an online platform that allows users to create interactive and visually appealing content such as presentations, infographics, posters, and more. It is designed to make content



creation engaging and dynamic, offering a range of interactive features and multimedia elements. It is often used in educational settings for creating engaging and interactive learning materials. Teachers and educators can use it to develop interactive lessons, quizzes, and educational presentations.

Moodle

Moodle is an open-source software, meaning that its source code is freely available for users to view, modify, and distribute. It is designed to help educators, trainers, and organisations create online learning environments and deliver courses to learners. Educators can create and administer quizzes, assignments, and assessments within Moodle. The platform supports a variety of question types, grading options, and feedback mechanisms.

Padlet

Padlet is an online collaboration tool that allows users to create digital boards, also known as "walls," where they can collaborate, share ideas, and collect information in real time. It provides a flexible and visual platform for users to organise content, collaborate with others, and engage in interactive activities.

6.2.4 Survey and Feedback Tools

Survey and feedback tools serve as valuable resources for collecting insights, opinions, and feedback from the target audience. These tools provide quantitative and qualitative data. Analysing this data enables data-driven decision-making, allowing Green Combs to prioritise education initiatives based on real insights. Share research results to contribute to the growth of knowledge in the field of sustainability.

**SurveyMonkey**

SurveyMonkey is a popular online survey and feedback platform that enables users to create, distribute, and analyse surveys and questionnaires. It supports many question types, including multiple-choice questions, open-ended questions, rating scales and more. The platform provides strong analytical tools for analysing survey data. Users can generate charts, graphs and reports to gain insights into respondent feedback.

Google Forms

Google Forms is a versatile and widely used tool for creating surveys and forms due to its ease of use, seamless integration with other Google Workspace applications, and the ability to collect and analyse data efficiently. Users can choose from various question types, including short answer and multiple-choice. Multiple users can collaborate on the same form, making it a useful tool for group projects or team collaboration.

Typeform

Typeform is an online survey and form builder. It is designed to mimic a conversation, presenting one question at a time. Users can choose from various question types, including multiple-choice and long text. The platform allows users to implement logic and branching based on respondents' answers. This enables the creation of personalised and dynamic forms.

Microsoft Forms

Microsoft Forms is a convenient tool for users already using the Microsoft 365 suite, as it integrates with other Microsoft applications and services. Users can create forms from scratch or choose from a pool of pre-designed templates. The platform supports various question types, such as multiple-choice, text, and rating. Multiple users can collaborate on the same form simultaneously, making it suitable for group projects or team collaboration.

Slido

Slido is an interactive audience engagement platform that is



commonly used during meetings, conferences, and events to facilitate real-time interaction between presenters and participants. Slido allows participants to ask questions in real-time during presentations or events. Attendees can submit their questions anonymously or with their names attached. Users can create surveys to collect feedback and insights from participants. Surveys can include multiple-choice questions, rating scales, and open-ended responses. It integrates with popular presentation tools like Microsoft PowerPoint and Google Slides, allowing presenters to incorporate interactive elements directly into their presentations.

Poll Everywhere Poll Everywhere is an interactive audience response system that allows presenters, educators, and speakers to engage with their audience through live polls, quizzes, and discussions. It is designed to enhance audience participation and gather real-time feedback during presentations, meetings, or events. The platform can be integrated with various learning management systems, making it convenient for educators to incorporate interactive elements into their online courses.

Mentimeter Mentimeter is a user-friendly interface, and versatile features make it a valuable tool for presenters seeking to create dynamic and participatory presentations. Presenters can conduct live polls to gather opinions, preferences, or feedback from the audience. Users can generate word clouds based on audience responses, visually representing the most frequently mentioned words or ideas. This is often used for brainstorming sessions.

Surveyplanet SurveyPlanet is an online survey platform that enables users to create and conduct surveys for various purposes, such as market research, customer feedback and academic research. This platform supports advanced features like question branching and



logic, allowing users to create dynamic surveys where respondents see different questions based on their previous answers.

6.2.5 Document Management and Sharing tools.

Green Combs are established on the principle of collaboration, therefore sharing resources and knowledge is fundamental. These tools support real-time collaboration, allowing multiple users to edit and contribute to documents simultaneously. This fosters teamwork, accelerates project timelines, and ensures that everyone is working on the most up-to-date content.

Google Drive Google Drive is a cloud-based file storage and collaboration platform. It allows users to securely store, synchronise, and share files and documents across multiple devices.

Users can easily share files and folders with others, and it automatically tracks document changes, providing a version history. This allows users to revert to previous versions if needed.

Microsoft teams OneDrive is a cloud-based file storage service. OneDrive is tightly integrated with Microsoft 365 applications, including Microsoft Word, Excel, PowerPoint, and Outlook. This integration allows real-time document collaboration and easy access to files from within these applications. Users can share files and folders with others, and OneDrive offers granular control over access permissions.

Dropbox Dropbox is a cloud-based file-hosting service that allows users to store and share files. Dropbox uses file synchronisation to ensure that files and folders are kept up to date across all devices linked to a user's account. Changes made on one device are automatically reflected on others. Users can share files and folders with others, both Dropbox users and non-users, by generating sharing links.



Dropbox supports collaboration on shared files, enabling multiple users to edit and comment on documents in real-time

Coda

Coda is a collaborative document editor that combines the functionality of documents, spreadsheets, and applications into a single platform. It aims to provide a flexible and powerful workspace for teams to create, share, and collaborate on documents with interactive and dynamic elements. Coda documents are built using "Building Blocks," which are modular components that include tables, text, buttons, and more. These can be combined and customised to create sophisticated documents. The platform supports real-time collaborative editing, allowing multiple users to simultaneously work on the same document.

Mediafire

MediaFire is a cloud storage and file hosting service that allows users to store, share, and access files online. Users can easily share files and folders with others by generating shareable links. This makes it convenient for collaboration on projects, sharing large files, or distributing content.

WeTransfer

WeTransfer is an online file-sharing service that allows users to send and receive large files quickly and easily. It is commonly used for sharing multimedia content, documents, and other large files that may be too large to send via email. Links are sent via email and they typically have an expiration date, meaning that recipients have a limited time to download the files. This helps manage and control access to shared content.

6.2.6 Knowledge Management & Dissemination Tools

These knowledge management tools facilitate the exchange of knowledge, which is crucial for the establishment and maintenance of a resilient and cohesive community. Establishing a knowledge platform that aids the ecosystem activities promotes development, cooperation,



and unity. Cultivating an atmosphere where community members can collectively learn and work towards shared objectives acts as a central hub of the ecosystem, connecting all Green Combs and stakeholders.

Google Sites

Google Sites provides a user-friendly and intuitive interface for creating websites. Users can choose from various templates and customise the layout, colours, and fonts to match their preferences. Multiple users can collaborate on the same website in real time. Websites created with Google Sites are automatically indexed by Google Search, making it easier for users to find and discover the content

Lesson Learned Register

The primary purpose of a Lessons Learned Register is to gather insights, experiences, and best practices that can be applied to future projects to improve overall performance and outcomes. Each lesson is described in detail, including the context in which it occurred, the specific issue or opportunity, and its impact on the project.

Microsoft Share Point

Microsoft SharePoint is a web-based collaboration platform that integrates with Microsoft Office. It provides a comprehensive solution for organisations to create, manage, and share content, as well as facilitate collaboration and communication among team members. SharePoint is highly customizable and is widely used for intranets, document management, workflow management, and collaboration within businesses. It allows the creation of intranet sites that serve as internal portals for employees. These sites can include news, announcements, departmental information, and quick links to important resources.

Wordpress

WordPress is a widely used open-source content



management system (CMS) that enables users to create and manage websites and blogs. It is known for its flexibility, user-friendly interface, and extensive ecosystem of themes and plugins. WordPress serves as a CMS, allowing users to create, edit, and organise digital content. It is particularly popular for blogs and websites where content needs to be regularly updated.

Blogger

Blogger is a free, web-based blogging platform owned by Google. It provides users with a straightforward and easy-to-use interface for creating and managing blogs. Since Blogger is owned by Google, it integrates with other Google services, such as Google Drive, Google Photos, and Google Analytics.

Squarespace

Squarespace is a popular website builder and content management system (CMS) that enables users to create visually stunning and professionally designed websites without extensive coding or technical skills. Squarespace includes robust blogging features, allowing users to create and manage blog posts with ease. It supports features such as categories, tags, and scheduled publishing.

Social Media

Social media is a dynamic and influential tool for disseminating information providing a platform for global communication, engagement, and collaboration. Many social media platforms offer targeted advertising and content distribution options. This allows content creators to tailor their messages to specific demographics, ensuring that information reaches the most relevant audience. These platforms are easily accessible to a vast number of users, making them an efficient means of reaching diverse demographics. This accessibility is particularly valuable for disseminating information quickly to a broad audience.



7. Relationship with the Hive

This Chapter presents the relationship of the Combs with the "Hive". This relationship represents the interconnected network of local hubs, collaborative partnerships, and the broader ecosystem working towards common sustainability goals. The "Green Hive" platform embodies the collective efforts of the various Combs that will be created and besides sustainability is committed to the environmental and community well-being. The relationship between the Green Combs and the Hive is characterised by collaboration, shared goals, and a commitment to creating a sustainable future. By actively participating in this interconnected network, Green Combs contribute to and benefit from the collective wisdom, resources, and momentum generated within the broader Green Hive ecosystem.

The principles of the Green Hive Consortium are that of co-creation, participation, adaptability, and partnership working to achieve a greener education network. The main function of Green Combs will be to offer high-quality sustainability education programmes. These programmes cover a wide range of sustainability topics, including climate change, resource management, renewable energy, and responsible consumption. Members of the Green Combs will be able to undertake courses and workshops for teachers and trainers to enhance their skills in sustainability education, as well as providing teaching resources, guides, and best practices to help other educators integrate sustainability concepts into their programmes and courses.



For the success of the project there are certain activities that must happen through the weaving networks of the project consortium, the Green Combs and the Ecosystem. These activities will nurture a connection of educators involved in Vocational and Educational Training (VET), the community, local leaders, and project partners, bringing them together. By upholding these principles, Green Combs can create a more holistic and inclusive approach to sustainability education and community engagement, leading to lasting environmental impact and the cultivation of a more resilient and environmentally conscious network of local community hubs. To do this a number of activities must happen to encourage and foster meaningful practices by understanding the role that each of the participants must take to achieve the Green Hive objectives.

7.1 Communication and Collaboration with the Hive

7.1.1 Identifying and Mapping existing stakeholders.

Identify the stakeholders. This is to ensure that all stakeholders will be represented in the Hub.

Choose stakeholders that are appropriate or relevant to your Hub. What characteristics/knowledge/skills to they have that would be of benefit to the Hub?

Map existing networks/stakeholders. Identify what organisations/networks/stakeholders are already being used and can relate to.

7.1.2 Channels of Communication

What channels of communication already exist within your Hub? Using existing communication systems makes communication easier and more efficient as they are easy to access.



Regular communication channels: To promote sustainability values and green skills within the education community through the Green Comb hubs, including VET institutions, non-profits, educators, learners, the community and other external stakeholders.

Improved coordination: Regular communication ensures that all team members are aligned with the project's goals and objectives. It allows for better coordination and collaboration, reducing the likelihood of misunderstandings and misalignments.

Timely issue resolution: Through regular meetings and updates, issues and challenges can be identified and addressed promptly. This helps in preventing potential bottlenecks and ensures that the project stays on track.

Increased accountability: Regular communication fosters a sense of accountability among team members. It encourages individuals to take ownership of their tasks and responsibilities, leading to improved productivity and efficiency.

7.1.3 Communicating the Vision of the Hive

Key message: The key message of the hive is important to communicate. Define this key message in order to focus on the relevant information. What key messages/information need to be included.

Define the values of what you want to achieve. This helps with commitment. Decide how the Hive can demonstrate the value of the Hive to the Stakeholders and service users.

Positive brand image: Celebrating achievements publicly can contribute to a positive brand image. It highlights the projects capabilities and commitment to delivering successful outcomes, thereby enhancing its reputation within the Green Combs and the Ecosystem. Decide where will reach target audience and what platforms to use so that you can guarantee the most reach.



Celebrating project milestones and sharing successes: Celebrating project milestones and successes acknowledges the hard work and dedication of the team. It boosts morale, motivates team members, and encourages them to remain committed to achieving future project goals.

7.1.4 Methods of Communication

Target users: Identify the methods of communication that targets the service users best and that would be most effective when communicating achievements and events.

Best practice: how can the Hive communicate existing best practices?

Participatory communication activities: It is important to have communication activities that are participatory such as roundtables to make stakeholders feel involved.

Project Meetings: Regular team meetings, whether virtual or in-person, provide a platform for discussing project progress, addressing challenges, and fostering collaboration among team members.

Email Communication: Email is a fundamental communication tool for sharing detailed information, project updates, and official documentation with both internal team members and external stakeholders.

Collaboration Platforms: Platforms like Microsoft Teams, Google Suite, Google Workspace offer instant messaging, file sharing, and collaboration features, making it easier for team members to communicate and coordinate their efforts in real-time.

Video Conferencing: Platforms like Zoom, Google Meet, or Microsoft Teams enable virtual face-to-face interactions, making it easier to conduct meetings, discussions, and presentations, especially when team members are geographically dispersed.

Newsletters: Regular newsletters can be used to update stakeholders and the wider community about project developments, achievements, and upcoming initiatives.



Social Media Platforms: Leveraging social media platforms such as LinkedIn, Instagram, and Facebook to share project updates, milestones, and success stories with a broader audience, increases project visibility and engagement.

Feedback Mechanisms: Implement feedback mechanisms such as digital surveys, suggestion boxes, or feedback forms to gather input from stakeholders and team members, facilitating continuous improvement and addressing potential issues in a timely manner.

Enhanced stakeholder engagement: Sharing successes with stakeholders and the community helps build a positive relationship with them. It fosters trust, enhances transparency, and encourages continued support for the project and its objectives.

7.1.5 Nurturing Continuous Communication Channels

Mandatory information: Identify what activities are mandatory to stay updated.

Stakeholder updates: Identify what to communicate with all stakeholders, what activities need to be posted. Will there be different methods of communication for different target audiences. Implement a communication plan to regularly notify stakeholders about newly added resources, updates, and relevant information available on the resource hub. Use a combination of email newsletters, social media posts, and targeted announcements to ensure that all stakeholders remain informed and engaged with the latest developments and resources.

Relevance and Interest: Selecting relevant topics ensures that the content presented at the workshops and seminars is relevant to the target audience's needs and interests, as well as to current sustainability trends. This will increase attendee engagement and satisfaction.

Expertise and Credibility: Inviting experts who are well-versed and experienced in the chosen topics enhances the credibility of the event. Their knowledge and insights can provide



valuable information and perspectives, making learning events more informative and impactful for the Green Combs and the Ecosystem as a whole.

Learning and Development: Workshops and seminars must provide valuable learning opportunities for the Green Combs. By focusing on key topics and inviting experts, participants can gain practical knowledge and skills that can be applied to their professional and personal development.

Marketing and Promotion: Highlighting key topics covered and expert speakers in all promotional materials can attract more members into the Green Combs and generate interest in the activities around sustainable practices. This can lead to increased attendance and increased participation within the Hubs.

Community Building: Bringing together the participants in the Green Combs and having like-minded community members interested in specific topics sharing information can lead to future collaborations, partnerships, and continued engagement among participants while meeting local needs.

Understanding Participant Experience: Feedback provides insights into the participants' experiences throughout the project, including what they found valuable, what they enjoyed, and what they would have preferred differently. Understanding these experiences can help in creating more engaging and valuable practices in the future.

Management of the Green Combs: If the hub has large numbers of participants/stakeholders then it may need to be structured. If this is the case, then a decision is needed on how the communication of a hub will be managed and who manages the communication of the hub.

7.1.6 Sharing Resources

Creation of a centralised information hub: Maintaining a centralised online resource hub, accessible to all stakeholders, where relevant information, best practices, and educational



materials can be easily accessed and shared. Organise the resources based on categories and topics for easy navigation and retrieval, ensuring that the platform is user-friendly and intuitive for all users.

Encouraging stakeholder contribution: Foster a culture of collaboration and knowledge sharing by actively encouraging the hubs to contribute resources, share their experiences, and highlight best practices within the community through the ecosystem.

Providing training and support: Offer training sessions and workshops to educate the Hubs on how to effectively use the shared resources available on the platform, emphasising best practices and demonstrating how these resources can be integrated into their daily activities.

Capacity building: One of the central functions is to improve the capacities of vocational education and training providers and professionals in the field of sustainability education. This includes the provision of training, workshops, and resources to enable educators to effectively teach sustainability concepts.

Innovation and co-creation: The Green Hive ecosystem encourages collective action and innovation. It provides spaces and opportunities for students and stakeholders to co-create solutions to sustainability challenges, such as hackathons, challenges, and collaborative projects.

Promoting sustainability skills: The Ecosystem promotes the development of sustainability skills as defined in the EU Green Comp framework. It ensures that students and educators have the necessary skills and knowledge to effectively address sustainability issues.

Hosting Collaborative Workshops and Seminars: This will aid with the communication of a hub and sharing of resources.



7.1.7 Measuring Impact of Hub Communication

Quality and quantity of communication: There is a need to measure Key Performance Indicators in terms of communication to ensure quality and quantity of communication as impact is important to measure.

Consistency of Communication: This is important. The communication plan should tie in with the communication Key Performance Indicators.

7.2 Collaboration with Other Hubs

7.2.1 Ecosystem Analysis

Identify what is already in place: What other hubs are operating that are of interest to you? Identify organisations/NGOs/civil societies etc to cooperate with.

Best use of the ecosystem network: Identify the reasons for collaboration. What is the value of the ecosystem. This should be communicated. As it is inter-regional and inter-cultural the message will need to be clear.

Structure of the ecosystem: A formal structure to an ecosystem ensures content is provided, keeps track of progress, identifies initiatives and brings ideas to the ecosystem. A facilitator may be needed for this.

7.2.2 Methods of Communication

Meetings: It is important for the Green Combs/Hubs to have regular meetings with the Ecosystem. It should be clarified if those meetings will be in-person/on-line or a mixture of both. It should also be clarified in the communication plan how regular these meetings will be. If they are to be online it is suggested that an in-person meeting should take place every few months.



Knowledge and Resource Sharing: Hubs can share knowledge, research, and resources, enabling them to leverage each other's strengths and expertise. This collaboration fosters a more comprehensive and diverse learning environment that benefits both educators' students and the community. This can be achieved through a shared ecosystem platform/app. It allows for people with shared interests to share ideas and tools. This allows for communities of interest to develop rather than geographical communities. Cross fertilisation can move to other channels and share new ideas.

Levels of Communication: Communication may be at institutional level/town/region/country. Partnerships with institutions across different regions or countries can provide a global perspective and facilitate the establishment of international networks through the ecosystem.

Expanded Research Opportunities: Partnering organisations will continue to collaborate on Green Hive allowing for the pooling of resources, data, and expertise.

Increased Funding Opportunities: There is the potential for the Green Combs to jointly apply for grants, funding, and research opportunities that may not have been accessible to them individually. This collaborative approach increases the likelihood of securing funding for various initiatives and research projects.

Improved Reputation and Recognition: Cross-institutional partnerships often lead to enhanced visibility, reputation, and recognition for the project.

Addressing Complex Challenges: Combs are expected to adopt a co-creation approach to the learning and partnership working to allow institutions to tackle complex challenges together. By working together, institutions can develop innovative solutions to developing green skills within the educational, environmental, and technological spheres that may have been beyond the scope of any one hub.



Communication pack: A communication pack should be created with an ecosystem logo etc. The logo can then be customised for the local hubs so that the ecosystem will feel more connected. An overall common communication plan is needed for all hubs.

7.2.3 Encouraging Community Engagement Events

Workshops and Educational Seminars: Organise workshops and seminars focusing on sustainable living, energy conservation, waste reduction, and eco-friendly practices within society and highlight how these can be implemented into the education setting and through the hub curriculum.

Awareness Campaigns and Competitions: Launch awareness campaigns and competitions such as hackathons within the Combs and focused on sustainability activities, such as recycling challenges, energy-saving contests, and eco-friendly design competitions. Encourage active participation from community members of all ages to promote sustainable habits. Create online challenges to encourage the hubs to participate and share their sustainable practices and initiatives.

Collaborative Networking and Discussion Forums: Green Combs must be rooted in the local community, reflecting the specific needs and challenges of the area in which they are located. Encourage the space for Green Comb Hubs to have a method that brings together local leaders, businesses, and residents to discuss sustainability initiatives, share best practices, and explore collaborative opportunities for promoting environmental conservation.

Partnerships with Schools and Educational Institutions: On a national level partner with schools, NGOs, and VET institutions through the Green Combs to integrate sustainability education into the curriculum and organise joint awareness programs, workshops, and environmental projects involving students, teachers, and parents. Use these networks to feed into the ecosystem of knowledge and practice sharing.



Online Campaigns and Social Media Engagement: Use social media platforms and online campaigns to spread awareness about sustainability in the Combs, share informative content, and encourage active engagement throughout the ecosystem. Create online challenges to encourage the community to participate and share their sustainability practices and initiatives.

7.2.4 Nurturing Communication Channels

Ensure Communication: It is important to ensure clear communication. Decide what is appropriate for each country/audience to use for communication e.g. newspaper, social media. Schedule regular meetings with hubs to share best practices and create common solutions.

Promote options: It is important to engage with the different hubs and ask how they would like to hear about the ecosystem, whether by email, text etc. By giving choice this will create options that work.

7.2.5 Outcomes

Measure impact: It is important to measure the impact of the ecosystem communication and collaboration and measure if it is achieving its Key Performance Indicators (KPI's) as outlined in the communication plan. It is important to ask how the hives can use the Ecosystem to meet their outcomes.



Conclusions

The document provides a comprehensive guide for setting up a sustainable educational initiative like Green Combs. The guide covers various aspects essential for the successful setup and operation of these hubs, including governance, organization, community management, activities, tools, and collaboration with the broader Green Hive ecosystem.

More specifically the guide aims to:

1. **Guide Governance & Organization:** It outlines the governance structures, leadership roles, integration with policies, resource management, performance evaluation, compliance, and accountability necessary for effective operation.
2. **Facilitate Community Management:** The guide focuses on member profiles, stakeholder engagement, partnership strategies, creating inclusive environments, member development through mentorship programs, and strategies for outreach and engagement.
3. **Detail Activities & Tools:** It provides insights into internal and external activities, thinking tools like concept maps and decision matrices, as well as various technological tools to facilitate collaboration and problem-solving within the Green Combs.
4. **Enhance Project Management:** The document emphasizes detailed planning, resource optimization, continuous monitoring and control of sustainability projects to ensure efficient execution aligned with set goals.
5. **Promote Collaboration with the Hive:** It underscores the importance of communication strategies with stakeholders within the Green Hive community to foster partnerships and create a dynamic learning environment beyond traditional education boundaries.



The guide includes various thinking tools like concept maps, connection circles, Ishikawa diagrams, and more to enhance system and design thinking approaches within Green Combs. The SWOT analysis helps in identifying internal factors influencing sustainability initiatives, while tools like decision matrix assist in making informed choices based on multiple factors. Additionally, techniques like hypothesis trees and impact journey provide structured approaches to problem-solving and understanding the impact of service experiences. Back casting is highlighted as a method to envision future scenarios and work backward to determine necessary steps for achieving desired outcomes. These tools aid in analysing complex situations, identifying root causes of problems, resolving conflicts, and planning for the future effectively.

Overall, the guide offers a robust framework for establishing and advancing sustainability education initiatives by leveraging strategic analysis, stakeholder collaboration, and innovative thinking tools to drive positive change in educational practices towards a more sustainable future. It can be used as a roadmap for individuals or organizations involved in establishing sustainable community hubs under the Green Hive project by providing detailed instructions on governance, organization, community management, activities, tools, and collaboration strategies.