Generation Climate Europe

2026

Youth organisations for environmental impact

Generation Climate Europe

2026

Youth organisations for environmental impact

1. Introduction

Welcome to **Youth Organisations for Environmental Impact**, a comprehensive handbook designed by Generation Climate Europe to bridge the gap between global ambition and local action by youth organisations!

The Sustainable Development Goals (SDGs) - also known as the Global Goals - are 17 integrated and interconnected objectives designed to end poverty, protect the planet, and ensure peace and prosperity for all by 2030. Established by the United Nations, they provide a shared framework for advancing global sustainable development. However, for youth organisations, the challenge often lies in translating these high-level global targets into daily operations and meaningful advocacy.

This handbook serves as a strategic roadmap for youth-led movements to internalise sustainability. It is designed to be used as both a practical toolkit for operational change and a SDG reporting guide to ensure transparency. By following the chapters within, your organisation can move toward authentic, measurable impact.

The journey begins with an exploration of the **Current challenges in embedding sustainability in youth organisations**, offering an honest look at the structural and financial barriers often faced when trying to institutionalise green practices. To address operational footprints, the guide introduces **Greener events through carbon budgeting**, which provides a framework for treating carbon like currency to ensure gatherings respect planetary boundaries. This is complemented by the section **Under the lens: sustainable food and drink**, where we navigate the complex ethics of catering, waste management, and plant-based transitions.

As your organisation evolves, the handbook shifts toward influence and outreach. The chapter **Sustainable communication for youth organisations** provides the tools to move your audience from awareness to action, while **Green policy and governance** outlines how to engage and advocate to ensure sustainability is written into your organisation's very DNA. In light of modern technological shifts, we also address **Digital sustainability in the era of Artificial Intelligence**, tackling the hidden environmental footprint of our digital tools. Finally, the handbook introduces **Sustainable KPIs** to ensure that all progress is tracked with the same rigor as financial or membership data.

As **extra resources**, the handbook also offers an **audience card** to help you mobilise supporters, a **ready-to-use checklist to improve your green governance**, and a **decision-making tree on how to use AI sustainably**.

2. Current challenges in embedding sustainability in youth organisations

Embedding sustainability within youth organisations is essential, yet it remains difficult in practice. Despite strong values and high motivation among young people, organisations often face structural and systemic barriers that limit long-term integration. Financial constraints and limited project funding rarely align with the long term nature of sustainability investments. This is particularly true when funding is needed to embed sustainability considerations in day-to-day operations or governance processes.

Another issue is that sustainability is often considered a short-term thematic project, resulting in it being siloed, rather than integrated into all projects. Recognising these interconnected obstacles is a first step towards designing realistic and resilient strategies for change. In this handbook, we aim to redefine your perspective on sustainability and how it interlinks with the functioning of your organisation.

In this handbook we will be focusing on everyday aspects of an organisation's life where we can embed sustainable thinking with little effort. Let's go through them!

3. Greener events: carbon budgeting

Organising a genuinely greener event involves far more than making a handful of isolated sustainable choices. It requires a structured approach that considers the event's full environmental footprint – from the earliest planning stages through to post-event evaluation. Events often concentrate emissions into a short period of time, combining participant travel, energy use, materials, accommodation, technical equipment, and waste generation. Without a clear framework, sustainability efforts can easily become fragmented or purely symbolic.

Carbon budgeting offers a practical way to address this challenge. At its core, it means estimating the greenhouse gas emissions associated with an event before it takes place, setting a defined emissions limit, and designing the event within that boundary. This approach reframes sustainability as a planning principle rather than a reactive exercise. Instead of asking how to offset impact after the fact, organisers assess potential emissions in advance and make informed decisions to reduce them.

Importantly, carbon budgeting does not require advanced technical expertise or expensive software. **The objective is not perfect precision, but informed decision-making**. Even approximate calculations can help organisers identify the most significant sources of emissions and prioritise meaningful reductions.

Beyond reducing emissions, carbon budgeting can improve financial efficiency, strengthen credibility with partners and funders, and build climate literacy within the organisation.

By embedding carbon budgeting into the planning cycle, sustainability becomes part of governance and operational design rather than an optional add-on. The following step-by-step framework outlines how youth organisations can implement a practical and proportionate carbon budgeting system for their events.

How to approach carbon budgeting

Step 1 – Define the scope

Begin by clearly defining the scale and format of the event. Identify the number of participants, duration, location, and whether the event is in-person, hybrid, or online. This step establishes the boundaries of the carbon budget and clarifies which emission sources must be included. Typical categories include participant and speaker travel, local transport, venue energy consumption, accommodation, materials and merchandise, technical equipment, digital infrastructure, and waste management.

Step 2 – Identify emission sources

Map all potential sources of greenhouse gas emissions across the event lifecycle. Consider both direct emissions, such as electricity use at the venue, and indirect emissions, such as participant travel or equipment production. A systematic review of all operational areas prevents important impacts from being overlooked and ensures that sustainability is integrated into planning decisions.

Step 3 – Estimate the carbon footprint

Use publicly available emission factors and accessible carbon calculators to estimate emissions for each category. While precision may be limited, approximate calculations are sufficient to identify high-impact areas. Travel is often the largest contributor, followed by venue energy use and materials. Estimation provides a quantitative basis for adjusting the event design.

Step 4 – Set a carbon budget and adjust the event design

Based on the estimates, establish a maximum emissions threshold for the event. This carbon budget becomes a planning constraint that guides decision-making. Organisers can then modify elements of the event to remain within the defined limit, such as prioritising accessible venues, reducing unnecessary materials, optimising technical set-ups, or encouraging lower-carbon transport options. Sustainability considerations should shape logistical choices from the outset rather than being addressed retrospectively.

Step 5 – Monitor and collect data

After the event, collect relevant data to compare projected emissions with actual outcomes. This may include participant travel surveys, energy consumption data from the venue, equipment rental duration, and waste volumes. Monitoring strengthens transparency and builds institutional learning for future events.

Step 6 – Evaluate and improve

Conclude the process by reviewing results and identifying areas for improvement. For recurring events, organisations can establish progressive reduction targets and track performance over time. Carbon budgeting should be understood as a continuous improvement mechanism that enhances accountability and reinforces credibility.

Following these steps enables youth organisations to transition from symbolic sustainability measures to a structured, measurable approach to reducing the environmental impact of their events.

4. Under the lens: sustainable food and drink

Why food and drink choices matter

When planning events, food and drink choices are often an overlooked area when it comes to reducing our carbon footprint, but they are responsible for a significant portion of our greenhouse gas emissions. Specifically, food systems – which include all activities, resources and people involved in producing, transporting and processing our food – are responsible for around one third of all human greenhouse gas emissions globally. **Figure 1** shows the common sources of these emissions across food systems. Whilst many aspects of food production are responsible, a significant portion of these emissions come from livestock, crop production (including animal feed) and land use change.

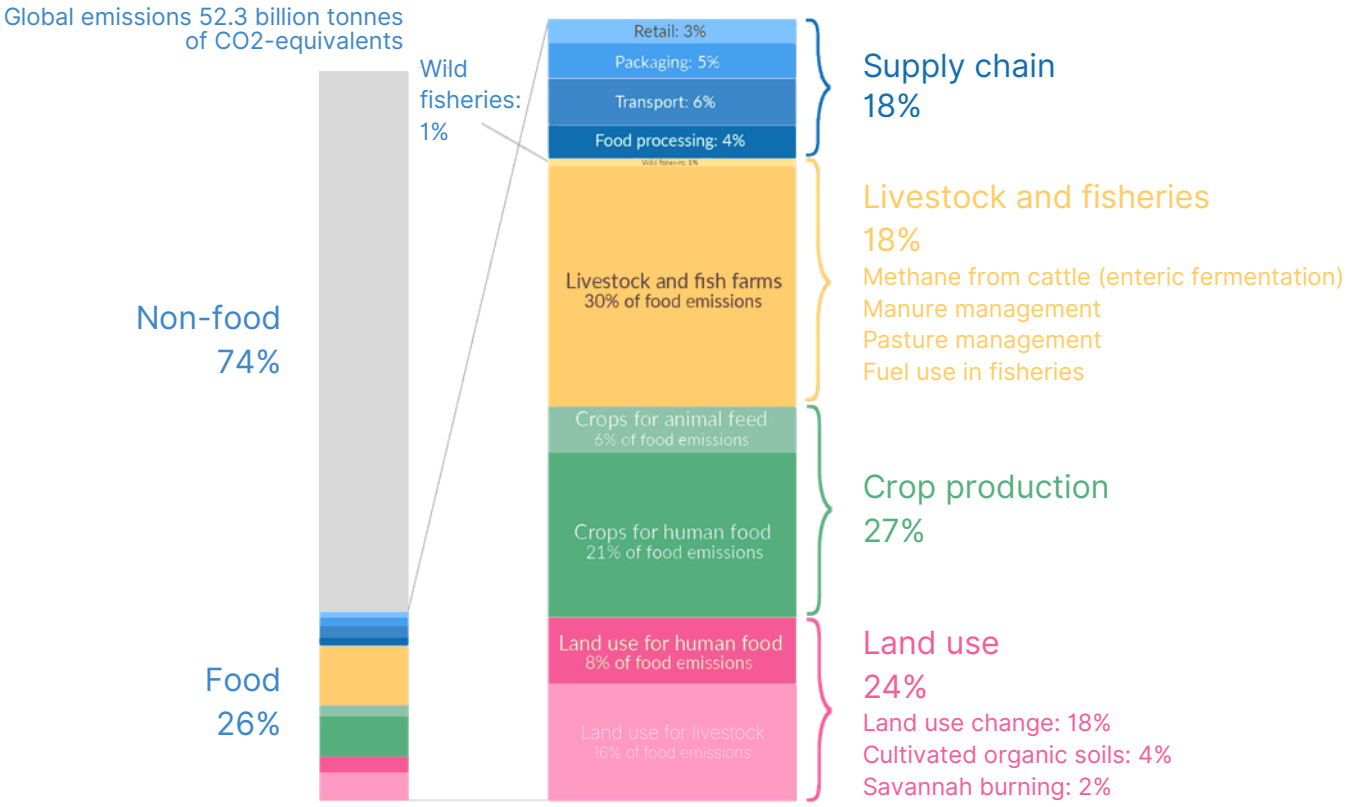


Figure 1 Data source: Joseph Poore & Thomas Nemecek (2018). Reducing food's environmental impacts through producers and consumers. Published in Science. Licensed under CC-BY by the author Hannah Ritchie (Nov 2022)

Food production is also a major driver of biodiversity loss, water use, resource depletion, and pollution. It currently fails to provide healthy diets for the global population, with hundreds of millions going hungry each year. Despite this, around a third of all food produced globally is wasted, with over 58 million tonnes of food waste generated annually in the EU alone. This is estimated to account for 16% of the carbon dioxide emissions of the EU food system, equivalent to around 131kg/person.

Understanding key impact areas in food and drink

The different stages of the food system cause various different impacts and environmental pressures, highlighted by **Figure 2**. Understanding these is useful for youth organisations when trying to reduce our carbon and environmental footprints so that key focus areas can be identified and focused on to maximise impact.

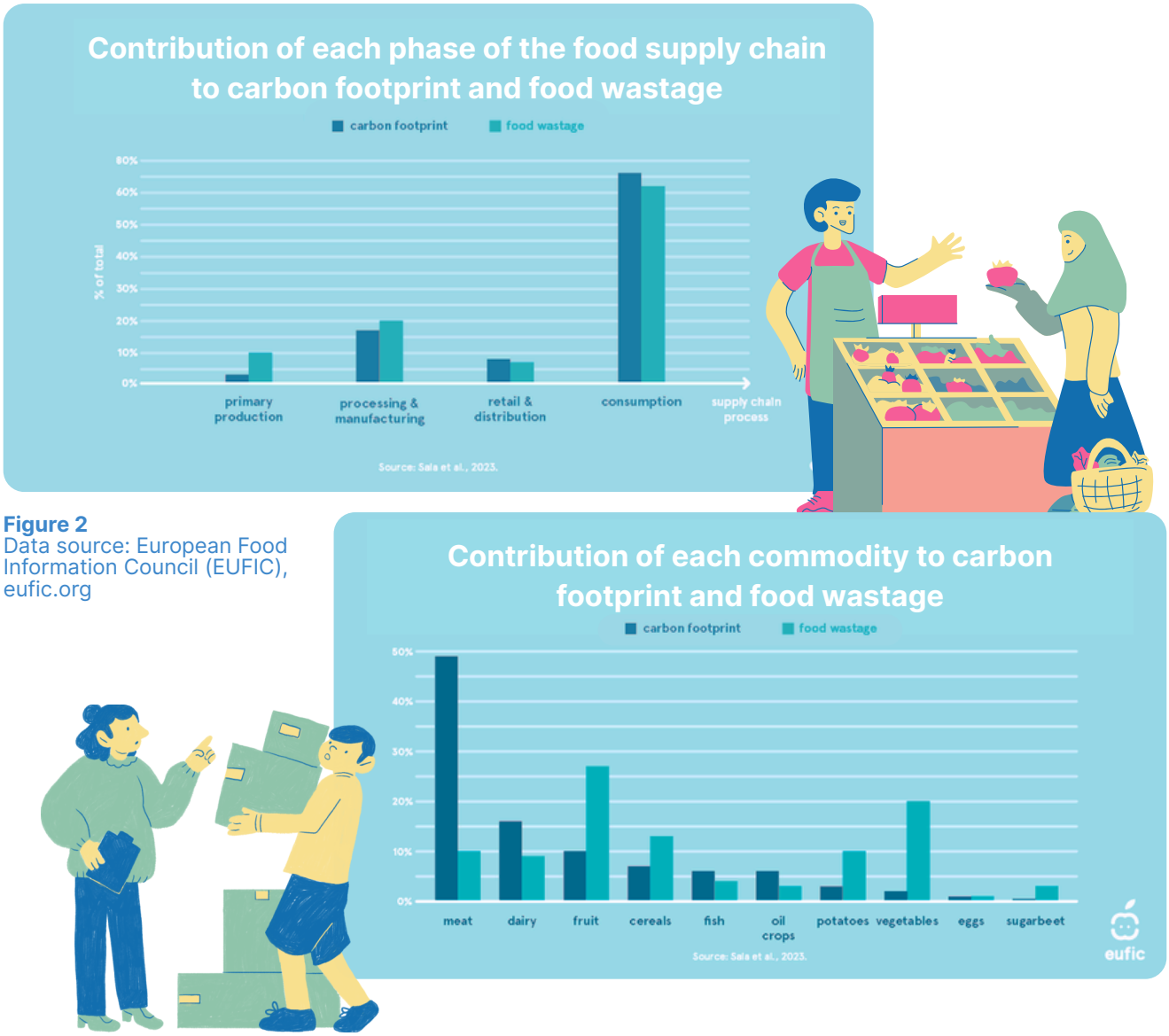


Figure 2
Data source: European Food Information Council (EUFIC), eufic.org

The environmental footprint of food arises at several stages. Agriculture and land use are major contributors, particularly due to livestock methane emissions, fertiliser use, and deforestation. Supply chains add further emissions through processing, packaging, refrigeration and transport. After purchase, energy used for cooking, storage and food waste also contributes to emissions. Understanding these stages helps organisations focus on the most effective areas for action.

Not all foods have the same footprint. Red meats such as beef and lamb have some of the highest emissions, largely due to methane from livestock and land required for feed and grazing. Dairy products also carry relatively high impacts.

In contrast, most plant-based foods such as beans, lentils, grains and vegetables generally have much lower emissions and require fewer resources. Globally, more than half of food-related greenhouse gas emissions come from animal products. Shifting towards plant-rich menus is therefore one of the most effective ways to reduce impact. We understand however that implementing a strictly plant-based menu can be percieved to reduce people's choice, therefore even small steps like reducing the quantity of red meat on offer in a meal can have a significant impact.

Plant-based and low-impact diets

Globally, more than half of the greenhouse gas emissions from food come from animal products. Consequently, shifting menu offerings towards plant-based meals is one of the most effective actions a youth organisation can take to reduce its carbon footprint.

Diets that are higher in plant-based foods and lower in red and processed meat are linked to lower greenhouse gas emissions and are also associated with better overall health outcomes. Showcasing what this could look like, the Planetary Health Diet (Figure 3) was developed by the EAT-Lancet Commission, a group of leading scientists in nutrition, health and environmental sustainability. It is a diet based on leading science and was designed to promote optimal health across different regions and cultures whilst protecting the planet. It sets out a way of eating that can be adapted to local foods and traditions while still following the same core principles. The diet is plant-rich, recommending that the majority of food consumed should be whole grains, fruit, vegetables, nuts and legumes, with only modest amounts of fish, dairy and small portions of meat.

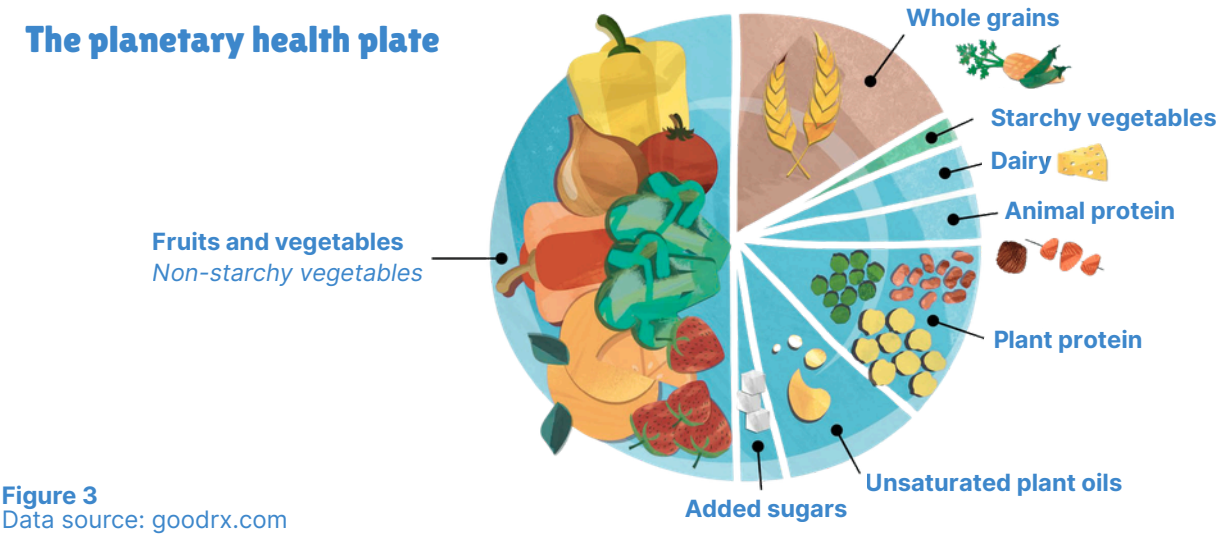


Figure 3
Data source: goodrx.com

Youth organisations can:

- Make plant-based or plant-rich meals the default option;
- Reduce red and processed meat;
- Clearly label lower-carbon options to increase understanding of impact of choices;
- Align menus, where possible, with the principles of the Planetary Health Diet.

Local and seasonal choices
Eating locally can reduce transport emissions, although transport usually represents a smaller share of total food emissions compared to production methods. Seasonality is often more important. Food grown out of season, especially in heated greenhouses, can have a higher footprint than seasonal produce grown in open fields. Prioritising seasonal ingredients and sourcing locally where feasible can help reduce impact while supporting local economies.

Food loss and waste
Food loss and waste also contribute to worsen the data, as they account for an estimated 8-10% of global greenhouse gas emissions for products that are not ultimately needed. In Europe, food waste represents a significant share of the food system's climate impact.

Practical steps include planning realistic portion sizes, improving storage and coordination with caterers, redistributing surplus food where permitted, and encouraging participants to avoid unnecessary waste. Prevention is more effective than recycling. Another important aspect is avoiding single-use plastics in food service contribute to pollution and climate change. Plastic packaging often has low recycling rates and can persist in the environment for decades.

What we can do as youth organisations is, for example, prioritising reusable cups, plates and cutlery, provide water refill stations, possibly offering fresh local products and reducing individually packaged items wherever possible.

In conclusion, there are many things that youth organisations can do to reduce the carbon footprint of the food they offer, including:

- Making food offered plant-based or aligned with the Planetary Health Diet as default;
- Designing menus so that all or most dishes are vegetarian or vegan, with smaller portions of meat or dairy used in line with the Planetary Health Diet recommendations;
- Working with caterers and suppliers to increase the number of meals that follow vegetarian, vegan, or Planetary Health Diet principles (more pulses, grains and vegetables; less red and processed meat);
- Clearly labelling plant-based and lower-carbon options on menus and buffet tables so that young people can make informed choices at a glance;
- Running workshops, cooking sessions or "planet-friendly food days" where young people help create and taste plant-based recipes that are affordable, culturally appropriate and appealing;
- Updating food and catering policies so that any food purchased or funded by the organisation reflects plant-based and low-impact guidelines while respecting cultural, religious and health-related dietary needs.

5. Sustainable communication for youth organisations: from awareness to action

What is sustainable communication?

Sustainable communication is the practice of sharing information and ideas in ways that not only inspire awareness but also encourage long-term behavioural and cultural change. It means communicating responsibly, inclusively, and transparently, with an understanding that every message has an impact on both people and the planet. For youth organisations, sustainable communication is more than an outreach strategy; it is a leadership tool. It reflects how young changemakers connect with their audiences, amplify their values, and build movements that are ethical, inclusive, and future-oriented. Unlike traditional communication, sustainable communication is grounded in three principles:

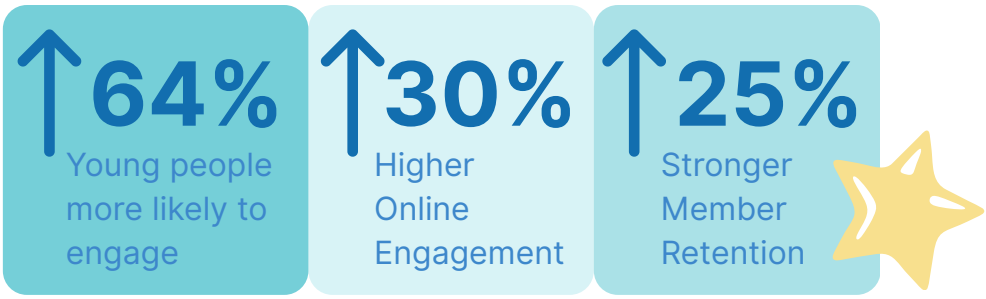
Authentic communication builds trust by aligning words with actions.

Accessible communication ensures that people of all backgrounds, languages, and abilities can engage meaningfully.

Accountable communication measures its success not just by reach, but by the positive change it helps generate.

The benefits of sustainable communication

Organisations that adopt sustainable communication experience measurable gains in credibility, engagement and impact. Studies show that 64% of young people are more likely to support and engage with organisations that communicate their environmental and social values transparently (Edelman Trust Barometer, 2022). These organisations not only strengthen their public image, but also strengthen participation and network reach, mobilising more volunteers for their cause. Youth organisations that embed sustainability principles in their communication strategies have up to 30% higher online engagement, 25% stronger member retention, and increased partnership opportunities with international bodies and universities (European Youth Forum, 2023). Clear, values-based communication builds trust among members, funders and partners, attracts grants, and sustains long-term projects.



Sustainable communication also supports organisational resilience. When messages are built on honesty, inclusivity, and clear evidence, they reduce the risk of misinformation, backlash, or greenwashing accusations. This reliability enhances donor confidence and public credibility, both of which are critical for youth-led initiatives seeking to scale their work. Ultimately, the benefits extend beyond visibility – sustainable communication fosters belonging, motivates participation, and makes organisations more adaptive to social and environmental change.

Hope–based narratives and storytelling

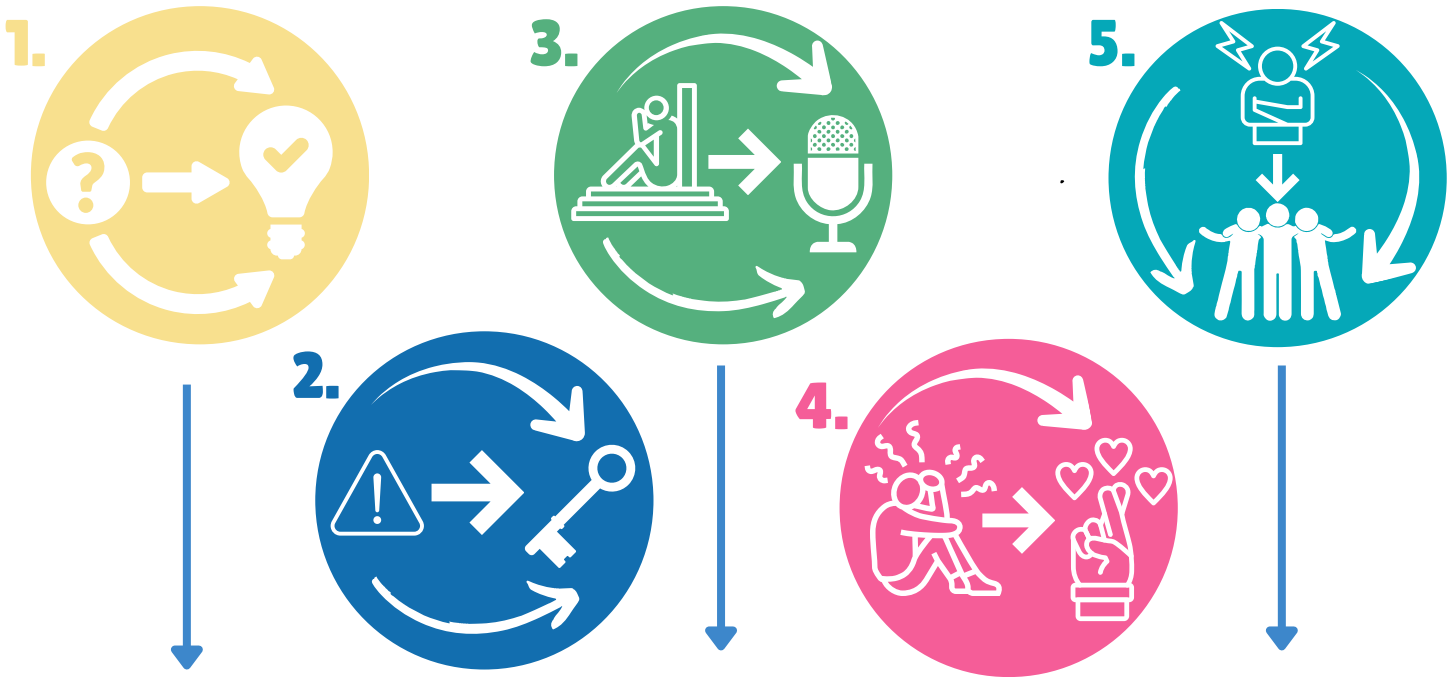
The psychology of hope–based communication

Hope-based communication is a transformative approach to sustainability storytelling that replaces fear and guilt with optimism and agency. Developed by Thomas Coombes (*Hope-Based Communications*, 2020), this framework is grounded in psychology and encourages communicators to reframe their messages away from crisis narratives and towards positive social change. This is based on the psychology that anger and fear-based narratives suffocate our capacity to understand the perspectives of others and encourages us to act for self-preservation. Hence fear-based storytelling of human rights violations doesn't lead to the action needed to combat these violations. Fear or anger can initiate a short reaction, like spontaneously attending a protest, but it is not fear that builds community or organises for long-term good.

Instead of telling us what to run from, hope-based communication is part of a visualisation process of what we are working towards. Furthermore, hope-based communication is about fostering belonging – for example the Pride movement experienced a narrative shift away from the discrimination they are facing to a concept built around love and celebration. As social animals, we are driven often by the idea of belonging and community (*The science of communicating hope*, Thomas Coombes).

For instance, when negated sentences are used to communicate a political position - 'Immigrants are not criminals' - research has shown that the average reader focuses on the word criminals and forgets the negation of the sentence: 'Immigrants are criminals'. Hope-based communication focuses on realising a juxtaposed narrative, rooted in an independent reality, from what it is trying to combat: 'Immigrants are active, powerful participants of society'. This message is not only more likely to be taken into consideration by the listener, but is now powered by optimism.

The five key narratives of hope–based communication



From problem → solution

Focus on how people are solving issues rather than describing them

From threat → opportunity

Highlight the potential for renewal and innovation

From victim → agency

Present people as empowered actors, not passive sufferers

From fear → hope

Use optimism to motivate participation

From them → us

Foster unity and shared purpose

For example, a youth campaign promoting climate action could shift from the message "We are running out of time" to "Together, we are designing a greener future." Real stories of students creating recycling systems or communities planting trees make sustainability relatable and achievable. This approach helps audiences visualise the world they want, rather than fear the world they might lose. Hope-based storytelling also aligns with mental wellbeing principles, countering eco-anxiety with empowerment and collective resilience.

Knowing your audience and choosing channels wisely

Understanding the audience is fundamental to effective sustainable communication. Each community has distinct motivations, languages, and media habits. Youth organisations can begin by mapping their audiences through a simple Audience Card tool (an example of this is shown in 'Extra Resources'): identifying what their audience values, how they access information, what barriers they face, and which messages resonate most. For instance, young people living in rural areas may prefer radio and local workshops, while university students may engage more with Instagram reels or interactive webinars.

Choosing communication channels should reflect not only where audiences are but also which platforms align with environmental and ethical principles. A digital-first strategy might include social media, newsletters, and podcasts, while an offline strategy could rely on school partnerships, public art, or community events. Integrating both ensures inclusivity and reduces overreliance on high-carbon digital tools. The key is to ensure that every message leads to a meaningful action – signing up for an event, pledging sustainable habits, or joining a local initiative.

Connecting communication to action

Sustainable communication is not complete without participation. The ultimate purpose of communication is to move people from awareness to action. This means inviting the audience to co-create campaigns, share their experiences, and help evaluate outcomes. Youth organisations can run surveys, storytelling contests, or sustainability challenges that give members an active role. When people participate, they internalise the message and become ambassadors of change. Each media communication therefore should always include a call to action.

Sustainable communication should not be assessed only by its visibility, but also by its effect. The key question is not how much was communicated, but instead:
to what extent did it result in change?

Youth organisations can evaluate impact by examining behavioural shifts, decision-making patterns, and awareness levels before and after communication efforts. For example, did participants adopt more sustainable practices? Did internal teams integrate environmental criteria more consistently? Did partnerships or policies evolve as a result of increased awareness? Combining simple surveys, behavioural indicators, and qualitative feedback allows organisations to measure whether communication has influenced real change.

Ultimately, sustainable communication becomes meaningful when it moves from information to positive transformation.

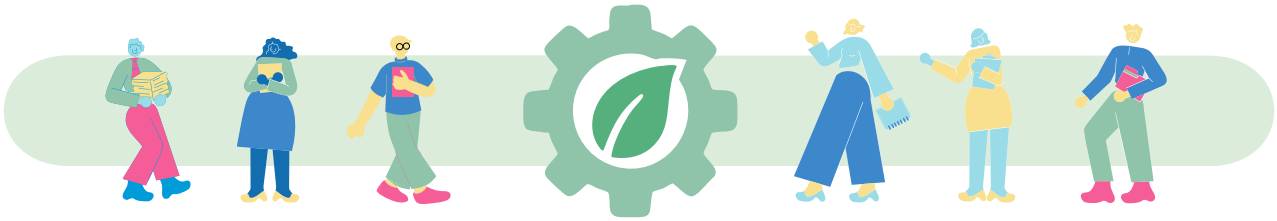
6. Green policy and governance: how to engage and advocate

Sustainable governance refers to the systems, rules, and decision-making processes that ensure an organisation's operations are environmentally sound, socially inclusive and economically responsible over time. It's about making sustainability part of how you work, not just what you work on.

For youth organisations, this means:

- Integrating sustainability into everyday decisions, not isolating it in one project or team;
- Ensuring inclusion, participation, transparency, and accountability guide all organisational processes.

Good governance for youth organisations depends on openness and shared responsibility. Shared accountability measures should also be in place to ensure consistency with these efforts. In the 'Extra Resources' section, there is a checklist of actions you can take to ensure that your governance structure and practices consider sustainability with consistency.



How to embed sustainability in governance structures

There are many different ways in which sustainability can be embedded within an organisational structure. For some, it is the sole responsibility of one individual, often called a 'Green Officer', but in other cases, the responsibility is spread throughout multiple roles.

Embedding sustainability across teams often increases policy continuity and reduces implementation gaps, particularly in organisations with high volunteer turnover. It also means that through this distribution of responsibility multiple people become more carbon literate. A single Sustainability Lead without integration of sustainability considerations across the organisation, although well-intentioned, is often a fragile structure:

- When that one person resigns or goes on leave, sustainability work halts immediately.
- Sustainability becomes a person, not a system (dependent on an individual's motivation rather than embedded practices).

Accountability and continuity weaken, particularly in youth organisations where roles change frequently and staff capacity is often fluid. This is why sustainable governance requires distributed responsibility, even if the responsibility of sustainable projects is centralised in one role.

European green policy frameworks and beyond

Understanding the foundations of European green policy and the wider frameworks that shape it enables your youth organisation to engage meaningfully at the political level. By familiarising yourselves with the current policy landscape, you can position your organisation as an active and credible civil society stakeholder – one that not only responds to developments, but helps shape them. Through mechanisms such as joint youth dialogues, policy consultations, and awareness-raising around new legislation, your organisation can contribute to informed debate and advocate effectively at EU level.

How you can align with EU legislation

European Green Deal and European Climate Law

This set of laws outlines a plan to transform Europe's economy, energy, transport, and industries for a more sustainable future.
The European Green Deal and Fit for 55 package outline the EU's path to climate neutrality:

- Reduce EU greenhouse gas emissions by at least 55% by 2030;
- Move toward 90% reduction by 2040;
- Achieve climate neutrality by 2050 (legally binding).

Your organisation can align by:

- Setting internal emission targets (e.g. halve travel emissions by 2030);
- Prioritising renewable energy sources for offices and events;
- Choosing local suppliers and low-emission transport.

UNFCCC

The United Nations Framework Convention on Climate Change (the Convention or UNFCCC) was adopted at the United Nations Headquarters, New York on 9 May 1992.

The UNFCCC obliges states to report on greenhouse gas emissions.
Youth organisations can mirror this by:

- Measuring the carbon footprint of events or travel;
- Publishing sustainability reports annually;
- Framing this as youth accountability towards global commitments.

How you can enact environmental protection laws

Aarhus Convention (1998)

The Aarhus Convention (1998) guarantees the public's rights to environmental information, participation and justice. Although it is legally binding on states rather than on youth organisations, its principles provide a powerful framework for advocacy. Youth organisations can reference the Convention to remind public authorities of their obligations, promote transparency, and demand meaningful inclusion of young people in environmental decision-making processes. This does not have to be directly for environmental law or matters, but any decision-making process, bill or project that may significantly affect the environment.

It grants the right to:

- Access environmental information (Article 4);
- Participate in decision-making (Article 6-8);
- Seek justice if those rights are violated (Article 9).

In 2022, Youth and Environment Europe (YEE) referenced Articles 7 and 9 of the Aarhus Convention to request youth inclusion in national climate consultation processes, successfully strengthening transparency and access for young people.

Resource: **Toolkit on Environmental Law and Youth Participation – YEE (Youth Environment Europe), The Aarhus Implementation Guide**

Case study

Breach of the Aarhus Convention: In July 2025, Friends of the Earth won a UN case finding that the UK breached international law under Article 8 and Article 3(1) of the Aarhus Convention by not providing public input into the draft of the EU withdrawal bill or having a framework in place to ensure public participation.

Relation of the bill to the environment: The EU withdrawal bill would significantly affect the environment in the UK, given that 80% of environmental law in place in the UK was derived from EU law.

Long-term outcome: The winning of this case reinforced that public participation in environmental matters is not a tick box exercise. It must be consistent and systematic engagement, allowing communities to have a voice in many different bill drafting and creation, because these bills will affect the environment. The UK however, refused to endorse these findings at the Member of the Parties Conference in 2025, resulting in a further 4 years of delay to reach an accepted proposal or outcome.

Green policy engagement strategy

Connecting your organisation's work to EU frameworks shows that you are active contributors to Europe's sustainability transition, and not just beneficiaries. It also increases legitimacy, visibility, and access to funding.

How can you effectively do that?

Step 1: Stay informed

- Follow updates on the European Green Deal (by following the official News Europa Page) & Fit for 55.
- Understand EU climate, energy, and sustainability targets and determine how these align with the priorities and values of your youth organisation. To what extent are you affected by or can you affect this issue?
- If you are particularly connected to this issue, consider writing a position paper stating your organisation's allegiances and a persuasive argument using fact-based evidence. Position papers can also contextualise the reality of a political issue and how it connects with different civil groups or marginalised populations. This grounds the effects of policy on people and human experience. To increase the advocacy impact, position papers can be released in partnership with other youth organisations or stakeholders.

Step 2: Join dialogues

- Participate in youth consultations and EU-level discussions by following the youth policy dialogue page and reviewing youth policy dialogue reports on issues that your organisation is involved in.
- Share your organisation's policy position, your personal perspective, and learn from others.

Step 3: Partner strategically

- Collaborate with environmental NGOs and youth networks like **Youth Environment Europe** and **Generation Climate Europe**, sharing their green opportunities with your members, including study sessions and upskilling. By collaborating with partners, venues, and organisations with similar values and beliefs, it is easier to implement green solutions in events or other projects.
- Enhance your organisation's impact and reach by strengthening connections to advocate for shared issues.

Step 4: Set internal targets

- Mirror EU goals (e.g., reduce emissions by 55% by 2030).
- Track process and report outcomes transparently online.

Step 5: Make engagement practical

- Prioritise hybrid or online events and sustainable suppliers.
- Include sustainability checks in project proposals and funding applications.

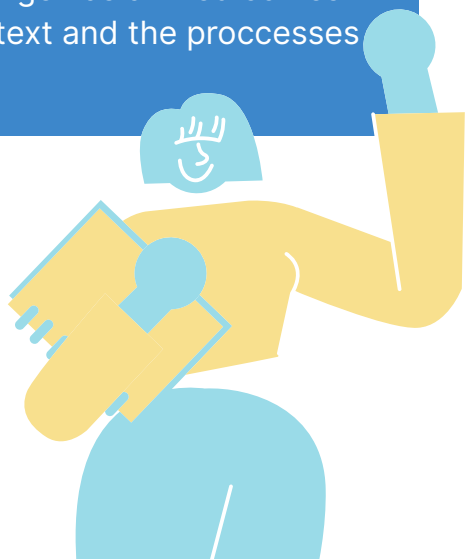
Step 6: Communicate your impact

- Showcase your organisation's actions in reports, social media and events.
- Demonstrate active contribution to Europe's green transition.

INFO BOX...

How can aligning with green policy increase your advocacy capacity?

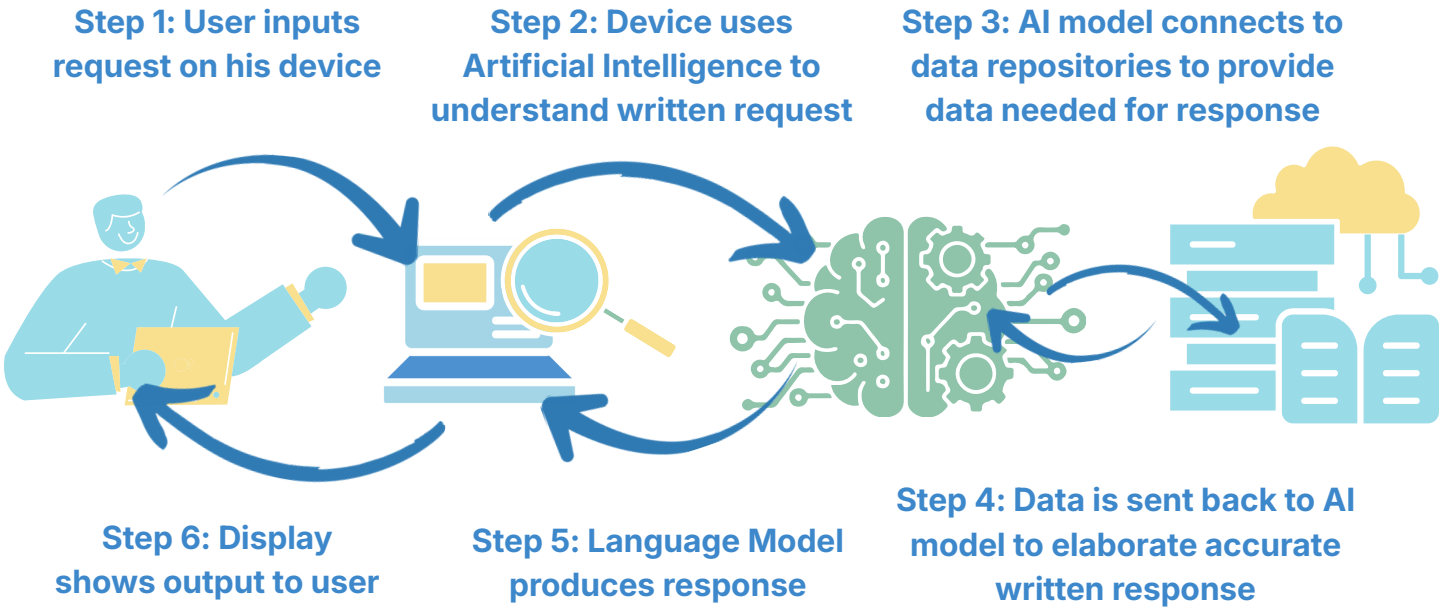
If you are actively engaged with green EU policy frameworks, you know when policy is under review, often allowing for a timely opportunity to advocate for your opinion. The gut feeling that the moment of change has arrived comes from understanding the current shifts in political context and the proccesses behind policy.



7. Digital sustainability in the era of Artificial Intelligence

What is Artificial Intelligence?

To give a brief definition, the words refer to a broad class of computational systems designed to perform tasks that typically require human intelligence. These tasks are dependent on data and provide a "humanised" output that can be used for a variety of applications, from leisure to supporting decision making. Rather than operating through fixed instructions alone, AI systems adapt their behaviour based on statistical models and large datasets, allowing them to improve performance over time.



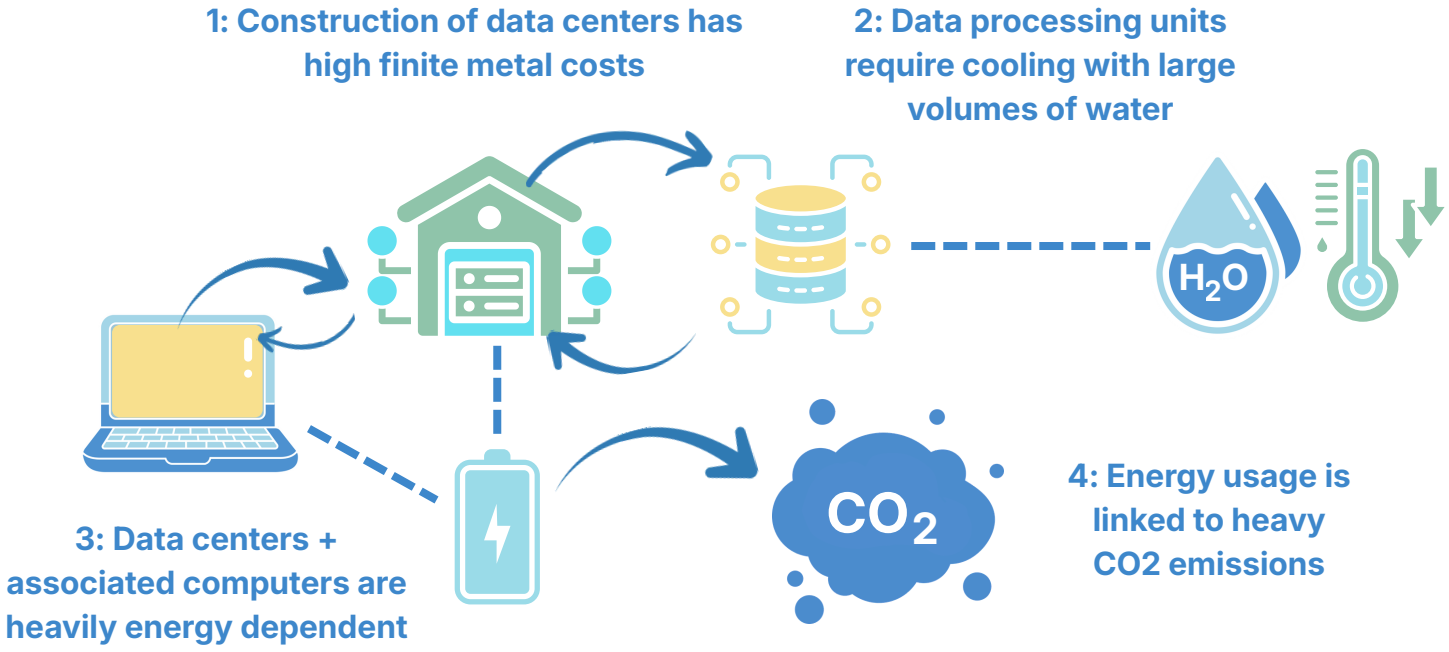
Caveats of AI:

- It does not possess consciousness or intent: it uses mathematical modelling and calculations of probability based on analysis of data to respond to a user input;
- The quality of the data also heavily affects the output. More data (specifically more accurate datasets) produce better results, but one should always be mindful about uploading potentially private or sensitive data online, potentially accessible to other users or then used to train the model;
- AI assistance comes at a cost, specifically to the environment.

The environmental cost of AI

To understand the impact AI has we must understand how resources are used throughout the process:

- The construction of data centers requires materials such as cobalt, gold or lithium, which require mining processes for extraction;
- The data is processed through processing units which are always active, requiring cooling provided by immense water usages;
- Data centers and associated computers are heavily energy dependent;
- Energy usage is linked to heavy CO2 emissions.



AI, cloud platforms, and online collaboration tools have become part of everyday organisational life, as people and companies can use it positively, speeding up the rate of scientific discovery and allowing us to notice patterns in data that we haven't been able to identify before. However, the current unregulated and daily usage by thousands of people is often unnecessary and increases the threat to our planet. Every digital action relies on physical infrastructure, consumes energy, and produces environmental and social effects that often remain invisible to users. At the same time, AI systems increasingly shape how information is accessed, decisions are made, and opportunities are distributed.

Digital sustainability is about bringing these hidden dimensions to the surface, aligning digital practices with values, and ensuring that innovation supports environmental responsibility, social justice, and long-term resilience rather than undermining them.

Ultimately, the trade off is between the value generated and the resources required.

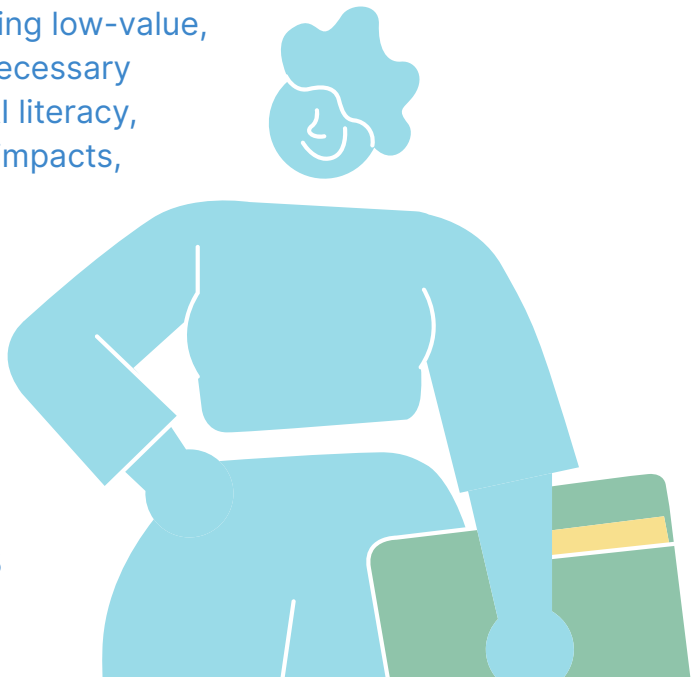
The equality of AI

Something we can reflect on is that most large-scale AI systems are based on a small number of high-income regions with strong digital infrastructures. The environmental and resource costs linked to these systems, however, are often felt elsewhere. The extraction of critical minerals, the production of hardware, and the water and energy needed to cool data centres frequently affect communities in the Global South. These communities often have limited access to AI-driven services and little influence over how these technologies are developed or used. This imbalance shows how digital progress can reinforce existing global inequalities if it is not carefully governed.

The environmental impact of AI is not neutral in relation to its purpose. The same level of computing power can be used to support essential services such as healthcare, education, climate monitoring, or accessibility. It can also be used to produce large amounts of non-essential content with limited social value. In both cases, energy consumption, emissions, and resource extraction may be similar. Responsible AI use therefore requires recognising that identical environmental costs can lead to very different social outcomes, depending on who benefits and who bears the consequences.

This raises an important question of fairness. Communities that consume the least digital resources may still experience a consistent share of environmental damage linked to extraction and energy production. At the same time, economic and technological benefits remain concentrated in a small number of countries and organisations. Addressing these inequalities requires more than improving efficiency. It requires aligning AI development and use with principles of climate justice, proportionality and global responsibility, so that innovation supports fair and sustainable development rather than deepening existing divides.

Youth organisations can contribute to reducing these inequalities through conscious and informed choices. By prioritising AI tools with clear educational, social, or environmental value, selecting providers committed to responsible data practices and renewable energy, and avoiding low-value, resource-intensive uses, they can limit unnecessary pressure on shared resources. Promoting AI literacy, encouraging open discussion about global impacts, and integrating fairness criteria into digital strategies help ensure that technology adoption becomes an ethical decision, not only a technical one.



How to act more sustainably when using AI

Individual level

Estimating the daily energy consumption of AI use by a single individual is complex. Current research suggests that daily AI-related electricity use typically ranges between 0.05-0.3 kWh, roughly equivalent to running a laptop for several hours. While these values appear small, millions of users performing similar actions simultaneously translate marginal impacts into a significant collective footprint.

Individuals can reduce their digital footprint by adopting mindful practices:

- Avoid unnecessary or repetitive AI queries
- Batch tasks into fewer, well-defined prompts
- Reuse outputs rather than regenerating similar content
- Prefer lightweight or task-specific tools
- Choose providers committed to renewable energy

A simple rule of thumb is to always weigh purpose against impact. Using AI to support learning, accessibility, research, or meaningful work generally justifies its environmental cost more clearly than applications with limited value.

Organisational level

Digital technologies are essential to the functioning of youth organisations. They enhance communication, coordination and participation, enabling global collaboration with limited resources. However, their growing use also raises environmental, ethical and governance challenges. A responsible digital strategy allows youth organisations to align technological progress with sustainability principles by minimising energy use, promoting fairness, and ensuring transparency and accountability.

Three guiding principles can support responsible AI use:

1. Awareness of impact: every digital action has environmental consequences;
2. Intentional prompting: use simple prompts for simple tasks and avoid unnecessary complexity;
3. Right tool, right task: specialised tools are often more efficient than general-purpose models.

Training on responsible AI use is increasingly accessible through online courses, institutional programmes, and policy-driven requirements such as those embedded in the EU AI Act. Youth organisations are encouraged to build internal AI literacy and, where possible, appoint a dedicated AI officer or task force to oversee implementation and review practices over time.

How much does AI really cost?

~0.24 Wh/prompt (Google's measured median for Gemini Apps)
~0.30 Wh/query (Epoch AI estimate for ChatGPT/GPT-4o "typical" query)

Equivalent: running a 10 W LED for 1.8 minutes

Energy

~0.26 mL/prompt (Google's estimate for Gemini Apps)

Equivalent: 0.26 mL → ~1,900 prompts for one 500 mL water bottle (500/0.26 ≈ 1923)

Water

~0.03 g CO_2/prompt (Google's Gemini Apps estimate)

Equivalent: around 33 prompts for 1 g CO_2

Carbon dioxide

	5 prompts/day usage	20 prompts/day usage	50 prompts/day usage
Energy	1.5 Wh	6 Wh	15 Wh
Water	1.3 mL	5.2 mL	13 mL
CO_2	0.67 g	2.7 g	6.7 g

OpenAI-confirmed reporting: ~2.5 billion prompts/day usage (as of July 2025)

Energy (using 0.30 Wh)

2.5B × 0.30 Wh = 750,000 kWh/day = 0.75 GWh/day

Water (using 0.26 mL)

2.5B × 0.26 mL = 650,000 L/day (= 650 m^3/day)

Equivalent: ~1.3 million 500 mL bottles/day

CO_2 (using IEA 445 g/kWh + 0.30 Wh)

750.000 kWh/day × 445 g/kWh = ~334.000.000 g/day = ~334 tCO_2/day

8. Sustainable KPIs

Sustainability commitments become credible only when they are measurable. Setting clear Key Performance Indicators (KPIs) allows youth organisations to move from intentions to accountability. A useful reference point is the structure of the UN Sustainable Development Goals (SDGs), which combine clear targets with specific indicators to measure progress.

While youth organisations operate on a smaller scale, the same logic applies: **define what you want to change, decide how you will measure it, and track progress consistently over time.**

Here are easy steps you can start with:

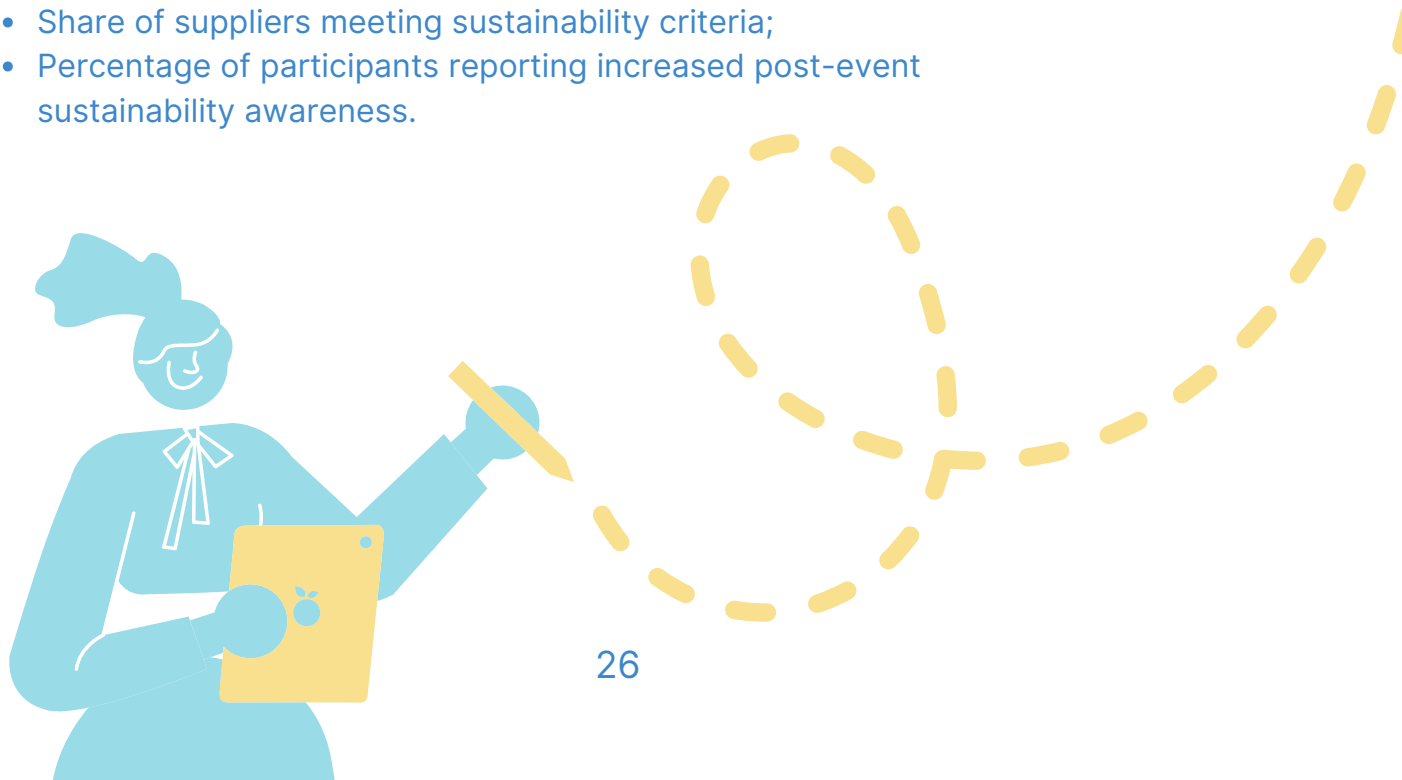
Step 1 – Define priority areas

Begin by identifying the sustainability areas most relevant to your organisation. These may include climate impact, resource use, inclusion and equality, sustainable procurement, education and awareness, or governance practices. KPIs should reflect your real activities, such as events, training programmes, partnerships or office operations. Prioritisation prevents measurement fatigue and ensures focus on areas where change is possible.

Step 2 – Translate goals into measurable indicators

For each priority area, define clear and specific indicators. Good KPIs are measurable, time-bound, and understandable. **For example, some sustainability KPIs could be:**

- Total greenhouse gas emissions per event (see carbon budgeting guide);
- Percentage of plant-based/fully sustainable meals offered;
- Share of suppliers meeting sustainability criteria;
- Percentage of participants reporting increased post-event sustainability awareness.



Step 3 – Set baselines and targets

Before setting improvement targets, establish a baseline. This may be the data from the previous year or the most recent event. Targets should be realistic but progressive. For example, reduce event emissions by 20% over two years, or increase plant-based catering to 70% within one year. Clear timeframes support accountability.

Step 4 – Assign responsibility and data sources

KPIs must be linked to responsibility. Identify multiple people who will collect the data, how often, and using which tools. Data may come from registration forms, travel surveys, procurement records, financial reports, or post-event evaluations. Keeping systems simple increases consistency. A shared spreadsheet or digital dashboard is often sufficient.

Step 5 – Monitor and review regularly

Tracking should be periodic, not only annual. Reviewing KPIs after each major activity allows for faster learning. Compare results against targets and document explanations for deviations. Monitoring should not be punitive, but a learning exercise that improves future planning.

Step 6 – Report transparently and adjust

Communicate results internally and, where appropriate, externally. Transparent reporting builds trust and demonstrates seriousness. If targets are not met, analyse why and adjust strategies. If targets are achieved, consider setting more ambitious goals. KPIs should evolve as the organisation matures.

Sustainable KPIs are not about collecting excessive data. They are about identifying a limited number of meaningful indicators that reflect your values and activities. By aligning goals, indicators and regular tracking, youth organisations can embed sustainability into governance, decision-making and everyday practice in a structured and measurable way.

9. Bibliography

Agriculture, & Board, H. D. (last accessed 07/04/2026). Greenhouse Gas Emissions: Agriculture. Retrieved from https://ahdb.org.uk/knowledge-library/greenhouse-gas-emissions-agriculture

Change, U. N. C. (2024). Food loss and waste account for 8-10% of annual global greenhouse emissions: cost USD 1 trillion annually. Retrieved from https://unfccc.int/news/food-loss-and-waste-account-for-8-10-of-annual-global-greenhouse-gas-emissions-cost-usd-1-trillion

Coombes, T. (2025). The science of communicating hope. Retrieved from https://hopebased.substack.com/p/the-science-of-communicating-hope

Coombes, T. (last accessed 07/04/2026). About Hope Based Communication. Retrieved from https://www.hope-based.com/about

Council, E. F. I. (2024). Food Waste in Europe: Statistics and facts about the problem. Retrieved from https://www.eufic.org/en/food-safety/article/food-waste-in-europe-statistics-and-facts-about-the-problem#

Crippa, M., Solazzo, E., Guizzardi, D., Monforti-Ferrario, F., Tubiello, F. N., & Leip, A. (2021). Food systems are responsible for a third of global anthropogenic GHG emissions. Nature Food, 2(3), 198–209. https://doi.org/10.1038/s43016-021-00225-9
Edelman Trust Institute. (2024). 2024 Edelman Trust Barometer Global Report.

Energy, C. C., & Forum, E. E. G. (n.d.). Green Public Procurement Criteria and Requirements. Retrieved from https://green-forum.ec.europa.eu/green-business/green-public-procurement/gpp-criteria-and-requirements_en

High Level Expert Group on Artificial Intelligence, European Commission. (2019). Ethics Guidelines for trustworthy AI. Retrieved from https://digital-strategy.ec.europa.eu/en/library/ethics-guidelines-trustworthy-ai

Forum, E. (last accessed 07/04/2026). The Planetary Health Diet. Retrieved from https://eatforum.org/eat-lancet/the-planetary-health-diet/

Forum, E. Y. (2014). Policy Paper: Youth work in the European Youth Forum and Youth Organisations.

9. Bibliography

Forum, E. Y. (2018). Policy Paper: Sustainable Development.

Future, A. G. (last accessed 07/04/2026). A Greener Festival: Event Sustainability Guides- Resources. Retrieved from https://www.agreenerfuture.com/resources-2 International Energy Agency. (2025). Energy Demand from AI, Energy and AI.

IPCC. (2022). Climate Change and Land: Summary for Policymakers. In Climate Change and Land (pp. 1–36). Cambridge University Press. Retrieved from https://www.cambridge.org/core/product/identifier/9781009157988%23prf2/type/book_part

K, G. B. (2022). What Is the Planetary Health Diet — and What Are Its Benefits? Retrieved from https://www.goodrx.com/well-being/diet-nutrition/planetary-healthy-plate?srsltid=AfmBOoqgZrH3C7MMv7ZijcBlpBcvxXvjbnP3kuDij3ckVFwiWS-zMgCV

Masanet, E., Shehabi, A., Lei, N., Smith, S., & Koomey, J. (2020). Recalibrating global data center energy-use estimates. Science, 367(6481), 984–986. https://doi.org/10.1126/science.aba3758

Moghaddam, A. B., & Deutschlands, N. (2024). Greening International Youth Work for youth workers and young people.

OECD. (2024). OECD Youth Policy Toolkit.

Patterson, D., Gonzalez, J., Le, Q., Liang, C., Munguia, L.-M., Rothchild, D., … Dean, J. (2021). Carbon Emissions and Large Neural Network Training.

Ritchie, H. (2020a). The carbon footprint of foods: are differences explained by the impacts of methane? Retrieved from https://ourworldindata.org/carbon-footprint-food-methane

Ritchie, H. (2020b). You want to reduce the carbon footprint of your food? Focus on what you eat, not whether your food is local. Retrieved from https://ourworldindata.org/food-choice-vs-eating-local

Ritchie, H. (2021). How much of global greenhouse gas emissions come from food? Retrieved from https://ourworldindata.org/greenhouse-gas-emissions-food

Ro, Z. E., & St, W. A. (2023). Sustainable Events: How to plan and organize sustainable events in Serbia.

9. Bibliography

Strubell, E., Ganesh, A., & McCallum, A. (2020). Energy and Policy Considerations for Modern Deep Learning Research. Proceedings of the AAAI Conference on Artificial Intelligence, 34(09), 13693–13696. https://doi.org/10.1609/aaai.v34i09.7123

Stylianou, N., Guibourg, C., & Briggs, H. (2023). Climate Change Food Calculator: What's your diet's carbon footprint? Retrieved from https://www.bbc.co.uk/news/science-environment-46459714

The Shift Project. (2019). Lean ICT: Towards Digital Sobriety.

UNESCO. (2022). Recommendation on the Ethics of Artificial Intelligence.

Extra reading and resources

Audience card:

Extra resource from **Sustainable Communication for Youth Organisations: From awareness to action**

Values and Morals of your desired audience:	
Where is your audience on the spectrum of support for your message?	
How does this audience access information? Do they face any barriers to accessing information?	
Chosen channels for communication?	

When you are aiming to change perspective on an issue, it is really important to understand the underlying values of your audience and how they agree or disagree with your message (spectrum of support). This will allow you to deliver a message that does not seem too radical to opponents, and that empathises with supporters. It is assumed that shifting values is a neccessary long-term goal of campaigning for social and environmental change, and therefore analysing how the value of your message interacts with your audience is key to understanding how their perspective may shift.

The spectrum of support maps out the agreement of key groups of stakeholders with your message. When choosing to target a certain stakeholder in a specific position of agreement, the way you frame your messaging and argument should change to become more acceptable to your target audience's world view. The channel of communication may also change when targeting a certain audience in the spectrum of support. For instance, in social media it is difficult to reach beyond your own echo chamber of followers. Therefore social media is best used to mobilise current supporters to action, through hope-based communication and messages that align with your current supporters values.

Often most of the population are people who will not be actively supporting or opposing our cause, which means generally they are easier to influence. In this case, we should aim to target those closest to active allies and push them to the left of the spectrum.

Extra reading and resources

A ready-to-use checklist to improve your green governance:

Extra resource from **Green policy and governance**

Task	Difficulty	Checkbox	Extra Resources
Sustainable governance: Add a clause to your founding statutes committing the NGO to environmental stewardship.			https://ec.europa.eu/programmes/erasmus-plus/project-result-content/dafa4e2d-9b47-4227-aa32-7b0233a11227/Sustainability_in_Youth_work_and_Non-formal_education.pdf
Sustainability handover: Create a "Green Legacy" folder in your cloud drive so new volunteers know the eco-rules from day one.			https://www.google.com/search?q=https://www.salto-youth.net/downloads/4-17-4185/SustainabilityInYouthWork.pdf
Sustainable procurement: Make sure you prioritise purchases, collaborations and partnerships who prioritise sustainability and low envronmental impact			A resource that helps you identify ecolabels: https://www.ecolabelindex.com/ecolabels/?st=region=europe A resource to help you review policy and ensure it considers youth: https://www.youthforum.org/files/Toolkit_Quality_Standards.pdf
Green IT: Ensure your digital tools and their usages are optimised for low energy consumption			A resource that helps you chose greener hosting providers: https://www.thegreenwebfoundation.org/directory/
Transparent Impact Report: Publish an annual summary of your NGO's footprint (e.g., travel, waste) and your sustainability goals.			Carbon Footprint Calculator: https://businessclimatehub.uk/carbon-footprint-calculators/
Sustainable travel policy: Formally document a "Train-First" policy for volunteers and ban short-haul flights for NGO events.			A guide to writing a sustainable travel policy: https://cultureforclimate.scot/guide/guide-to-writing-a-sustainable-travel-policy/
Carbon literacy training: Organise or attend a certified training session to ensure your leadership understands climate science.			Carbon LiteracyTraining Resources: literacytrainnhttps://carbonliteracy.com/trainer-hub/resource-library/

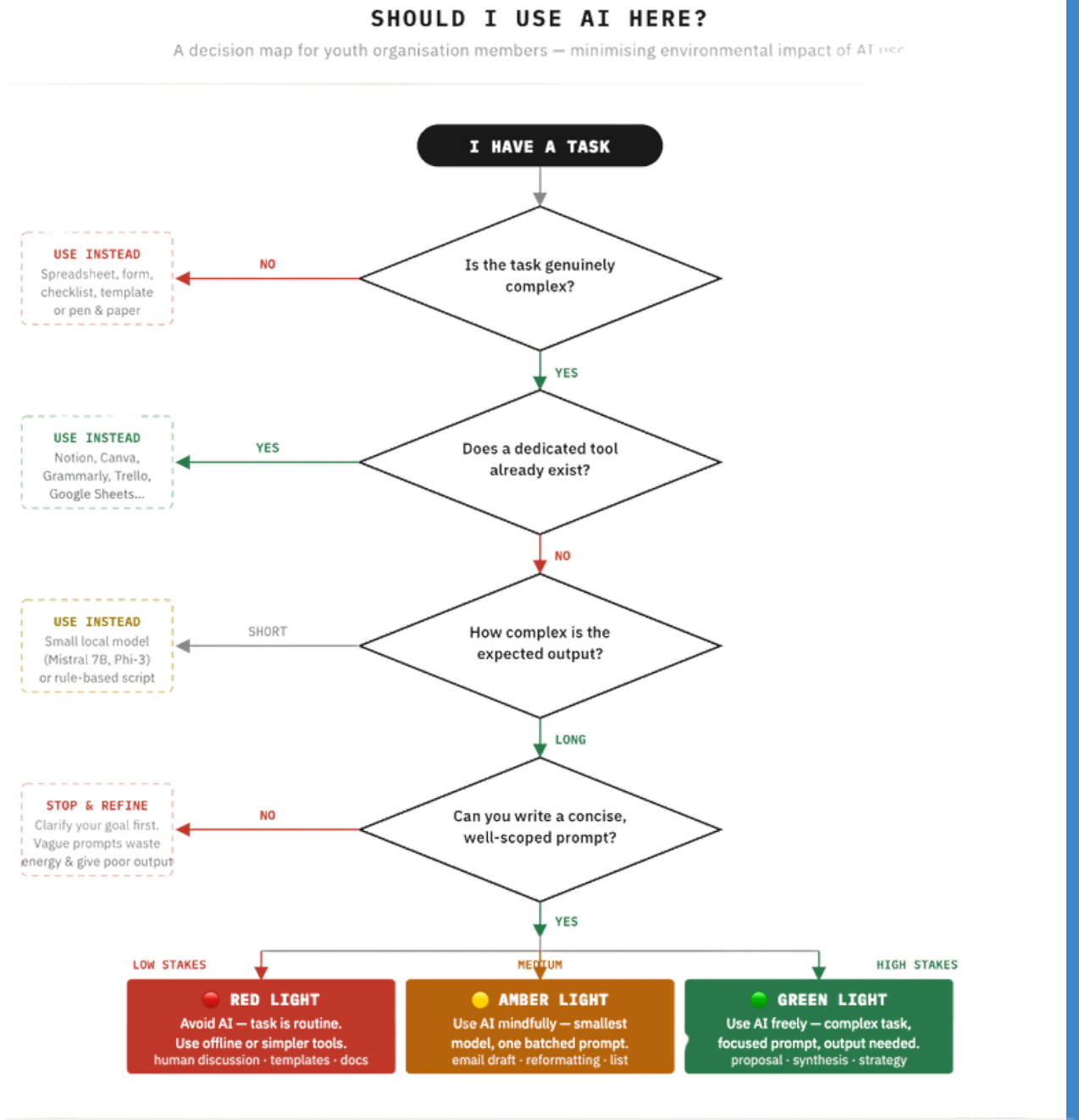
*A traffic colour here is used to suggest how difficult this action is to implement:

Green = can be implemented within a 2 week timeframe
Yellow= takes up to 1 year to implement, cost free
Pink = takes up to 1 year to implement, requires investment

Extra reading and resources

How to use AI sustainably - a decision-making tree

Extra resource from **Digital sustainability in the era of Artificial Intelligence**



Why it matters: a single LLM query can use **10× more energy** than a standard web search. Training and inference consume significant electricity and water. Collective small choices across an organisation add up — use AI as a **tool, not a reflex**.

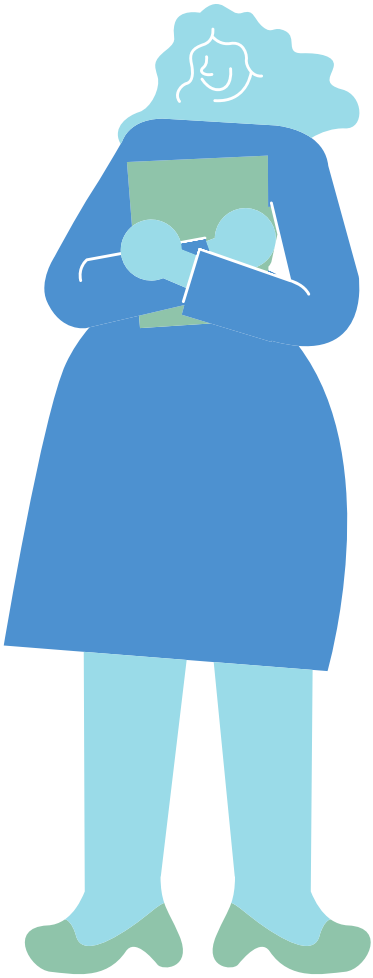
10. Acknowledgements

Responsible for concept and coordination: Molly Scrase-Kings

Researchers (with regard to each section of the handbook):

- Lorenzo Mazzeo, Molly Scrase-Kings (Greener events: carbon budgeting)
- Bethany Lloyd (Under the lens: sustainable food and drink)
- Fatima Madani, Molly Scrase-Kings (Sustainable communication for youth organisations: from awareness to action)
- Şevval Salman (Green policy: How to engage and advocate)
- Lorenzo Mazzeo (Digital austainability in the era of AI)
- Lorenzo Mazzeo (Sustainable KPIs)

Designers and text editors: Irina Radu, Molly Scrase-Kings, Lorenzo Mazzeo



Contact

Generation Climate Europe
Rue des Deux Eglises 14-16
1000
Brussels, Belgium
www.gceurope.org
gce@gceurope.org

Generation
Climate
Europe