

# SUSTAINABILITY HANDBOOK

2024  
Impact Hub Vienna

[Estimated reading time: 35 minutes](#)

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# ABOUT THIS DOCUMENT

This document is to serve as an introduction to the sustainability work undertaken at Impact Hub, Climate Lab and Future Health Lab for any staff member. It should be updated when information of higher quality is found. An annual update is suitable. It is difficult to have expertise on everything from food waste to paper production, transportation policy strategies to the energy market and recycling to toxicology. Therefore it is recommended that life cycle assessments and meta-reviews are used to update this document, and that academia-style referencing is used for transparency and future knowledge management. This should enable non-experts to understand, use and improve this handbook. Currently not every reference is a primary academic reference as the goal has been to explain main fields effectively.

The mandatory criteria M 04 from the Austrian Eco-Label (Umweltzeichen) Green Location states that:

*The enterprise shall inform and train the staff on the basis of samples, written instructions or manuals in order to ensure the application of environmental and sustainability measures and to raise awareness amongst staff on environmentally friendly behaviour. [...] Adequate training shall be provided to all new staff within 4 weeks of starting employment and an update on the above mentioned aspects for all other staff refresher and updating training shall be provided at least once a year.*

**This handbook should therefore be read by everyone within 4 weeks of starting working at Impact Hub, and once per year by all staff members.**

In addition to what is written here, Impact Hub Global have resources as well: <https://impacthub.force.com/s/knowledge-space/ks-environmental-action>

# BACKGROUND INFORMATION

This section aims to provide a short description of the current state of the planet and summarise the environmental problems that we are dealing with.

## Planetary Boundaries

It is true that the climate has been both a lot warmer and colder in the past, but the last 10.000 years have been an unusually stable 'Goldilock Zone' for humanity. This is the era since the last Ice Age known as the Holocene. Anatomically modern humans have existed long before now, but it was not until the Holocene that we could build larger societies, and exist in the numbers that we do now. The Holocene is thus the only state of the planet that can support human life as we know it. Current climate change is also happening a lot faster than climate changes in the past, so the transition could be a lot more dangerous.

What it takes to stay within a Holocene-like state is explained by the Planetary Boundaries framework - parameters of the Earth System we need to avoid transgressing, otherwise risking ours and many other species life on this planet.



Stockholm Resilience Centre (2022). Planetary boundaries. URL: <https://www.stockholmresilience.org/research/planetary-boundaries.html> [Accessed 2022-11-16].

## Mickey Mouse Economics

You may have heard that sustainability consists of three pillars, environmental, social and economic sustainability. This model can be criticised for enabling exchangeability between the three pillars, with economic sustainability unsurprisingly being favoured. This results in what gets called "Mickey Mouse economics", where social and environmental sustainability are the small ears and finances are the large head.

Closer to reality is the recognition that the economy is embedded in the social sphere, and the social sphere is embedded in the environment. One may also question the purpose of the economy as a goal in itself, if it does not lead to increased well-being, for people as well as their organisation. Economic growth is for many businesses an unquestionable goal or perceived as a reliable indicator of success and societal progress. This is however worth questioning, as more and more research reveals that not only does increased growth fail to correlate with increased living standards after a certain point. It is also impossible to maintain unlimited growth on a planet with limited resources. The idea of 'green growth', where economic growth is decoupled from increased resource use, has been genuinely debunked by the European Environmental Bureau (2019):

*[...] not only is there no empirical evidence supporting the existence of a decoupling of economic growth from environmental pressures on anywhere near the scale needed to deal with environmental breakdown, but also, and perhaps more importantly, such decoupling appears unlikely to happen in the future."*

*[...] There are at least seven reasons to be sceptical about the occurrence of sufficient decoupling in the future. Each of them taken individually casts doubt on the possibility for sufficient decoupling and, thus, the feasibility of "green growth." Considered all together, the hypothesis that decoupling will allow economic growth to continue without a rise in environmental pressures appears highly compromised, if not clearly unrealistic.*

**1 Rising energy expenditures.** *When extracting a resource, cheaper options are generally used first, the extraction of remaining stocks then becoming a more resource- and energy-intensive process resulting in an increase in total environmental degradation per unit of resource extracted.*

**2 Rebound effects.** *Efficiency improvements are often partly or totally compensated by a reallocation of saved resources and money to either more of the same consumption (e.g. using a fuel-efficient car more often), or other impactful consumptions (e.g. buying plane tickets for remote holidays with the money saved from fuel economies). It can also generate structural changes in the economy that induce higher consumption (e.g. more fuel-efficient cars reinforce a car-based transport system at the expense of greener alternatives, such as public transport and cycling).*

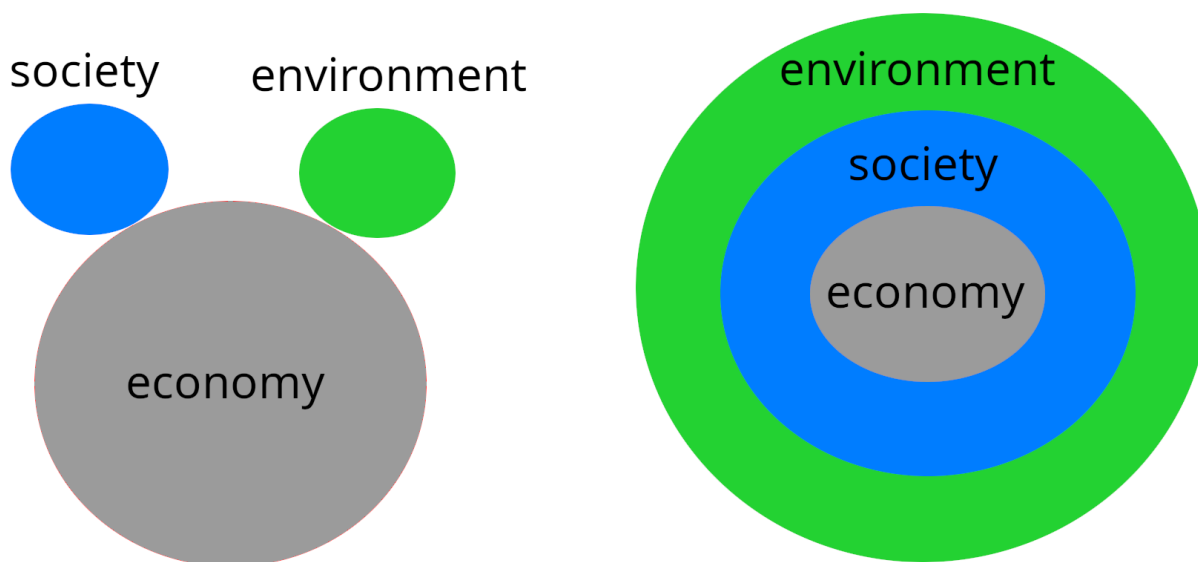
**3 Problem shifting.** *Technological solutions to one environmental problem can create new ones and/or exacerbate others. For example, the production of private electric vehicles puts pressure on lithium, copper, and cobalt resources; the production of biofuel raises concerns about land use; while nuclear power generation produces nuclear risks and logistic concerns regarding nuclear waste disposal.*

**4 The underestimated impact of services.** *The service economy can only exist on top of the material economy, not instead of it. Services have a significant footprint that often adds to, rather than substitute, that of goods.*

**5 Limited potential of recycling.** *Recycling rates are currently low and only slowly increasing, and recycling processes generally still require a significant amount of energy and virgin raw materials. Most importantly, recycling is strictly limited in its ability to provide resources for an expanding material economy.*

**6 Insufficient and inappropriate technological change.** Technological progress is not targeting the factors of production that matter for ecological sustainability and not leading to the type of innovations that reduce environmental pressures; it is not disruptive enough as it fails to displace other undesirable technologies; and it is not in itself fast enough to enable a sufficient decoupling.

**7 Cost shifting.** What has been observed and termed as decoupling in some local cases was generally only apparent decoupling resulting mostly from an externalisation of environmental impact from high-consumption to low-consumption countries enabled by international trade. Accounting on a footprint basis reveals a much less optimistic picture and casts further doubt on the possibility of a consistent decoupling in the future.



**Mickey Mouse model**

**Embedded sustainability**

As it is not only unrealistic to decouple growth from increased resource use, and therefore not possible to maintain infinite growth with finite resources, both *degrowth* (of excessively resource-using systems) and a steady-state economy (maintaining a steady size and economic "metabolism") have been proposed as better options - being neutral about growth or even aiming to limit it, and instead pursuing goals of wellbeing and equality while taking care of the planet that our well being depends upon.

Degrowth has moved from being an obscure radical idea to being cited by the IPCC (2022) as a transition strategy and future pathway.

Green growth on the other hand, moved from being a mainstream, capitalist solution to the environmental crisis, to being debunked by large mainstream organs such as the European Environmental Bureau.

**Supporting references:**

Center for the Advancement of the Steady State Economy (2021) Definition of Steady State Economy. URL: <https://steadystate.org/discover/definition-of-steady-state-economy/> [Accessed 2022-11-07].

D'Alisa, Giacomo, Demaria, Federico & Kallis, Giorgos (red.) (2014). *Degrowth: a vocabulary for a new era*. Abingdon: Routledge

European Environmental Bureau (2019) Decoupling Debunked - Evidence and arguments against green growth as a sole strategy for sustainability. URL: <https://eeb.org/library/decoupling-debunked/> [Accessed 2022-11-07].

Jackson, T., 2016. Prosperity Without Growth. Routledge.

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Raworth, Kate (2017). *Doughnut economics: seven ways to think like a 21st century economist*. White River Junction, VT: Chelsea Green Publishing

IPCC (2022). Climate Change 2022 - Mitigation of Climate Change. URL:

[https://report.ipcc.ch/ar6/wg3/IPCC\\_AR6\\_WGIII\\_Full\\_Report.pdf](https://report.ipcc.ch/ar6/wg3/IPCC_AR6_WGIII_Full_Report.pdf) [Accessed 2022-11-17].

## TOOLS

### About Measuring Our Resource Use And Climate Impact

To reduce emissions, we first need to count them, to see which reduction measures work and which do not work (reduction of one thing might result in higher consumption of another thing, for example). There are always two variables that need to be recorded: type and amount. The type of material, type of food, type of transport, type of energy, etc.

It is insufficient to simply change a product for another product. Example: we may change plastic to paper, if we find that paper has lower environmental impact, but the amount of paper needed for the same purpose may be higher, and the environmental impact might not decrease but stay the same or even increase, if we do not also count the quantity. If we only count quantity, a smaller or lighter material might appear as an improvement, but this different type of material may have a higher environmental impact per unit than the one it replaces.

#### Standards for counting

Regarding climate change there are existing frameworks to estimate our climate footprint. Standards need to be followed, as different data, methodologies and assumptions can create very different results. A climate footprint is counted in 3 different categories.

**Scope 1** – direct company owned or controlled emissions occurring at source

**Scope 2** – emissions associated with the production of energy consumed by a company

**Scope 3** – indirect emissions associated with company activities from sources not owned or controlled by a company”

- Net Zero Climate (2022). What is Net Zero?. URL: <https://netzeroclimate.org/what-is-net-zero/> [Accessed 2022-06-24].

Scope 1 can be emissions directly from the company, such as from machinery, engines and the cooling agents in air-conditioners, and can be measured by reviewing maintenance log or counting how much fuel or cooling agent has been used and emitted.

Scope 2 is for example electricity and heating, and can be recorded from invoices or from metres in the building, or may be available from the energy company directly.

Scope 3 are indirect emissions and these can be from purchases that we make, vehicles we use outside of the company, and the waste we produce.

## GHG Footprint Log (Inflow Log & Outflow Log)

At Impact Hub, we weigh the waste and track purchases and travels as part of our consumption monitoring/footprint. This is required for progressing towards net zero and for holding the Umweltzeichen Ecolabel. Weighing the waste is also the law in Austria for companies of this size. Everyone needs to fill in, purchases, travelled kilometres and mode of transport and type of accommodation in the logs.

Tracking electricity, heating, cooling, and water is currently done by collecting the annual invoices and seeing if they were higher or lower than last year measured in kilowatt hours, litres, or spendings. Metres will be installed to give data more frequently in the future.

A carbon footprint needs to be verified by an independent third party to be legitimate and used for marketing purposes. These estimates are only internal.

**Instructions are found in the 'info' tab of each sheet. Learning resources are under the resources tab in the GHG Footprint spreadsheet files:**

**-REMOVED**

**-REMOVED**

## ClimatePartner

### BACKGROUND INFO:

The carbon footprint of Impact Hub is a prerequisite to reduce our emissions and be aligned with 'net-zero' our company-wide goal from Impact Hub Global and our moral responsibility. We need to see how large our emissions are, where they come from, so we can take steps to reduce it and track this over time to see if the efforts to reduce it are working. The carbon footprint was previously only covering Spaces and some Transports. We are taking steps to complete the carbon footprint, and to verify it through a third party. ClimatePartner is the chosen third party (based on cost, credibility, specialisation towards our business type, and quality of carbon credits used for offsetting) and we are starting with Events, the part of our product that has been most difficult to track ourselves and therefore most cost-effective to outsource. We have acquired a software solution from ClimatePartner for tracking and offsetting Events carbon footprints. The result will be that we can offer "carbon neutral" events - note that the phrase "carbon neutral" has fallen out of fashion and "ClimatePartner-certified" is becoming the official phrase. It means that the carbon footprint of the whole event is calculated and offset through funding carbon removal projects.



#### HOW TO USE IT:

The software offers a simple overview on what type of data needs to be collected. You need to know the number of participants, the dimensions of the room(s) used (metres), the amount of food and other products bought specifically for the event (kg, meals, or pieces depending on what it is. This is visible when using the software.), the distance travelled (departure point, arrival point, or kilometres, + transport mode), streaming hours for online events, hotel nights, and kg of waste. The data collection is divided into separate parts for Employees, Contractors, and Participants. If there is any confusion caused by overlap between these groups, it does not matter where the persons are counted, as long as they are not forgotten, or double-counted. The waste bins associated with Events can be fully counted under the event if the event produces significant waste, if they do not, it is ok to leave the waste out and let that be counted under the waste log of our other, non-event activities. Events staff and Floor managers need to communicate with each other for this.

#### WHAT TO USE IT FOR:

My suggestion is that this tool is used to offer clients the opportunity to have a "carbon neutral" event with us. We can charge extra to cover the small increase in workload from gathering this data and enter it into the software in addition to the cost of offsetting. Offering this to clients can be done when the client is one clear entity that we can communicate with. It also makes sense that we start doing this for our own larger events, when the client is not one entity but diverse, and when we ourselves are the organisers with the decision making power to do this. It seems hypocritical if we encourage clients to certify their events but we do not do it ourselves. It does not make sense to do this for small events (example: bier um vier) where the resource use is small and overlapping with normal non-event activities. It makes sense to do this for our own larger events, offering it to clients, and do this with future accelerator programmes / ES activities).

#### WHAT TO COUNT:

In this tool we would count purchases, travels and waste specifically tied to an Event. Much of the Bookings budget falls under this. The bookings budget that do not fall under this is: "Capital goods" such as a fridge, or "Consumer goods" bought in bulk but not tied to a specific event, such as a big box of tea used continuously. These would be counted under the general inflow log (our COMPANY carbon footprint, while Events is our PRODUCT carbon footprint). Events that are not to be certified can be excluded from both the company carbon footprint (inflow log) and product carbon footprint (ClimatePartner software) as these indirect emissions are voluntary to record and we need to be strategic. It is a decent strategy because Events have many small products which are labour-intensive to count, and because most emissions come from the clients, whose cooperation we need to get the right data. Other circles (ES, Community) should not exclude data from the inflow log until procedures are set up for using the ClimatePartner software. "Visitor travel + hotel nights" is technically optional. According to carbon footprinting standards (GHG Protocol) we should count this when we or the organiser have "operational control", when staff is doing it, or when we are paying for it. Example 1: A client wants a certified event with us = A client has operational control of where they travel, so if we do a ClimatePartner-certified event for them we should count participant travel to events. Example 2:

We design an accelerator programme containing travel = We have operational control of where/if people travel, so we should count it. Example 3: International dinner & Impact Days ; We can not do much to control or know if/how far participants travelled = Participant travel can be excluded. Staff and contractor travel always need to be included though.

#### WHAT IS HAPPENING NOW:

All related circles ( Bookings, ES, Community ) should start counting some events in the ClimatePartner software for the purpose of understanding future budgeting needs, both for offsetting ourselves and for knowing what to charge clients in the future.

Bookings can start to offer this to clients as soon as we know what extra charge to apply since the cost is carried by the client. You can do this by communicating that events can be certified by ClimatePartner, that this is something we do for the client in exchange for an extra cost (to be determined), that this means the carbon footprint is calculated and offset through carbon removal projects, and that in exchange for doing this we need their cooperation in collecting the data described above. They can be sent a summary after the event of the emissions. It is good if the very first CERTIFIED event is small and with someone we are close to so we are comfortable to experiment in setting up routines and the costs involved are not high.

For ES, a few events/programmes should be registered to understand which budgeting needs exist to offset future accelerator programmes. Since budgeting happens annually, accelerator programmes do not have one uniform client to charge, and run over the long term, offsetting can probably not happen now.

For Community, a few of the bigger events should be registered so that we can understand if offsetting these fits in our current budget or need to be budgeted for the future.

When starting "New Calculation", mark these events as "Test calculation" in the software for now.

#### WHO DOES WHAT:

Lead Links are responsible for allocating resources in their circle for starting to use the software. I strongly recommend that this becomes a shared responsibility between several people as experience shows how compartmentalisation does not work for establishing sustainability practices and that responsibility needs to be disseminated throughout the organisation in order to stick. It also needs to keep working if one role is sick or on vacation, for example. As allocation of resources is a default responsibility of the Lead Links, a governance is not needed from my side but can be done by the Lead Links for delegation according to their preference. However, the modest speed and repetitive nature of Holacratic decisions can not be allowed to delay sustainability work.

#### WHEN/DEADLINES

The current tasks mentioned here should be done within this month, to gather enough data before budgeting in autumn and before people are away for summer, and to align with the

carbon footprinting of the company running from May to May in its current form. I will not be available in June, so learning the software before then is needed.

FAQ:

"CAN'T YOU JUST TELL ME WHAT INFO YOU NEED AND I SEND IT AND YOU ENTER IT?"

This will cost you a lot of time, not save you time. I am part time remote and do not have an overview of events. It is 100 times more efficient for everyone if the organisers of an event intently gather data while planning and executing an event than for me to chase after this data through emails for weeks or months. I promise it takes less time for you to enter the data in the software than it does to send emails back and forth with the Sustainability Manager. Once the data is gathered it takes around 10 minutes to enter.

"I DON'T KNOW HOW THE SOFTWARE WORKS"

Do not postpone because you don't know how the software works - Follow steps 1,2,3,4:

1. The software contains written explanations to most of its functions. 2. Reading this email thoroughly explains most of the remaining matters.
3. After this meeting, each relevant circle now has 1 person who knows how the software works. This person can help you understand the software.
4. If other questions arise, message the sustainability coordinator on Slack.

WHAT IS HAPPENING IN THE FUTURE:

Accelerator programmes, internal events and community events may have to be budgeted to be offset. We should also make the appropriate resource use reductions suggested in the software. Eventually, it is the idea that the spreadsheet log (inflow/outflow) is replaced for the ClimatePartner software also for the CCF (Company Carbon Footprint), or that the spreadsheet is used not to estimate CO<sub>2</sub>e emissions but to gather data to be entered into ClimatePartner, so the full footprint of our activities is coherently measured and can be offset. This is planned for 2024. For 2023, ClimatePartner is only used for events.

## Nista

Nista.io is a free online tool for measuring and gaining insights into our electricity use.

Instructions are found at the website, in the software, or by talking to their customer service.

URL: <https://www.nista.io/en/>

## Food Waste Log

The food waste log is a printed paper that contains the columns: Date, Your name, Type of food, Catering company name, Reason for food being wasted, Nr. of portions, and Donated (if we managed to donate the food somewhere rather than just throwing it away). This does not necessarily need to be weighed and strictly quantified, rather it is a tool for us to go over regularly to see what type of food is wasted and why, and how it can be avoided in the future. Currently no statistic is created out of it, instead it is more of a qualitative discussion.

## Umweltzeichen Green Location Software

Impact Hub is certified for Green Events and as a Green Location with the national ecolabel Umweltzeichen. ClimateLab is in progress to be certified.

The software used for certification is found here: <https://tourismus.umweltzeichen.at/index.php>

## Commute

Commutes are gathered through a survey regularly at different times throughout the year to capture staff changes and mobility pattern changes. If done monthly, it is easier to see for the employee when they did and did not commute. The number of commutes, kilometres and mode of transport can then be added to ClimatePartner when we certify the company with them.

## Homeoffice

Homeoffice hours can be gathered from the timesheet that each employee fills in to record their working hours, but we need to make sure that this function is used by everyone to not undercount. Home office hours can be added to ClimatePartner when we certify the company with them.

# TAKING ACTION

## Principles

### Waste Hierarchy / Lansink's Ladder

To conserve resources and thus transgress less towards the planetary boundaries, we should follow the waste hierarchy, also known as Lansinks' Ladder.

- (a) prevention;
- (b) preparing for reuse;
- (c) recycling;
- (d) other recovery, e.g. energy recovery; and
- (e) disposal.

EUR-Lex (2008). Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives. URL:

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02008L0098-20180705> [Accessed 2022-07-29]

This general principle also translates to procurements; all other things being equal, it is generally better to not purchase something, secondly purchase reused goods, thirdly recycled,

and only after that newly produced. Lansink's ladder can be popularly summarised as **Refuse > Reduce > Reuse > Recycle > Recover > Dispose**.

## Food-Energy Pyramid

Tertiary consumers (Carnivores):	10 Joule
Secondary consumers (Herbivores):	100 Joule
Primary producers (Plants):	10000 Joule
Incoming energy (sunlight):	1000000 Joule

The food energy pyramid describes the different trophic levels in an ecosystem. A general rule is that approximately 90% of the energy is lost between each trophic level. This is why it takes less resources to maintain a plant-based diet over a meat-based diet. This is also known as the 10% rule, which is well-known and can be found in many introductory biology / ecology textbooks.

## Green Transport Hierarchy

The green transport hierarchy was first created by Chris Bradshaw (1992) as a guidance for environmentally friendly and socially fair modes of transport. The full version of the proposed transport hierarchy is as follows:

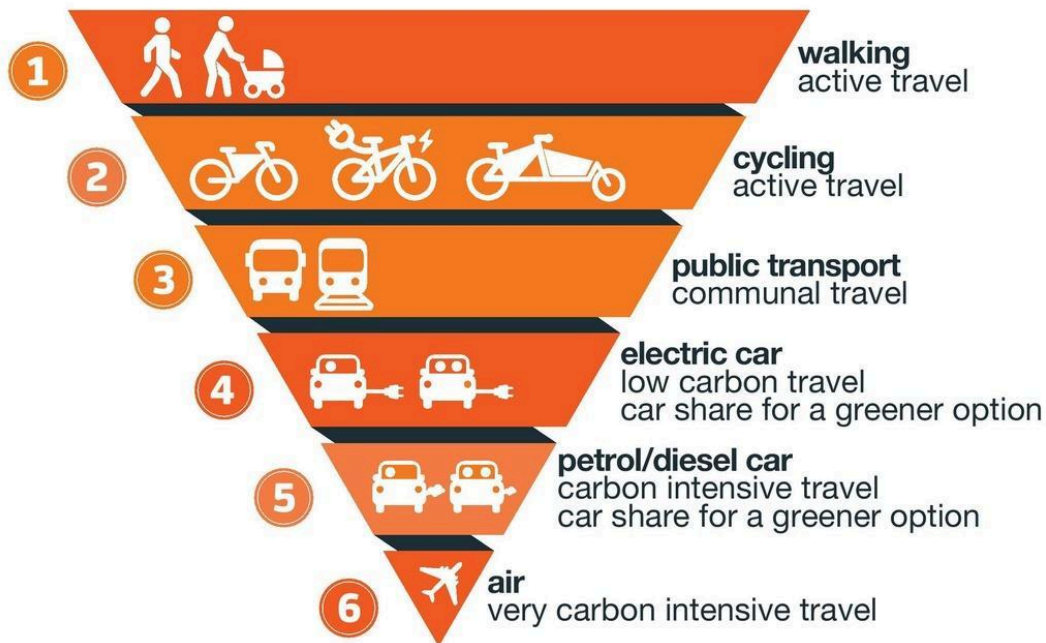
*FACTORS ("HIGHEST" AT TOP, "LOWEST" AT BOTTOM):*

- **Mode:** *Walk > Cycle > Bus > Truck > Car*

- **Energy Source:** Human-powered > Gravity > Solar > Wind > Hydrogen (Not yet)

## LOW CARBON TRANSPORT HIERARCHY

ENCOURAGING SUSTAINABLE TRAVEL TO REDUCE EMISSIONS



commercially available) > Electric or inertia (e.g. flywheel) to store energy from another source) > Hydrocarbon > Nuclear

- **Trip Length:** Short > Long
- **Trip Speed** (danger and wind friction): Slow > Fast
- **Vehicle Size** (weight and profile against the wind): Small > Large
- **Vehicle Utilization:** (efficiency): Full > Empty
- **Trip Segment:** Access to a property > Through movement
- **Trip Purpose:** ("exchange value", synergy, sustainability): To meet people > To reach a special place > To move goods > To reach work > To move information > For recreation/entertainment > To save a little money > For thrills
- **Traveller:** Young child > Disabled > Senior > Visitor/Newcomer > Adolescent > Adult

(Formatting changes made from the original text)

Bradshaw also lists the following benefits to following the suggested hierarchy:

### A. Physical

*Reduced air pollution and acid rain*  
*Less Noise in public places and homes*  
*Reduced urbanisation of agricultural and sensitive lands*  
*Less street dirt and grime*

## **B. Social**

*Reduced street crime (more "eyes" on street)*  
*Increased personal fitness*  
*Higher quality street life*  
*Fewer injuries/deaths from "accidents"*  
*Less loss of time due to congestion*  
*Less need for poor/seniors to buy/maintain a car*  
*Children spend less time passively being chauffeured (walking is their natural mode because they remain active and stay within their known world)*  
*seniors have more independence; less exposure to "accidents"*

## **C. Economic**

*Lower energy costs; less vulnerability to energy interruptions*  
*Revitalised neighbourhood shopping areas*  
*Lower costs for health care*  
*Less lost-time from injuries, stress, congestion*  
*Lower transportation costs to all*

Bradshaw, Chris (1992[1994]). Green Transportation Hierarchy: A guide for personal and public decision-making. Prepared for Ottawalk and the Transportation Working Committee of the Ottawa-Carleton Round-table on the Environment (Greenprint), Jan 1992 by Chris Bradshaw (revised September 1994). URL: <https://vault.sierraclub.org/sprawl/articles/trips.asp> [Accessed 2022-08-01].  
Home Energy Scotland (2020). Transport Hierarchy. URL: [https://www.homeenergyscotland.org/wp-content/uploads/2020/08/Transport-Hierarchy\\_1.jpg](https://www.homeenergyscotland.org/wp-content/uploads/2020/08/Transport-Hierarchy_1.jpg) [Accessed 2022-11-16]

## The Material Pyramid

The material pyramid is an interactive tool available at: <https://www.materialepyramiden.dk/#>  
It shows roughly which materials are more sustainable than others. Not buying materials unless they are absolutely needed is always more sustainable though.

AR3T



A similar choice hierarchy to the ones already explored is the AR3T framework for businesses to avoid harmful impact on nature. The most desirable step is to AVOID harmful impact. If that is not possible, REDUCE it. When impacts cannot be avoided, RESTORATION & REGENERATION is the third best option, and in the repertoire is also to TRANSFORM by enabling global scale positive changes in various ways.

See the Science-Based Targets for Nature Initial Guidance for Business for more information:

<https://sciencebasedtargetsnetwork.org/wp-content/uploads/2020/11/Science-Based-Targets-for-Nature-Initial-Guidance-for-Business.pdf>



## Environmental Leakage, Rebound Effects & Jevons Paradox – The Importance Of Measuring Everything

Well-intended sustainability practices, if they are limited in scope, may even if successful for their specific purpose, result in increased pressures elsewhere. An international example is how protecting an ocean area from overfishing has led to even more overfishing in other areas. This is called 'environmental leakage'.

Similarly, increased resource efficiency does not always lead to the corresponding amount of resource savings, due to what is called the "rebound effect". This effect can be both direct and indirect and is explained well by VDE/DKE (2018):

### **Direct rebound**

*"A direct rebound is an increased demand for the same good. Energy services which are provided more efficiently are thus cheaper. The cheaper the service, the greater the demand. For example, a more efficient lamp saves energy, (some of) which is then used for longer lighting periods (e.g. at night)."*

### **Indirect rebound**

*"All those who save energy and therefore money due to increased efficiency, will spend the money on other things that also consume energy. This raises the demand for additional products that also require energy for their production, operation and disposal. For example, petrol will be saved after purchasing an efficient car. The money from this saving can then be used to book a flight."*

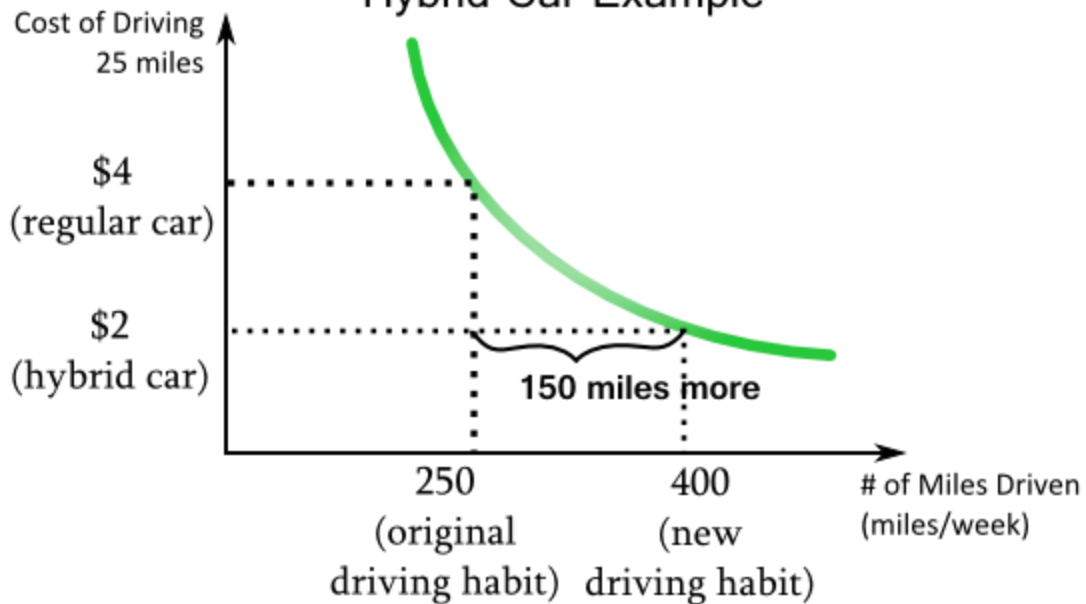
VDE Verband der Elektrotechnik / DKE Deutsche Kommission Elektrotechnik (2018). Electrical Energy Efficiency German Standardization Roadmap Version 2. URL:

<https://www.dke.de/resource/blob/950186/b602220460b894dfe4be445e5eda8b0a/nr-energieeffizienz-v2-en-data.pdf>  
[Accessed 2022-07-29].

It is very important that resource savings are not incorrectly considered as environmental progress, if they are used for consumption elsewhere in the system. The risk of rebound effects can hopefully be alleviated by counting ones **total** resource use, making this 'elsewhere' in the system visible, as well as being aware of the rebound effect and environmental leakage when designing strategies.

For us, this could mean that a well-intended reduction measure in let us say, plastic usage, could increase our paper usage and depending on the amount even outweigh the benefits of reduced plastic use. For this reason it is important to measure our full footprint, Scope 1, 2, and 3. It also means to not only consider CO<sub>2</sub> but count the other greenhouse gases (as CO<sub>2</sub> equivalents), and to not only consider greenhouse gases but not forget about, for example biodiversity (by also choosing products with a reliable and ambitious eco-label), and social aspects (for example by buying climate offsets that carry the Gold Standard label, taking not only reduced GHGs into account but also the social impact of the project).

# Jevons Paradox: Hybrid Car Example



Greenevelien.com. URL: <https://www.greenevelien.com/blog/wp-content/uploads/paradox1b.png> [Accessed 2022-11-16]

## Recommendations

### Offsetting

The main rule about offsetting is: "Reduce what you can, offset what you can't." The second rule would be that the calculations need to follow established industry principles such as the GHG Protocol, and not include subjective, self-congratulating ways of counting.

Offsetting is the last option after attempting to stop polluting, by using less, finding alternatives, and reforming our business model to be less pollutive. In 2022, offsetting does not impress anyone with knowledge in the field of climate change, and has been compared to the Mediaeval practice of buying "indulgences" to pay off ones guilt, but permit one to keep "sinning". With this being said, buying high quality offsets (Gold Standard) for the unavoided emissions is better than doing nothing. It is common to make an upper-end estimate to account for uncertainties. Despite this significant underreporting occurs, actually reaching 300% for the energy sector (which fuels the other sectors). Additionally, just offsetting what we pollute does not create a net GHG reduction, rather it cancel out emissions that already occurred and keeps us at a standstill.

It is therefore recommendable to offset doubly, meaning around 600% of our calculated emissions.

Harvey, F. (2022). Oil and gas greenhouse emissions ‘three times higher’ than producers claim. The Guardian 2022-11-09. URL:

<https://www.theguardian.com/environment/2022/nov/09/oil-and-gas-greenhouse-emissions-three-times-higher-than-producers-claim> [Accessed 2022-11-29].

Climate Trace (2022). More than 70 000 of the highest emitting greenhouse gas sources identified in largest available global emissions inventory. URL:

<https://climatetrace.org/news/more-than-70000-of-the-highest-emitting-greenhouse-gas> [Accessed 2022-11-29].

## Energy Markets

To avoid confusion it can be worth clarifying that energy can be both electric and thermal, or in other words the word energy is an umbrella term covering both electricity and heating.

### Choosing electricity source and provider

Using renewable energy is often seen as an obvious choice for the purpose of avoiding dangerous levels of climate change as well as creating a future where humanity does not risk energy scarcity once non-renewables run out. However, different sources of energy have different types of environmental impact, even if they are renewable, and choosing renewable energy does not automatically equal zero greenhouse gas emissions. A recent paper states:

*In contrast to today’s dispatchable, fossil-fueled, thermal generation sources, the availability of solar and wind resources varies throughout the day and by location. In highly renewable power grids, the environmental quality of electricity will also vary correspondingly. Considering only annual or country-level carbon intensity data will lead to erroneous carbon accounting and, ultimately, inefficient investment. As is now recognized by some large corporate actors, claims of “100% renewable energy” do not guarantee commensurate emissions reductions. [de Chalendar & Benson 2019]*

In an interview, one of the authors of the above papers phrased the same sentiment followingly:

*“To guarantee 100 percent emissions reductions from renewable energy, power consumption needs to be matched with renewable generation on an hourly basis,” said Sally Benson, co-author of the paper and co-director of the Precourt Institute for Energy.*

*“Just purchasing more solar energy in a grid that already has lots of solar generation will not result in zero emissions,” Benson, professor in the Energy Resources Engineering Department in the School of Earth, Energy & Environmental Sciences (Stanford Earth), also said.*

Luckily, there are external reviews and ratings available to find the better options. The IPCC (2012) has reviewed different energy sources and their environmental impact. Also the Greenhouse Gas Protocols’ Scope 2 guidance offers recommendations in Chapter 11: *How Companies Can Drive Electricity Supply Changes with the Market-Based Method*. One of them is the non-profit label EKOenergy « <https://www.ekoenergy.org/> » certifying that the electricity production lives up to certain environmental standards. There are also electricity providers certified by the Austrian Umweltzeichen label. Perhaps most useful is the ranking of electricity providers by Global2000 “Stromanbieter-Check” where the top category are providers that are contributing to changing the electricity grid for the better.

## References:

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- GHG Protocol Scope 2 Guidance. URL: [https://ghgprotocol.org/sites/default/files/standards/Scope%20%20Guidance\\_Final\\_Sept26.pdf](https://ghgprotocol.org/sites/default/files/standards/Scope%20%20Guidance_Final_Sept26.pdf) [Accessed 2022-10-25].
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- Global2000 (2021) Stromanbieter-Check. URL: <https://www.global2000.at/publikationen/stromanbieter-check> [Accessed 2022-10-25]
- Stanford Earth Matters magazine. 2019. When 100% renewable energy doesn't mean zero carbon. URL: <https://earth.stanford.edu/news/when-100-renewable-energy-doesnt-mean-zero-carbon> [Accessed 2022-05-09].

## Reducing Energy And Other Resource Use

Broadly we can say there are 4 ways to reduce energy use – increasing efficiency, decreasing losses, optimised use, and decreased use.

- Increasing efficiency can be done by exchanging appliances for more energy-efficient appliances - but be wary of 'environmental leakage' (see above) – buying new appliances may or may not outweigh the energy savings, so compare the two before making major decisions. A simple heuristic can be that once a device is bound for replacement anyway, such as from being broken, replace it with an energy-efficient successor. The European Energy label and the American Energy Star are some of the most notable rankers of energy-efficiency for electric appliances. Aim for the highest efficiency possible.
- Decreasing losses is for example insulating or draught-proofing doors and windows, ensuring that the refrigerators close properly, or creating routines to not leave windows and doors open when the heating or AC is turned on. Reducing 'parasitic' energy loss by disconnecting appliances that use electricity when idle or on standby is another way of decreasing losses .
- Optimisation means using the resources we have more efficiently, such as installing timers to only use electricity or heating when it is actually needed, running the dishwasher full, adjusting food serving sizes to the amount that people actually want to eat, etc.
- Decreasing resource use, often meaning compromising using it only when it is truly needed.

## Meetings

One person flying in for a one day conference from, for example, Amsterdam to Vienna would release greenhouse gases representing over 300 kg of carbon dioxide [1]. If you take a train or bus you could cut this number by two-thirds. Online meetings enable even larger savings.

Several estimates [2,3,4,8] find that an online video call typically causes only a few percent of the emissions from flying in for a meeting.

Avoided emissions should always be the first option. For those emissions, travel or otherwise, that for some reason simply can not be reduced or avoided, buying high quality and independently verified carbon offsets is better than doing nothing. The most stringent carbon offset standard is called the Gold Standard [5]. It can be deeply recommended to compensate at least double of what is emitted, in order to improve the current climate situation rather than remain at a stand-still, and to do so through a Gold Standard certified project << <https://marketplace.goldstandard.org/collections/projects> >>.

It can not be denied that online activities also use considerable amounts of resources [6], and that online meetings may not simply replace an otherwise identical physical meeting, but can open up for more participants that would not have otherwise travelled in. The larger that number is, the less greenhouse gas emissions are saved, but it also enables knowledge sharing with people that would otherwise not have had the opportunity to participate for financial or other reasons.

One way of comparing the effect on climate change of a meeting is to use the Arts Carbon Calculator << <https://artscarbon.com/> >> for online media and the Travel and Climate Calculator << <https://travelandclimate.org/> >> for travelling. And if you want to reduce the emissions from your online activities, turning off your webcam and streaming videos in standard rather than high definition can cut that number by more or less 90% [6].

## References:

- [1] Travel & Climate (2022). Calculate your trip's climate footprint | Travel & Climate. URL: <https://travelandclimate.org/> [Accessed 2022-02-28].
- [2] Arts Carbon (2022). Carbon emissions calculator for streaming media. URL: <https://artscarbon.com/> [Accessed 2022-02-28].
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- [4] Grant Faber (2021). A framework to estimate emissions from virtual conferences, International Journal of Environmental Studies, 78:4, 608-623, DOI:10.1080/00207233.2020.1864190
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- [8] Hiltner, K. (2020). A Neary Carbon-Neutral Conference Model. URL: <https://hiltner.english.ucsb.edu/index.php/ncnc-guide/> [Accessed 2022-03-07].

## Online Services

Fact is that online services and events have a significant environmental impact<sup>1 5</sup>, which makes it important for us to keep in mind from the beginning so that we don't have to tear down and re-build our online community it after a few months or years if we are to reach the Impact Hub goal of carbon neutrality by 2025. To quote an example from Anthropocene magazine<sup>6</sup>, "Putting on a one-day virtual conference with about 200 participants resulted in carbon emissions roughly equivalent to that of driving almost 3,300 miles or burning nearly 1,500 pounds of coal". A website should be less data intensive than video streaming, but on the other hand needs to be turned on 24/7, 365 days per year. A recent Zoom event of ours (Sustainable foods) can be estimated by rudimentary online tools<sup>7</sup> to release around 30 kg CO<sub>2</sub> equivalents based on the duration and number of participants.

With open-source software, we can choose which server to run our platforms on and make sure that it lives up to our ethical and environmental standards ( i.e. runs on green energy, on our own server or a company that lives up to our standards), and most importantly, move it if they don't. With proprietary software however, there is a risk that we get locked into a situation where our commercial partner is not able to meet our standards and we are forced to either tear down and rebuild our online community, or stay in an undesirable deal.

In addition to mobility, these and other open-source platforms typically have stronger security and respect of privacy. Solid data protection can be part of what we offer our members, and can be especially important in the work of minority rights, activism, and religious freedom in certain parts of the world, someone's immigration status, whistle-blowing or simply protecting business secrets and banking information from cyber crime.

Privacy may not appear to be a problem in countries where people enjoy relatively strong protection of their rights and low levels of corruption, but ours and our members' social networks and especially digital tools and online platforms, are not confined to Austria. We all socialise or work with someone from other countries. And globally, hundreds of environmental activists<sup>2</sup> and several journalists<sup>3</sup> are murdered every year. To consciously choose an ethical and safe and online platform is an opportunity for us to be good role models and spread best practices (to 'build a world that works for all'). Simply being connected to someone working with controversial topics (that are perhaps not controversial at all here and now, but can be very controversial in other places, or in the future) can be enough to cause persecution. Those who pay little attention to data protection risks being the leak that enables persecution for everyone they exchange information with.

It should be mentioned that open source software is also free and gives the opportunity to save significant amounts of money. We can also better guarantee GDPR compliance by hosting our own data and using the inherently transparent open source licence.

Other platforms that may be suitable, for example if we want a closed discussion space, are the Matrix and XMPP protocols. These are more fully fledged group chats platforms that work in the browser, not unsimilar to Slack, but free and open-source. If we are interested in a publicly visible space such as a forum, there are options for that as well. There are also alternatives for platforms such as Google Drive, which is not expected to run on carbon-free energy until 2030<sup>4</sup>, leaving us 5 years when we might have to pay compensation for Google's carbon emissions to reach the Impact Hub goal of carbon neutrality in 2025. The same might go for other services we are currently using.

If you have a certain type of platform in mind, <https://switching.software/> , <https://ethical.net/> , and <https://alternativeto.net/> are excellent resources to find ethical, free and open-source options for pretty much everything, and I urge everyone to look through especially the first two.

Many of these platforms are federated – meaning that apps can 'talk' to each other regardless of which server they are on, in the same way that all email servers can communicate with each other, regardless of the provider. This means that we can connect and collaborate with other communities (possibly other Impact Hubs for example) running compatible software if we want to, but we should also be able to choose to not federate with any server we don't want to share content with. We can investigate the different options based on our needs.

In addition to the above benefits, privacy-respecting online services can be assumed to be more environmentally friendly even when not on a designated green server, as they do not collect more data than necessary to provide the service, reducing energy consumption for data transmission and data storage. This is difficult to say for certain as economies of scale applies, which may change over time as a service grows, and as many of the regular and commercial

companies are not very accessible and transparent about which and how much data they collect, but can be a useful heuristic rule.

#### References:

- <sup>1</sup>Grant Faber (2021) A framework to estimate emissions from virtual conferences, International Journal of Environmental Studies, 78:4, 608-623, DOI: 10.1080/00207233.2020.1864190
- <sup>2</sup>Global Witness. 2021. LAST LINE OF DEFENCE - The industries causing the climate crisis and attacks against land and environmental defenders. ISBN: 978-1-911606-55-0
- <sup>3</sup>Reporters Without Borders. 2020. Red alert for green journalism – 10 environmental reporters killed in five years. URL: <https://rsf.org/en/news/red-alert-green-journalism-10-environmental-reporters-killed-five-years> [2021.12.13].
- <sup>4</sup>Talbott & Conkling. 2021. Announcing new tools to measure - and reduce - your environmental impact. URL: <https://cloud.google.com/blog/topics/sustainability/new-tools-to-measure-and-reduce-your-environmental-impact> [2021.12.13].
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- <sup>6</sup>DeWeerd, S. 2021. New study quantifies the carbon emissions of virtual conferences. Anthropocene Magazine. URL: <https://www.anthropocenemagazine.org/2021/02/virtual-conferences-have-a-low-climate-impact-but-not-zero/> [2021.12.20]
- <sup>7</sup>Arts Carbon. URL: <https://artscarbon.com/> [2022.01.25]

#### Extra:

Kirchgaessner, S. 2019. Revealed: Google made large contributions to climate change deniers. URL: <https://www.theguardian.com/environment/2019/oct/11/google-contributions-climate-change-deniers> [Accessed 2022-10-13].

## Communicating Sustainability And Avoiding Greenwashing And Impact-washing

Greenwashing is defined by the Merriam-Webster dictionary as *"the act or practice of making a product, policy, activity, etc. appear to be more environmentally friendly or less environmentally damaging than it really is"*.

It is extremely important to avoid greenwashing. COP27 recently announced a zero-tolerance statement on greenwashing.

*"But the bad news is that too many of the net-zero pledges are... little more than empty slogans and hype," she argued. "Why is greenwashing so bad? In part, because the stakes are so high. It's not just advertising, bogus net-zero claims drive up the cost that ultimately everyone would pay. Including people not in this room, through huge impact, climate migration and their very lives"*.

*"Using bogus 'net-zero' pledges to cover up massive fossil fuel expansion is reprehensible. It is rank deception. This toxic cover-up could push our world over the climate cliff. The sham must end"*

*Please read the article in full here: UN News (2022). COP27: 'Zero tolerance for greenwashing', Guterres says as new report cracks down on empty net-zero pledges. 8 November 2022. URL: <https://news.un.org/en/story/2022/11/1130317> [Accessed 2022-11-29].*

It is therefore necessary to change the marketing mindset from trying to appear as attractive as possible, to a scientific one of being as clear and truthful as possible. Communicating

sustainability claims externally carries strict legal restrictions. This responsibility falls on the Marketing and Legal teams.

We have previously communicated externally our sustainability efforts under the following format:

*"At Impact Hub we are on a mission #TowardsZero*

*What does it mean?*

*We want to become a community with net zero greenhouse gas emissions, reduced and circular resource use, who protects biodiversity and avoids harmful substances here and in our supply lines."*

\*Followed by more specific information\*

## SUSTAINABILITY COMMUNICATION RESOURCES:

- **Climate Visuals:** <https://climatevisuals.org/>  
Guidelines for effective climate communication and an image-library for climate efforts, partially under the Creative Commons licence, showing real climate efforts with people-centred narratives, no staged photos, and claim an evidence-based effect.
- **Cayla Silbermann – Freelance science communicator and graphical designer**
  - <https://www.silver-catalyst.design/>
  - [email@silver-catalyst.design](mailto:email@silver-catalyst.design)
  - <https://www.linkedin.com/in/cayla-silbermann-b61bbb234>
- **ClientEarth Communications - The legal risk of advertising carbon ‘offsets’**  
<https://www.clientearth.org/latest/latest-updates/stories/the-legal-risk-of-advertising-carbon-offsets/> [Accessed 2022-11-29].
- **Legal recommendations for how to avoid greenwashing (automatically translated from Swedish)** Original title: Att tänka på vid användning av klimat-, hållbarhets-, och miljöpåståenden i reklam. From Westerberg, published 2021.  
[https://drive.google.com/file/d/1ByyNMhsNXx8vaLbUpqI8SuyT8T8auvv9/view?usp=share\\_link](https://drive.google.com/file/d/1ByyNMhsNXx8vaLbUpqI8SuyT8T8auvv9/view?usp=share_link)
- **ISO14021 - Environmental labels and declarations — Self-declared environmental claims (Type II environmental labelling):**  
[https://drive.google.com/file/d/1fIPBwPzhBkgfaKRS0HLMYNEu8FGwKf7/view?usp=share\\_link](https://drive.google.com/file/d/1fIPBwPzhBkgfaKRS0HLMYNEu8FGwKf7/view?usp=share_link)
- **BBC articles exemplifying greenwashing:**
- *Why 'bio' and 'green' don't mean what you think*
  - <https://www.bbc.com/future/article/20220330-why-bio-and-green-dont-mean-what-you-think>
- *The adverts banned for misleading climate claims:*
  - <https://www.bbc.com/future/article/20220302-the-adverts-that-were-banned-for-misleading-climate-claims>
- *Oatly ads banned over 'misleading' environmental claims*
  - <https://www.bbc.com/news/business-60128075>



### **Paragraph for onboarding new members:**

*"At Impact Hub we are on a mission #TowardsZero*

*What does it mean?*

*We want to become a community with net zero greenhouse gas emissions, reduced and circular resource use, who protects biodiversity and avoids harmful substances here and in our supply lines.*

*Things you can do as a HUBber to help us reduce our environmental impact:*

*In an internal estimate we found that paper products seem to make up a large part of our greenhouse gas footprint. We are figuring out how to improve in this regard and encourage both staff and members to "think before you print" and only print what you really need.*

*It also often happens that you get automatically subscribed to magazines you do not really want, or are not interested in anymore. Please help us reduce our waste by unsubscribing from unnecessary magazines!*

*We also encourage everyone to use public transport [link to [bikesharemap.com/vienna/](https://bikesharemap.com/vienna/) and ÖBB travel planner] and we have expanded our bicycle parking with two courtyards, so that as many as possible can travel to us fossil-free.*

*Another way to help us in our mission towards zero as well as the current energy crisis this winter is to opt for an extra layer of clothing over extra heating, and to not leave windows open for longer than what is really necessary. Thank you for your cooperation!"*

### **IMPACT-WASHING**

Related to greenwashing is the term "*impact washing*". Impact-washing is defined as all marketing claims done by different stakeholders without having authentic evidence that they generate an environmental or social benefit. In an interview this year The Swedish National Advisory Board for Impact Investing issued a stern warning:

*"[Increased impact investment] is not only positive [...] When there is no common definition of what impact is, it is not possible to hold anyone accountable for impact-washing. [...] There is a danger with capital flowing into businesses without the businesses making any remarkable impact in society."*

Jenny Carencó, from the aforementioned advisory board gives the following example:

"Let's say a certain software company develops a financial direction system where one may also register CO2 emissions. Then the company says, and stakeholders who want to invest, that this is an impact-investment. But it does not contribute to reducing emissions, but only register emissions. By lack of knowledge it is classified as an impact company"

### **References:**

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ISO (2021) Impact washing: what is it and how to spot it. URL: <https://www.iso.org/news/ref2752.html> [Accessed 2023-05-15].

## Policies

Policy name	Glassfrog link:
Discarding unused items policy	REDACTED
Procurement policy	REDACTED
Travel policy	In progress ( )
Expansion policy	In progress ( )
Allergy & Asthma-friendly products policy	In progress ( )
Energy control & conservation policy	In progress ( )

## Projects

For existing measures, refer to the Sustainability Concept / Nachhaltigkeitskonzept for each location. For future planned measures, refer to the Action Plan of each location and the project listed in Glassfrog.

Lindengasse: Redacted (Internal team see documentation in appropriate Drive folders)

Climate Lab: Redacted (Internal team see documentation in appropriate Drive folders)

Future Health Lab: not started yet

## Staff Conservation Volunteering Days Programme

### Motivation, Benefits And Structure

#### 1. The importance of biodiversity

There is an urgent need to take action against biodiversity loss. This is evident by looking at the 'planetary boundaries', a framework that shows which parameters the Earth system needs to respect to stay within a 'safe operating space' for human life on the planet. Biodiversity loss is one of the furthest transgressed boundaries, and it ultimately threatens human wellbeing as well, as we are dependent on healthy ecosystems to deliver clean air, water, food, medicine, construction material, and much more. For example, in just 50 years, we have lost 2/3 of animal populations. As an office space which do not administer any form of natural habitat we are limited in what we can do. One option that remains available is 'staff conservation volunteering'. Some progressive companies opt to permit their employees to use a number of days per year for volunteering with nature conservation. In addition to safeguarding biodiversity, which is the

main goal, there are numerous benefits for both the employee personally, professionally and for the company as a whole.

## 2. Personal, professional and organisational benefits

The programme will provide an opportunity for the employees to learn something new, explore and live out their personal interests, and contribute to their personal development. Actively contributing to something meaningful can also bring personal fulfilment, as well as nurturing an emotional or even spiritual connection to nature.

### 2.1 Health benefits

There are also clear health benefits. Office workers often suffer the consequences of being sedentary for extended periods of time, low sun exposure and therefore vitamin D deficiency, not to mention the poor air quality in many cities. Vitamin D deficiency has even been compared to a pandemic in some medical research, and is estimated to have quadrupled the death rate during the COVID-19 pandemic. It is also connected to health problems such as preeclampsia, periodontitis, autoimmune disorders, infectious diseases, cardiovascular disease, deadly cancers, type 2 diabetes and neurological disorders. Air pollution is considered "the single largest environmental health risk in Europe". The European Environment Agency reports that:

*Both short- and long-term exposure to air pollution can lead to a wide range of diseases, including stroke, chronic obstructive pulmonary disease, trachea, bronchus and lung cancers, aggravated asthma and lower respiratory infections. The World Health Organization (WHO) provides evidence of links between exposure to air pollution and type 2 diabetes, obesity, systemic inflammation, Alzheimer's disease and dementia. The International Agency for Research on Cancer has classified air pollution, in particular PM2.5, as a leading cause of cancer. A recent global review found that chronic exposure can affect every organ in the body, complicating and exacerbating existing health conditions.*

In addition, air pollution has also been linked to mental illnesses such as depression, bipolar disorder, and schizophrenia. Sedentary work also negatively influences many types of health factors. The World Health Organisation states the following key facts:

- *Physical activity has significant health benefits for hearts, bodies and minds*
- *Physical activity contributes to preventing and managing noncommunicable diseases such as cardiovascular diseases, cancer and diabetes*
- *Physical activity reduces symptoms of depression and anxiety*
- *Physical activity enhances thinking, learning, and judgement skills*
- *Physical activity ensures healthy growth and development in young people*
- *Physical activity improves overall well-being*
- *Globally, 1 in 4 adults do not meet the global recommended levels of physical activity*
- *Up to 5 million deaths a year could be averted if the global population was more active*
- *People who are insufficiently active have a 20% to 30% increased risk of death compared to people who are sufficiently active*

### 2.2 Soft skills and satisfaction

These strong personal benefits also carries over to the professional, and in turn, the organisational level. An employee would not only boost their health, with obvious benefits such as having more energy, and needing fewer sick days, which may well make up for the time

spent away for doing the conservation volunteering and better overall wellbeing, but as listed above have enhanced 'thinking, learning and judgement skills'. An employee not previously experienced in such work could develop soft skills such as confidence and environmental resilience which could help them deal more comfortably with changing situations in the workplace. Employees, especially foreign employees, will get an additional opportunity to explore Austria, connect with local communities, which can aid comfortable integration into Austrian society.

The social interaction with different people that conservation volunteering can bring when it is done in teams can boost soft skills useful for the workplace. In addition to developing their personal knowledge, the employee could also use this knowledge to contribute to the organisations delivery of their CSR (corporate social responsibility) and environmental commitments. Not only environmental knowledge, but experience with other organisational systems, i.e. the volunteer organisation, could bring mutual benefits as well. Allowing the employee more opportunities to explore their interests outside of everyday work routines can help keep employees from feeling like they have to quit and change jobs to explore those interests, resulting in higher workplace satisfaction and lower employee turnover. In the case that employees choose to spend their conservation days together, it could also boost community feeling, cooperational skills, and emotional connections.

### 2.3 Networking

The exposure to conservation work in nature where different stakeholders are involved provides experience with different management and leadership types, experience which can be brought back to the workplace, both internal team relations and to interactions with external actors, including NGOs' locals, volunteers, employees and decision-makers of different sectors. It is simultaneously an excellent networking opportunity for the employee to dive into different areas of work that can be related to our programmes and services and build future partnerships upon. It appears obvious that both the creation of new partnerships and the quality of existing partnerships will benefit significantly if the people involved have a holistic understanding of the work, where there is an emotional attachment and an understanding of purpose-driven ventures out of their own motivation. Conservation volunteering would expose and equip the employee with the relevant language, personal understanding, and emotional connection to the work that happens on the ground in the sphere of societal change. This can be compared to the manner in which one has a better understanding of the needs of a startup company if one has had their own startup. It would thus create a positive feedback loop, combining administration, facilitation and theory, with direct contribution, on-the-ground action and practice, in the category of mission, purpose, and value-driven work, where each benefits the other.

### 2.4 Summary of benefits

Once the employee comes back from their conservation days, they will have done something truly good and, importantly, tangible, for the planet and in turn humanity, bringing them more sense of meaning, they will be mentally and physically healthier, they will have hard and soft knowledge and skills that benefit them in their personal as well as work-life, that can be shared with colleagues and partners alike, and they will not only appear, but be more credible in the interaction with other changemakers. Organisations with such employees will have a higher workplace performance, fewer sick days, fewer resignations, better team relationships, a higher diversity of knowledge, and be more well-connected to relevant partners. There would also be a stronger resilience to future pandemics and epidemics such as COVID-19.

- Safeguard ecosystems, and therefore also human prosperity on Earth
- Increased mental well-being
- Increased physical well-being
- Fewer sick days
- Higher workplace performance
- Better team-relationships, if going together with coworkers
- Increased cooperational skills
- Emotional connection to nature
- Experience with local nature and culture
- Experiencing Austria, especially for foreign employees
- Exploration of personal interests
- Personal and work-related learning experience
- Stakeholder management experience
- Boosting and developing soft and hard skills
- Environmental resilience
- Increased personal confidence
- Networking opportunities
- Positive feedback loop of understanding, connection and skill-sharing with relevant peers
- Less personal and organisational vulnerability against future pandemics and epidemics

### 3. Structure

Most importantly, fossil fuel flights (even those who are offset with carbon credits) needs to be avoided. This is not negotiable. It is otherwise very likely that the volunteering days cause much more damage to life on Earth than benefits. It may happen that the employee will wish to combine their volunteering with their vacation days, TOIL, holidays or weekends. In these cases it may not be possible for the company to restrict the employees vacation, but there can simply be a criteria for using the conservation days stating that the designated days can not be used in combination with any flights. Due to the limited number of days available, most conservation projects are likely to be regional, but this unnegotiable criteria is nonetheless needed to avoid worst-case scenarios. Since staff conservation days are technically workdays and not vacation, there is nothing unusual about placing restrictions on what can or can not be included. Glacier Carbon Reduction GmbH is an example of a company who simply decided that *"Air travel is not an option"* for their team trips. Obviously the same criteria can be present even if one goes without the full team. Other necessary criteria is that the manager of the staff conservation volunteering programme at the company need to together with the employee perform fact-checking and find a fitting, credible, science-based organisation for the volunteering employee. This is highly important as organisations that are not tracking their actual impact but act mostly on intention or just to spread awareness, are at best a waste of resources and at worst doing more harm than good, as plenty of research shows.

As a good personal fit is needed for the conservation volunteering to be enjoyable, and to gain the benefits of exploring personal interests, matching of skill sets, etc. it is recommendable that the employees are allowed to individually choose their project, and use their designated days individually or in smaller groups of their own choosing. This will also be significantly easier for the organisation to budget as only few employees will be absent from the workplace simultaneously. The full team volunteering in the same project at the same time could be a form of team building, and can remain an option if it is doable and desirable for everyone involved,

but always carries the risk of dissatisfaction due to divergent interests and comfortability, as well as taking resources away from other, more conventional and relaxing team-building events.

The conservation days can be allocated among the employees in different ways:

Option A. Each employee is given an equal number of days per year. **This is the option we are currently using, 2 days per employee.**

Advantages:

+ Innate fairness

Disadvantages:

- Difficult to budget as it is unknown how many days will be used
- Allows very few consecutive days for volunteering for the employee unless the available days are very high
- Requires quite many days across the company to be allocated for staff conservation volunteering

Option B. A set number of days are available per year and the interested employees apply on a first come, first serve basis.

Advantages:

- + The most motivated employees get to volunteer, presumably those who would enjoy it the most
- + Easy to budget as the company knows how many days will be spent
- + Enables employees to volunteer more than one or a few days consecutively even if the available days are the same as or lower than the amount of employees

Disadvantages:

- Less motivated employees stay in their comfort zone and become less likely to volunteer
- Not everyone will get to volunteer every year unless the available days are very high

Option C. A set number of days are available per year and are assigned through a lottery or rotational scheme

Advantages:

+ Fairness

+ Enables employees to volunteer more than one or a few days consecutively even if the available days are the same as or lower than the amount of employees

Disadvantages:

- Difficult to budget as the company will not now for sure how many days will be spent

- May take a long time for everyone to get a chance to volunteer

Option D. A set number of days are available per year and the interested employees apply with a motivation.

Advantages:

+ The most motivated employees get to volunteer, presumably those who would enjoy it the most

+ Easy to budget as the company will know how many days will be spent

+ Enables employees to volunteer more than one or a few days consecutively even if the available days are the same as or lower than the amount of employees

Disadvantages:

- Motivational rating can be too subjective?

- May take a long time for everyone to get a chance to volunteer

- Higher administrative workload

To disseminate gained knowledge, and to improve the staff conservation volunteering days programme over time, it is also asked of the volunteering employee to provide feedback or hold a presentation for the organisation after getting back.

#### 4. Examples

Conservation volunteering can include a wide range of work. The main task may be data collection by taking notes and photographs in a meadow, maintaining a habitat with a saw, shovel or scythe, or cleaning litter while walking across mountains, or maybe wading or canoeing through a river to remove plastic waste.

A few examples of opportunities in Austria is the Naturschutzbund and Landschaftspflegeverein, who frequently organise events taking care of different ecological habitats. One could also fight waste in rivers such as the Danube by joining an event posted at [Danubecleanup.org](http://Danubecleanup.org) or

River-cleanup.org, help wounded wildlife return to nature with Wildtierhilfe Wien, or track important pollinators such as butterflies.

If one has more time, it is also possible to go to a neighbouring country and enjoy a wider range of projects, such as tracking bird populations at an ecological field station in Slovenia, clean the Italian Alps, take care of the mountain forests in Switzerland, or help scientists with marine conservation in the Mediterranean Sea.

#### Austria:

- <https://naturschutzbund.at/mithelfen.html>
- <https://landschaftspflegeverein.at/termine/>
- <https://www.river-cleanup.org/en>
- <https://www.wildtierhilfe-wien.at/ehrenamtliche-mitarbeit/>
- <https://austrian-butterfly-conservation.jimdosite.com/aktuelles/>

#### International:

- <https://www.ptice.si/en/about/volunteer/>
- <https://www.europeanresearchinstitute.eu/cleanalps-proteggiamo-e-puliamo-le-nostre-montagne/>
- <https://www.pronatura.ch/de/unsere-projekte>
- <https://bergwaldprojekt.ch/>
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## Community involvement related to sustainability measures

Both Impact Hub Vienna and Climate Lab have publicly available diary books where the community can share their observations and recommendations regarding sustainability matters for the respective space. The books should be placed in a clearly visible and easily accessible spot in each respective location to remove barriers to access and expression. Understandably staff should also accept feedback in verbal form or any other form so as to enable expression regardless of one's bodily abilities.

The sustainability coordinator is responsible for periodically (at least once a month) checking the sustainability recommendation diary and if recommendations are present, they are responsible for evaluating the plausibility of implementation. The recommendations may be implemented as long as they do not clash with formalised responsibilities (e.g. Umweltzeichen certification) and other organisational goals. When possible, the author(s) of the recommendation should be credited.

## SHORT: How To Make Sustainable Choices

### Cooperation

Cooperate with data collection for the **Tools** mentioned above. Follow the sustainability-related **Policies**, and engage to uphold and progress the sustainability-related **Projects**. Participate in the **Staff Conservation Volunteering Days Programme**.

### Use The Principles

Follow the **Principles** of the five "pyramids" and beware of "environmental leakage" as described above

- Transport hierarchy
- Lansink's Ladder

- AR3T
- Food-Energy pyramid
- Material pyramid

## Ecolabels

If you do not find any second hand options and can not avoid consuming newly produced items, look for the following labels:

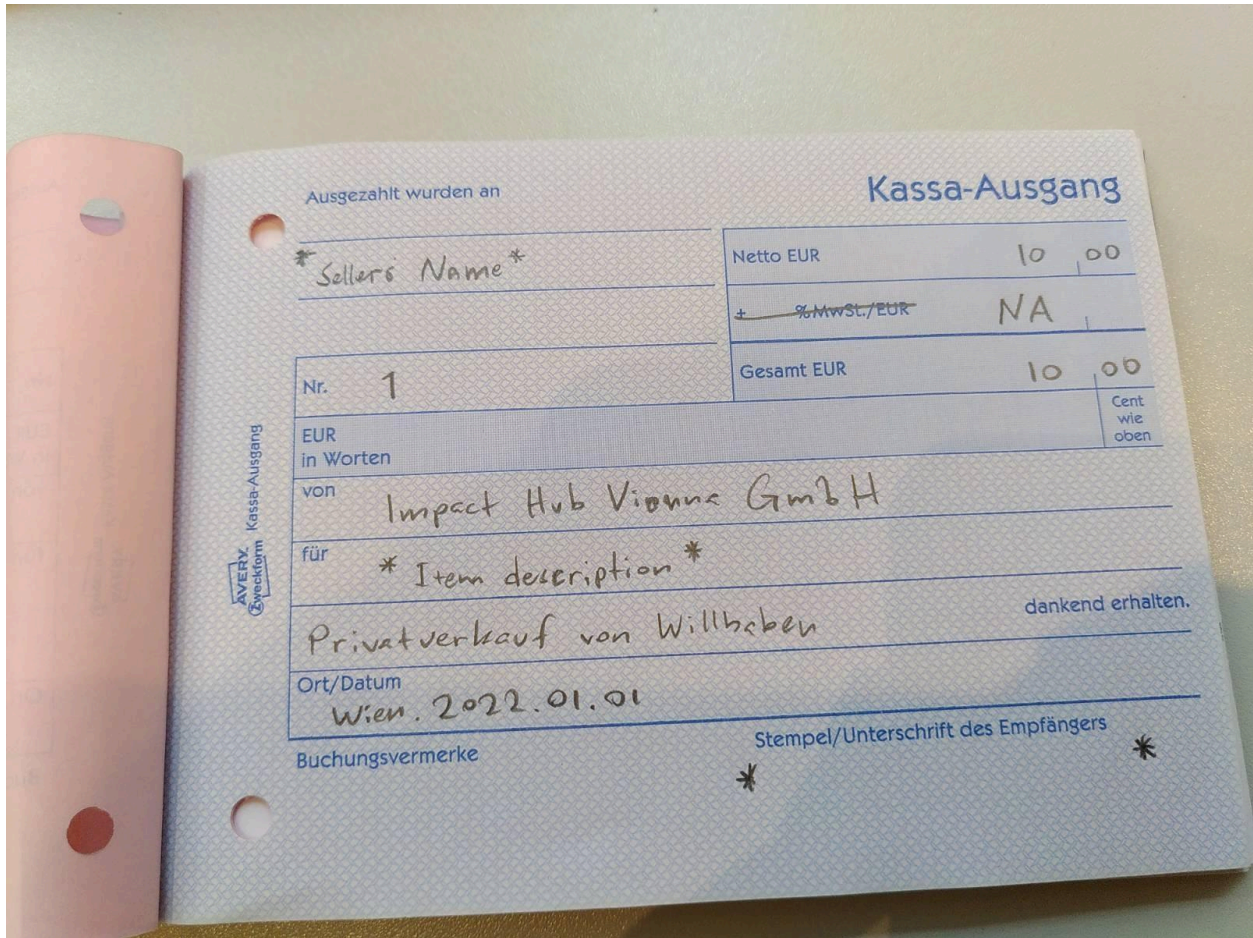


This spreadsheet can help you find more sustainable products:

[+ Sustainable Producers/Suppliers](#)

## Buying Second Hand

To create a fully valid receipt for second hand purchases on Willhaben or similar platforms, we need first a handwritten receipt with the details that you can see in the template below. This receipt folder can be found behind the reception in the bottom drawer, and is the same that we use to provide receipts for Daily Tickets. The seller should sign their name by the bottom right two asterisks.



In addition to the handwritten receipt, we should also print the website listing of the product. On Willhaben you can do it by clicking the printing icon when you are on the product page:



After having both two documents, put them together in the plastic folder with receipts that we give to accounting once a week, that is kept in a drawer behind the reception desk.

