

TOOLKIT

CLIMATE ACTION ACADEMY

FOOD





Structure:

	PAGE
1) Why food system?	2
a. Food systems and climate change: What is the relationship?	
b. Education and food system: What are their interlinkages?	
2) Why this toolkit?	3
3) Presentation of the organisations	4
4) Methods:	5
5) Impressum:	26

1 Why food systems?

Food systems and climate change: **what is the relationship?**



Food systems are both impacted by and significant contributors to climate change. Recent studies have indicated that food systems account for more than a third of the greenhouse gas emissions causing climate change (IPCC, 2021), making them essential to global mitigation efforts.



Moreover, going one step better than carbon neutrality, agricultural landscapes and food supply systems are currently the only sector that can flip from carbon sources to carbon sinks, thus pulling more GHG emissions out of the atmosphere than it emits.



Aiming to take advantage of this potential, the “SDG 2.4: Sustainable Food Production and Resilient Agricultural Practices” and the “European Green Deal”, comprising its landmark “Farm-to-Fork Strategy” (F2F), aim to foster a transition that will not only positively impact our environment but also help mitigate climate change and adapt to its impacts, reverse biodiversity loss, and ensure access for everybody to sufficient, safe, nutritious, and affordable food, among others.

Education and food systems: **what are their interlinkages?**



Although the crucial and multifaceted role of food systems in climate change mitigation and adaptation initiatives is primarily recognised, the role of youth in this endeavour is still underestimated.



Thus, food systems could be used as an entry point to raise youth’s awareness around climate change and food-related issues and build significant agency and capacities around their pro-environment behaviour and active role in defining development priorities.



However, to enable youth to engage in civic action and sustainable development initiatives, empowering them with adequate knowledge, competencies, skills, and opportunities is imperative. Hence, this toolkit is for teachers, organisations working with youth, and other formal and informal educators, to foster this crucial and promising process.

2 Why this toolkit?

a What is this toolkit about and how to use it?

This toolkit "Methods for exploring Sustainability through Food Systems and Dietary Habits" offers a collection of resources and tools to help educators effectively engage young people in discussions about sustainability and climate change. By focusing on food systems and dietary habits, it provides an engaging and relatable entry point to the complex topic of climate change.

This publication has been specifically designed to provide teachers, youth organisations, and other formal and informal educators with a valuable compilation of didactic and methodological resources.

The toolkit results from the collaborative efforts of numerous organisations working in the field of education for sustainable development that were involved in the "Climate Action Academy (CAA) Food" project. During the project, these organisations presented and tested various methods within their educational practices. The toolkit serves as a comprehensive compilation of the methods that were explored, tested, and refined throughout the project's online and on-site activities.

The toolkit has been adapted from the Visual Toolbox for System Innovation by Javier de Vicente and Christian Matti prepared for the Climate-KIC Pioneers into Practice Program[1] particularly to be used for challenges related to climate change and food issues. Other tools available to delve deeper into systems innovation can be found in the mentioned resource.

b What is the Climate Action Academy Food?

The CAA Food is an international project focused on food systems and dietary habits as relatable entry points to emphasise the linkages between climate change and the daily life of young people.

A pivotal activity of the project was a five-weeks online training targeting teachers, organisations, and other formal and informal educators working with youth. During the academy, participants had the opportunity to learn from experts the latest state-of-the-art of the food-climate nexus and explore and test various educational methods and tools, improving their capacity to design and deliver training/educational offers to youth on this topic.

This project was jointly organized by BluoVerda Deutschland e.V. and 2811 (Germany), and JA Slovenija (Slovenia) with the financial support of the Erasmus+ program of the European Union.

3

Presentation of the organisations:



BluoVerda Deutschland e.V. is a diaspora (non-profit) organisation that works in the field of education for sustainable development, nature conservation and sustainable livelihoods. Together with partners in Europe and Latin America, BluoVerda designs, implements, and supports innovative and inclusive approaches to develop sustainable pathways based on empathy and respect for people and nature. The work of BluoVerda encompasses six thematic areas: climate, forests & wildlife, mountain ecosystem, marine & freshwater, food & farming (agriculture and fisheries), and sustainable cities.

2811

2811 Social Enterprise UG is an international platform working on all aspects of sustainable development, particularly social and environmental change. Initially founded in 2016 in Chile and now based in Colombia and Germany, the company has accumulated deep, wide-ranging, and global expertise in social innovation and climate education-related projects in Latin America, Europe, and Africa.



JA Slovenia is a non-profit organisation dedicated to fostering entrepreneurship and developing vital life skills among young people. JA Slovenia mission is to empower youth to become innovative leaders, entrepreneurs, and globally-minded individuals. Through their diverse programs and activities, JA Slovenia creates unique opportunities for young individuals to gain practical experience in the business world, cultivate entrepreneurial skills, and establish connections with mentors and experts from various fields.

Method: Understanding the system

1) General information

Thematic fields:	To understand the basics of systems, to grasp the essence of the challenge, to become acquainted with the relationships between various components of the system, and to discover how the environment around us operates.
Format:	Online (Mural, Jamboard) or in person
Age group	Youth, NGO, other organisations
Number of participants	5-20 (5 to 7 per group)
Duration:	45 min
Required materials:	Preparation of online slide of the canvas (if online) or preparation of a large paper canvas, post-it notes and markers.

2) Short description

The primary objective of this method is to provide a deeper understanding of systems and how they function. To better understand what is meant with a system, first for exercise explore the car as a system. When a single component within the car malfunctions, the entire system is affected, highlighting the interconnection and interdependence of elements within systems. By understanding this basic example, we can then delve into the key principles of systems and mirror that to any other challenge, in this case a food related challenge that the participants are trying to address.



3) Preparation

1 **Previous steps:** Talk about the presented food challenge.

2 **Desired outcome of this section:** Participants get the big picture and identify smaller issues (like a broken brake in the car example) within the challenge. These smaller issues have an affect on the whole system. At the same time, they might be easier to address and solve. Identify a smaller issue to work on.

3 **Next steps:** Participants are divided into groups of five to seven members. The facilitator provides them with instructions for the task. Each team creates its own challenge as a system image.

4) Execution

Rules



1 **Holistic Exploration:** Participants must comprehensively explore and analyze the challenge by considering its various dimensions and interconnections.



2 **Targeted Problem Identification:** Each team should identify and select a specific smaller issue within the challenge to work on.



1

Participants are invited to confront the set challenge.



2

The set challenge, for example, can be: How to empower young people to take action and engage in finding solutions to the food-related challenges brought about by climate change?



3

Whitin the challenge we explore the social, technical, and climate-related aspects, and the gaps that exist between them.



4

Each team creates their own canvas as illustrated below.

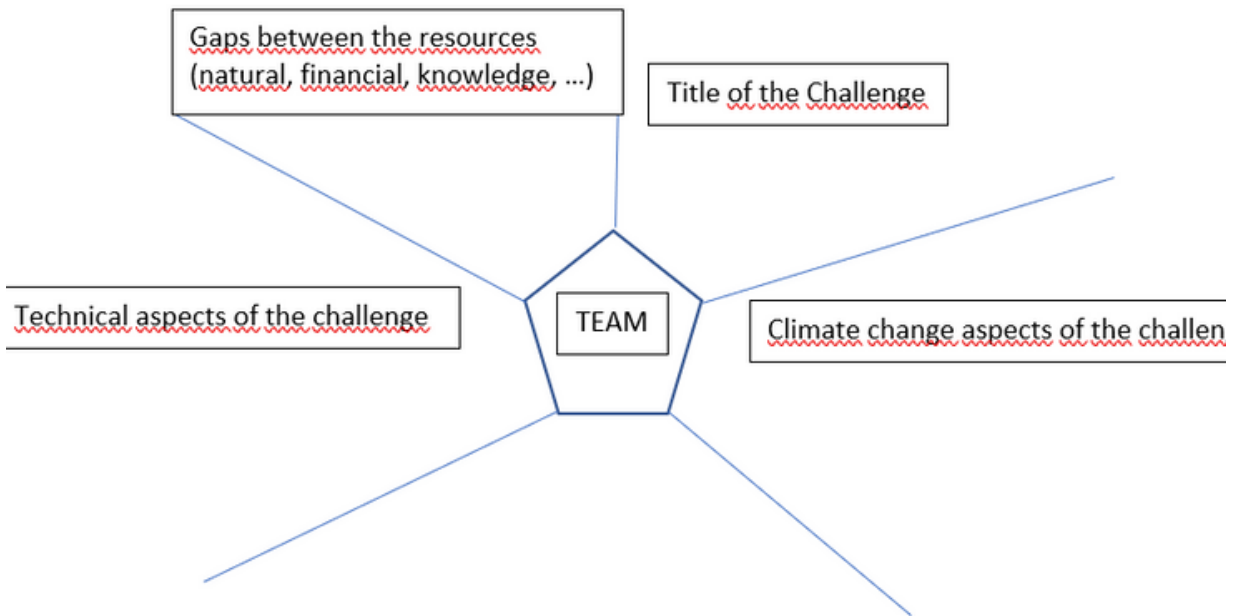


5

Through discussions within the team they populate each part of the canvas.

5) Short description

The completion time for the interactive worksheet is 15-30 minutes. In case the participants run out of ideas, the facilitator will step in and prompt them with questions. They will be encouraged to think about the competition, what practices are already being implemented, and what additional practices they would like to see implemented.



Outcome:



6) Evaluation

Evaluation questions

- To what extent did participants demonstrate an understanding of system interconnectedness and dynamics? This question aims to assess whether participants were able to grasp the concept of systems, their interconnected components, and their dynamic nature.
- Did the teams effectively identify and address smaller issues within the challenge? This question focuses on evaluating participants' problem-solving skills and their capacity to identify specific issues within the broader challenge.
- To what extent did the method facilitate proactive intervention and anticipation of potential outcomes? This question assesses whether participants were able to apply the principles of the method to foresee potential positive and negative consequences of interventions within the system.

7) Extra information

For additional information, please contact us:

eva.straser@evegreen.eu



Method: Understanding the stakeholders

1) General information

Thematic fields:	Understanding all the stakeholders and their interest and influence in the challenge.
Format:	Online (Mural, Jamboard) or in person
Age group	Youth, NGO, other organisations
Number of participants	5-20 (5 to 7 per group)
Duration:	45 min
Required materials:	Preparation of online slide of the canvas (if online) or preparation of a large paper canvas, post-it notes and markers.

2) Short description

There are two aims of this method. The first is to get to know all the possible stakeholders that are in any possible way related to the challenge. The second aim is to become aware of the stakeholders that have a special interest in the challenge and special power to influence the outcomes of the challenge. The objective is to find:

- stakeholders, who could have a positive influence on the challenge and aid finding a solution and bringing it to market
- stakeholders, who could have a negative influence and are a barrier to success



3) Preparation

- 1** **Previous step:** Define a smaller issue within the challenge that can be solved more easily at this stage (see previous method).
- 2** **Desired outcome of the challenge:** Create a stakeholder map and identify stakeholders that are the “Agents of Change”.
- 3** **Next step:** Participants are divided into groups of five to seven members. The facilitator provides them with instructions for the task. Each team creates its own challenge image.

4) Execution

Rules



- 1** **Comprehensive Stakeholder Identification:** Participants must identify and list all possible stakeholders relevant to the challenge.



- 2** **Strategic Stakeholder Categorization:** Participants should strategically categorize stakeholders based on their influence on the resolution of the problem, interest in the resolution of the problem, and adaptability to the solution.



1

Participants are invited to think of all the stakeholders relevant for the challenge.



2

Write down on each post-it note one of the identified stakeholders.



3

Through discussion position the stakeholders in the three main categories or in between: influence on the resolution of the problem, interest in the resolution of the problem, adaptability to the solution.



4

Position stakeholders on the canvas. Write a [+] sign next to a stakeholder that has a positive effect and a [-] sign next to a stakeholder with a negative effect.

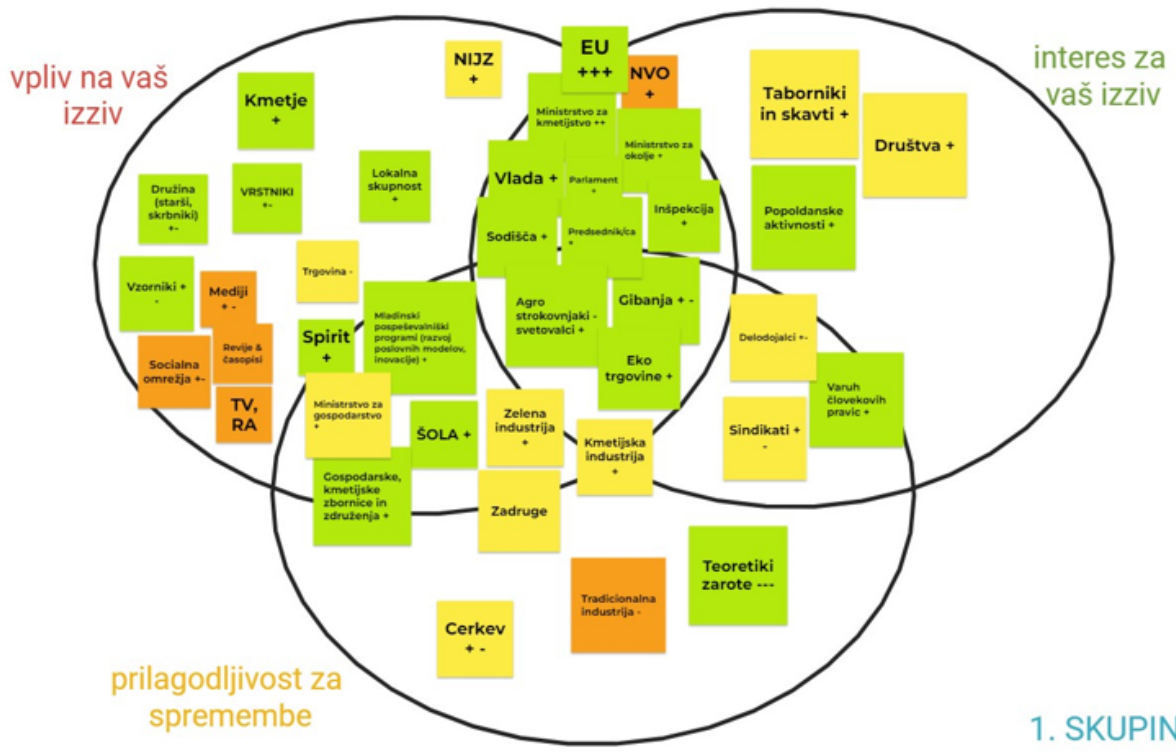
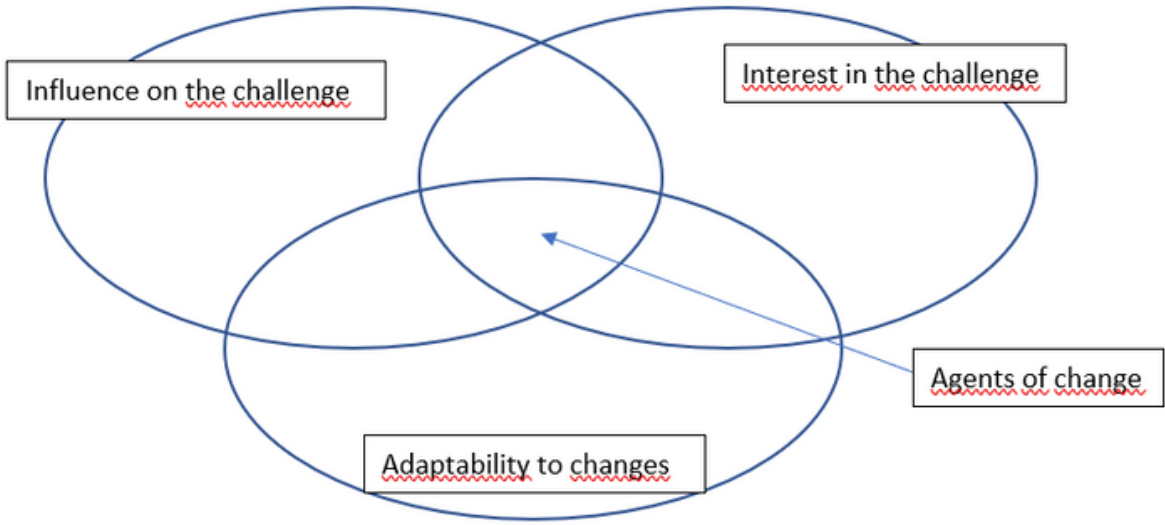


5

Once the stakeholders are positioned in the three circles and in-between areas, look at the stakeholders in the center area. These are the “Agents of Change” and these are the ones you have to keep in mind when ideating for a solution to your small problem identified with the tool Understanding the System.




5) Short description

The completion time for the interactive worksheet is 45 minutes. In case the participants run out of ideas, the facilitator will step in and prompt them with questions. They will be encouraged to think about the main actors in a system and all the other actors that do not come to mind at the first glance. The participants should find as many stakeholders as possible.



6) Evaluation

Evaluation questions

-  To what extent did participants identify and consider a comprehensive range of stakeholders relevant to the challenge? This question focuses on evaluating participants' ability to think broadly and identify all possible stakeholders related to the challenge.
-  How well did participants categorize and analyze stakeholders based on their influence, interest, and adaptability? This question aims to assess participants' analytical thinking and their capacity to understand the dynamics of stakeholder relationships.
-  To what extent did the method help participants identify the "Agents of Change" and their potential positive or negative influence on the challenge? This question evaluates the method's success in guiding participants to identify key stakeholders with significant potential to influence the challenge's outcomes.

7) Extra information

For additional information, please contact us:

eva.straser@evegreen.eu





Method: Ideation



1) General information

Thematic fields:	To generate a large quantity of ideas for solutions to the issue.
Format:	Online (Mural, Jamboard) or in person
Age group	Youth, NGO, other organisations
Number of participants	5-20 (5 to 7 per group)
Duration:	45 min
Required materials:	Preparation of online slide of the canvas (if online) or preparation of a large paper canvas, post-it notes and markers.



2) Short description



The primary objective of this method is to foster creativity and innovation by encouraging participants to generate a wide range of ideas and solutions related to the given problem. The participants should create a no judgement atmosphere. No idea is “too stupid”, “too crazy”, “too impossible”. All ideas should be written down.

3) Preparation

1

Previous steps: By exploring the system (Tool Understanding the System) and stakeholders (Tool Understanding the Stakeholders) we have conducted a comprehensive understanding of the challenge and the smaller issue.

2

Desired outcome of this section: Identifying an ideal solution to the problem.

3

Next steps: Participants are divided into groups of five to seven members. The facilitator provides them with instructions for the task. Each team creates its own canvases of ideas.

4) Execution

Rules



1

Non-Judgmental Idea Generation: Participants must create an environment of no judgment, where all ideas are welcome and encouraged regardless of how unconventional or "impossible" they may seem.



2

Iterative Idea Expansion: Participants should iteratively build upon and expand ideas through structured steps of combining, refining, and exploring new possibilities.



1

Team member each write down three ideas for a solution to their challenge.



2

Team members look at each others' ideas and each team member chooses two ideas they like written by another member. Out of these two ideas each member writes down a new idea that is a composition of the previous two ideas.



3

Team members repeat first step.



4

Next team members choose two ideas among all the ideas. Out of the two ideas each team member writes down a new idea that should be an "out of the box" response to the chosen two ideas.



5

All ideas are gathered on Canvas 1. Team members look at all the ideas in the "Out of the box" group and put them on Canvas 2 discussing with each other the level of creativeness of each idea and the level of feasibility of each idea.

5) Short description

The completion time for the interactive worksheet is 45 minutes. In case the participants run out of ideas, the facilitator will step in and prompt them with questions. The idea that each team identifies as the most creative and most feasible is the ideal solution for their problem.



Canvas 1:

Initial ideas

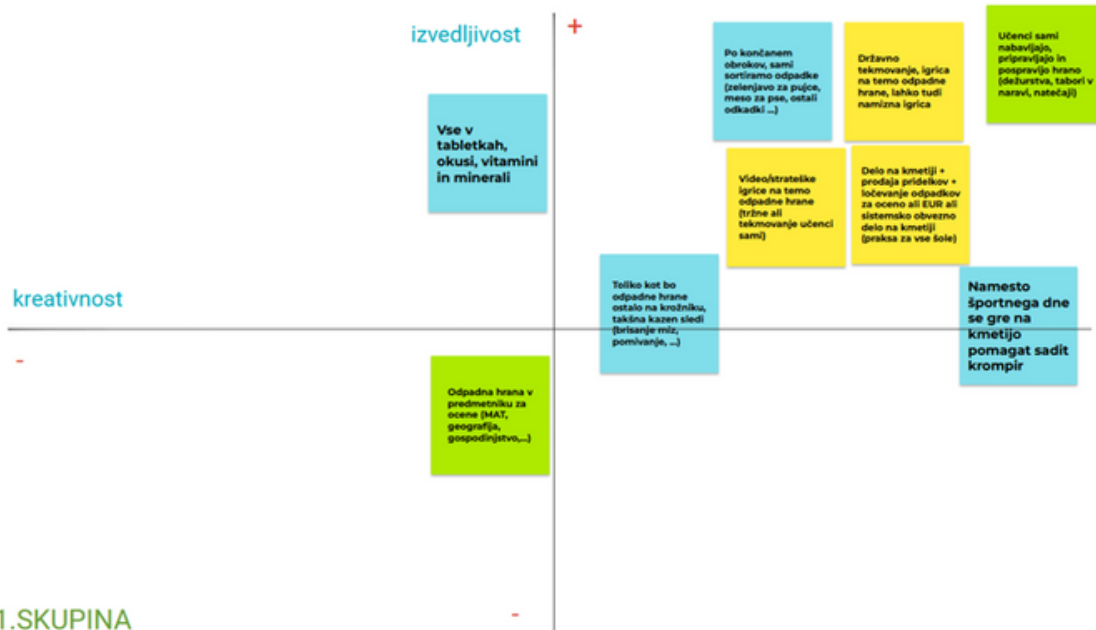
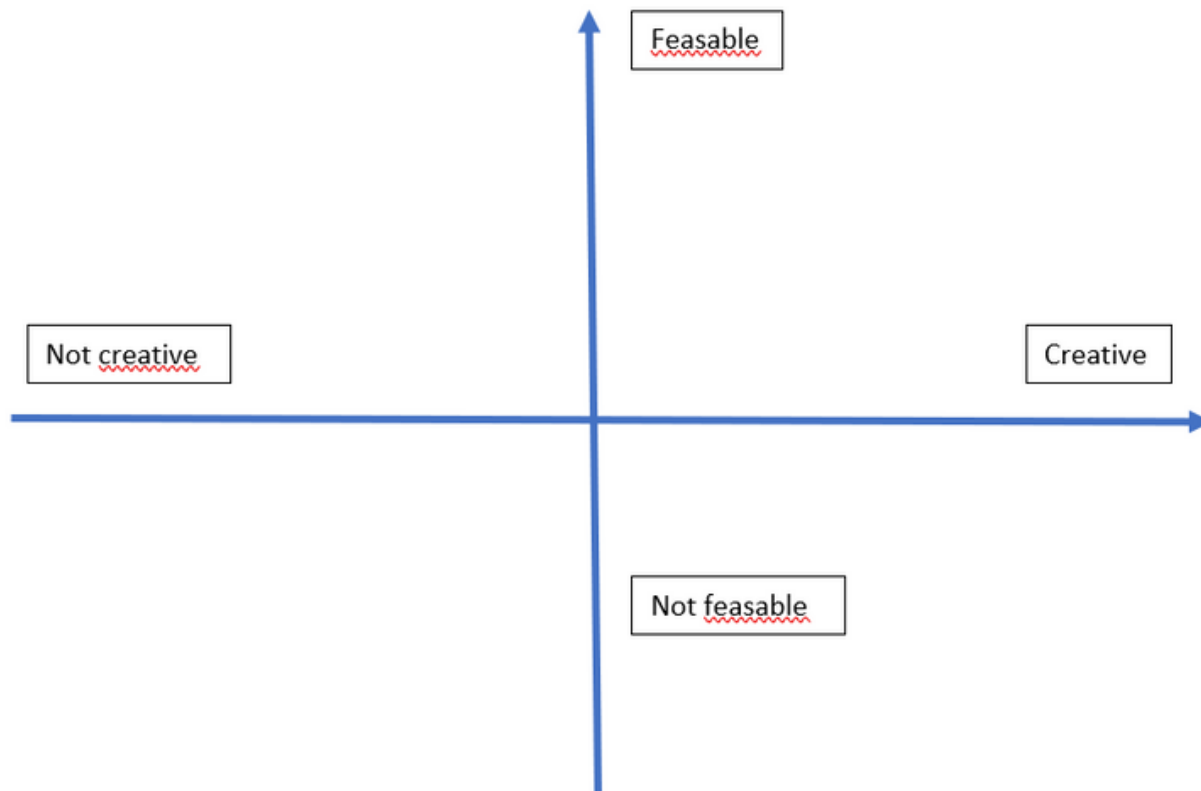
Combined ideas

»Out of the box« ideas





Canvas 2:






1.SKUPINA



6) Evaluation

Evaluation questions

-  **Collaborative Idea Generation:** Participants are encouraged to collaborate and build upon each other's ideas to generate innovative solutions.
-  **Idea Diversification:** Participants should strive to generate a wide range of ideas that cover various aspects, approaches, and potential solutions to the problem.
-  **Evaluation through Feasibility and Creativity:** Ideas should be evaluated based on two main criteria: their level of feasibility and their level of creativity.

7) Extra information

For additional information, please contact us:

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Method: Story board

1) General information

Thematic fields:	Visual Storytelling and Backcasting: Participants will learn the art of visual storytelling, using images, graphics, another visual elements to communicate their solution effectively, and identifying the steps that need to be made to bring the final solution to life
Format:	Online (Mural, Jamboard) or in person
Age group	Youth, NGO, other organisations
Number of participants	5-20 (5 to 7 per group)
Duration:	45 min
Required materials:	Preparation of online slide of the canvas (if online) or preparation of a large paper canvas, post-it notes and markers.

2) Short description

There are two objectives of this method. The first objective is to develop a visual story for a concrete solution in our case the final ideal solution. The second objective is to go through the process of backcasting by identifying the necessary steps that have to be taken for the participants to be able to implement the solution. Participants have to think backwards and create a timeline of all the steps that will bring from the final solution that has come to fruition sometime in the future back to where they are today. Through this approach, participants will gain the necessary competences to effectively convey their ideas and their vision for the solution of the problem, through a compelling and engaging visual narrative. Additionally, they will also gather the necessary information for an initial simple project proposal.

3) Preparation

- 1** **Previous steps:** Identification of the final ideal solution (Tool Ideation)
- 2** **Desired outcome of this section:** Visual story board for a concrete solution and presentation to other teams.
- 3** **Next steps:** Participants are divided into groups of five to seven members. The facilitator provides them with instructions for the task.

4) Execution

Rules



- 1** **Focus on Future Backcasting:** Engage participants in envisioning the future success of the final ideal solution and working backward to identify the key procedural steps to achieve that success.



- 2** **Collaborative Presentation and Clarity:** Communicate the envisioned solution and its implementation steps to others in a clear and engaging manner.



1

Participants have to fill out the canvas, which consists of elements of a newspaper article.



2

The participants have to put themselves in a future period (10, 50, 100 years from now) when their final ideal solution has come to life and a journalist is writing an article about the success of the idea.



3

They have to write a compelling title for the article, a compelling one sentence description of the solution, a description of how the solution functions, a quote from a stakeholder excited by the solution and the four steps they made to implement the final ideal solution.

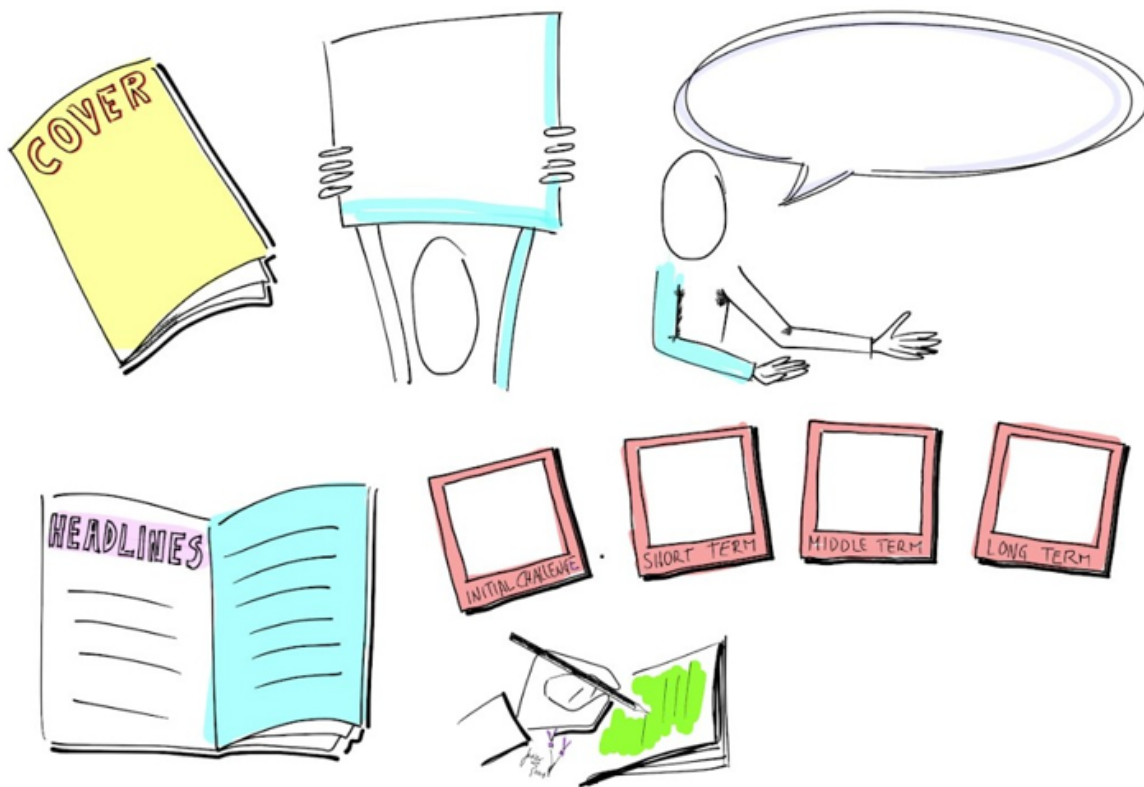


4

At the end each team has 5 minutes to present their solution and the story board.

5) Short description

The completion time for the interactive worksheet is 45 minutes. In case the participants run out of ideas, the facilitator will step in and prompt them with questions.



1. SKUPINA

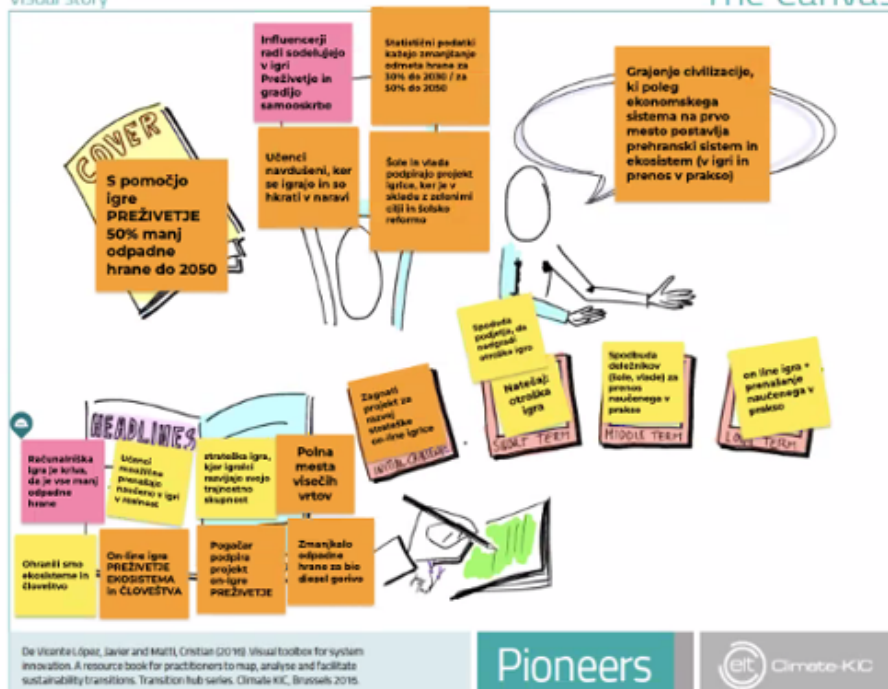
Državno tekmovanje, igrica na temo odpadne hrane, lahko tudi namizna igrica

Video/strateške igrice na temo odpadne hrane (tržne ali tekmovanje učenci sami)

Igrica na temo hrane/simulacija imaš omejene vire/output: razumvanje ravnovesja med ceno in kvaliteto hrane

Visual story

The Canvas



Pioneers

Climate KIC

6) Evaluation

Evaluation questions

- ▶ **Strategic Vision and Clarity:** How effectively did the participants convey the future success of the final ideal solution through their visual storyboards? Did the newspaper article layout effectively communicate the essence of the solution and its impact?
- ▶ **Backcasting Process:** How successfully did participants reverse-engineer the steps required to implement the solution from its future successful state? Were the identified procedural steps logically connected and feasible for achieving the final ideal solution?
- ▶ **Overall Impact and Insights:** How has this method deepened participants' understanding of the relationship between a successful solution and its implementation steps?

7) Extra information

For additional information, please contact us:

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Impressum

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