

Artist Residencies and Sustainability

Learn more about how residency providers can help tackle the climate crisis.



This guide is written by Tanja Råman – Artistic Director of TaikaBox – who undertook training in sustainability in order to learn to calculate and manage the carbon footprint of the organisation.

Introduction

The world around us is changing at an ever-increasing rate, demanding us to find new ways to operate. As residency providers – working deeply within artistic communities and with wider audiences – we are in a key position to advocate for working practices within the arts that are economically, socially and ecologically more sustainable.

Although sustainability may feel like a trendy buzzword or another box to tick. It is, however, a massive area of research that is constantly developing. The research provides us with practical tools that we can use to help make our residencies more sustainable. However, there are no quick fixes or easy ways out. If an organisation wants to engage in a meaningful sustainable practice the journey towards sustainability needs to start from deep within the organisational structures. The process will also need to be built on a solid fact-based foundation. At the heart of the process of developing sustainable practice is the need to reflect on the organisation's core values and principles and ask significant questions. Are the sustainable values transparent enough in our organisational structures and aligned with our operations? Can we honestly communicate to our audiences about our sustainable choices? The more deeply the sustainable values and actions are embedded into our organisations, the more convincing our sustainable work and our communication are. However, it is good to remember that when it comes down to sustainability, we are on a continuous learning journey. We will never reach an endpoint and therefore it is important that we also recognise and accept our imperfections.

This guide has been written to share TaikaBox's story of developing a more sustainable artist residency programme. We hope that it will provide you with some practical tips, although it is not intended to be all inclusive. We are hoping that this is inspiring you and helps you to build an ecologically more sustainable artist residency.



Why calculate carbon footprint?

Our current goal is to develop carbon neutral culture – or even better - create cultural activities that have the ability to sink carbon and also enhance local biodiversity. Not an easy task for a small organisation that creates intangible cultural experiences. To achieve these ambitious visions, we need to accept smaller, more achievable goals to begin with. To create carbon neutral cultural activities we need to reduce the carbon footprint of our activities gradually, develop new ways of creating artistic work and carefully consider the ways we offset the carbon waste that we cannot reduce. But it all started with changing our thinking.

Since 2014, TaikaBox has been developing eco-friendly touring methods and creating ways of connecting with international partners without travel by using technology. However, it wasn't until one of our projects was selected to be part of Oulu City's European Capital of Culture 2026 – and Oulu2026 aiming to be the most sustainable Capital of Culture – that we thought that we need to base our actions on facts rather than a feeling.

One of the first things to do was to calculate our current carbon footprint. Our initial aim was to find out the carbon footprint for one of our artist residency programmes. We, however, became curious about knowing how the artist residency programme compared with our other projects. At the end, we decided to calculate the carbon footprint for each of our projects separately and then move on to assessing our entire operations. Calculating started as a pilot but it soon became clear that it is a good idea to continue calculating the figures on an annual basis and collect long-term data. In this way, we can measure progress and identify any trends. We have realised that fact-directed development is essential in building sustainable practice. The calculations create a foundation on which we can base concrete actions and devise new working methods. Calculations clearly expose those aspects of our activities that produce the most carbon emissions. They also show those aspects that can be easily reduced. In this way, the calculations guide the development of our activities and provide us with confidence that we are moving in the right direction on our journey towards sustainability.



How to calculate the carbon footprint?

What came as a bit of a surprise to our organisation was the amount of information and the level of detail that was needed for calculating the carbon footprint. Calculations included TaikaBox's consumption of energy and resources, the waste we produce, as well as the carbon footprint of products and services that we buy. There is a huge variety of ready-made climate indicators – online forms with simplified formulas that help calculate an organisation's annual carbon footprint. As we were new to this field, we felt that we needed professional guidance from a specialist to get started. As a small organisation buying a specialist service was an investment for the future. We could not continue buying the service on an annual basis; hence it was also important for us to gain training and confidence in being able to do it ourselves. Another benefit of using an outside specialist was that they took our organisation's specific needs into consideration and created a tailor-made climate indicator for us.

Information needed for the calculations can be found from various sources. We found the energy usage for heating the spaces we hired for our activities by contacting the venues and finding out how their spaces were heated and then were able to calculate the usage for the size (m³) of the space for the time we used it. Electricity consumption was calculated from electricity bills, as well as testing the consumption of specific equipment during different activities. Waste was calculated according to the weight of different recycled materials. Water consumption and wastewater production were calculated from water bills. Business trips were calculated according to the distance travelled and mode of travel. Different types of bought goods and services were calculated from figures shown in the accounts.

What made it challenging to compile the information at times was that we didn't have specific figures for everything. Sometimes, we had to dig deeper and be creative to find the required information – which was a particularly time-consuming process. Sometimes, we had to estimate figures based on the existing information we had available. As part of the process, we have not just learnt to calculate the carbon footprint but also learned how to search for the required information.

In the climate indicator, each type of goods, service and source of energy that we use is marked as units, such as km, litres, m³, kWh etc. Each type of goods, service and source of energy also has a specific emission factor based on research. Emission factors tell us how much carbon is produced when using/buying/consuming/producing/travelling a specific unit. The emission factor for consuming wind energy differs from nuclear energy. The emission factor for train travel differs from air travel, and even short flights have different emission factors in comparison to long flights. These factors can be found in different official sites that publish updated figures based on the most current research. The source of information is also always stated in the climate indicator so that the information can be checked and updated when needed. The carbon footprint is calculated by multiplying the number of units with a specific emission factor and summing the results together. Our carbon footprint is expressed as carbon dioxide equivalent (kg of CO₂e), which means the number of metric tons of CO₂ emissions with the same global warming potential as one metric ton of another greenhouse gas. The emission factor for internal European flight, for example, is 0,0842 CO₂e. During 2000 km flight we, therefore, produce 168,4 kg of CO₂e. For the same distance travelled by train is resulting in 30 kg of CO₂e. The emission factor for train travel is 0,015 CO₂e.

Reducing carbon footprint as part of artistic vision

The calculations give us accurate and clear information about the environmental impact of our activities. In 2022 our organisation produced 9425 kg CO₂e in total. For context; the carbon footprint of an average Finnish person is about 10 200 kg CO₂e each year.

In our case, the biggest carbon producers were the bought services and goods, as well as international air travel. The next step was to evaluate ways that we could reduce our carbon waste. As a result, our organisation decided not to support air travel for any of our projects. This has also directed us to develop our international collaborations within areas that are more accessible for us via land and sea. There are also ways of making the most of the travel time and sharing resources with other organisations. We have, for example, collaborated with another residency host and the same artist has visited both residencies whilst in the North - benefiting both areas and communities. We also try to buy all our equipment and goods secondhand or borrow/hire them from our partners or other suppliers to avoid adding to the carbon footprint unnecessarily. The carbon footprint of a product is calculated only once – when it is first sold.

Our organisation is an unusual residency host as we don't have our own space, but we hire space from other organisations when needed. This reduces the proportion of our carbon footprint relating to heating, electricity and water consumption, as we don't have these expenses outside of the times we are hosting visiting artists. For some other organisations running a space can be one of the biggest contributions to their carbon footprint. However, there are ways of reducing carbon by investing in good insulation, renewable energy and changing energy consumption habits.

Having more of an understanding about how different activities contribute to our carbon footprint has helped us develop our activities in new directions and create new solutions and partnerships in more accessible geographical locations. Including slow travel as an integral part of the artist residency has become one way of realising our international collaborations in a more sustainable way. It also offers undiscovered potential for artistic practice that is focused on exploration and process, immersing artists gradually in new cultures, languages and landscapes as they transit from their homes to the residency location.

Incorporating online options as part of the residency work can greatly reduce the need for travel and environmental impact. Although live streaming is ecologically more sustainable than air travel, it is not carbon neutral. The carbon footprint from each live stream is calculated according to how many receivers are logged on to the live stream and for how long (hours). The emission factor for live streams is 0,036kg CO₂. Therefore, a live stream that is watched by one online audience member with their laptop causes 0,036kg of CO₂ in an hour. The result is the same even if 100 people were watching the same live stream in an auditorium through one laptop. However, if all 100 people were watching the same live stream in their own homes via 100 different laptops the result would be 3,6kg CO₂ in an hour. Therefore, connecting communities for live streamed events makes the most of the streaming facility with minimal environmental impact.

How to avoid traps?

Slow travel is an excellent way of reducing carbon footprint, but only if it doesn't involve too many expensive hotels on the way to the destination. The emission factor for a hotel accommodation is high, 0,5kg CO₂. This is multiplied by the price of the accommodation per night. Therefore, the more expensive the accommodation is the more carbon is produced. Two nights in a hotel costing 50€/night, for example, would produce 50kg CO₂. Whereas a hotel costing 100€/night would produce 100 kg CO₂ over two nights. The current methods of calculation do not take into account whether a hotel has a specific environmental agenda, so, whilst staying in an eco-hotel is morally beneficial, this is not reflected in the calculations.

This has directed us to keep international travel to a minimum, search for the most efficient slow travel routes, build international partnerships and projects with easier reach, as well as use a variety of online tools for collaborating with international partners who happen to be further away. The more we learn about sustainability and the realities of our own practice the more we begin to create new ways of working, replacing the old methods of organising projects. Finding ways to reduce the carbon footprint is essential for developing sustainable practice.

Offsetting

As well as calculating and reducing our carbon footprint, our organisation has started off-setting the carbon waste that we cannot reduce. Offsetting is a rapidly growing sector with many pitfalls to watch out for. Greenwashing can be difficult to spot. There are likely to be many businesses offering offsetting products to buy either locally, nationally or internationally. As this field has sprung up very quickly, the regulations are slacking behind in many countries and hence it is easy to waste money and effort investing in a good cause in the wrong place. It is, therefore, very important not to rush when finding an offsetting company, but to thoroughly research the options. For us it was important to find a company that provides offsetting products in Northern Finland. This was a value-based decision for our organisation. This was also a practical decision as it is easier to check the reliability of the product sold locally than supervise off-setting activity taking place in another country.



Communications

Although the act of becoming more sustainable is the main thing for us, it is also important for us to inform others - particularly other cultural organisations, artists, audiences and funders. When we started our journey towards a more sustainable practice our big vision was to produce *carbon neutral culture*. This is still our aim but due to the double-counting factor – Finland calculates and reports to EU all climate units including all offsetting products implemented in Finland – we cannot state that we are producing carbon neutral culture as this would mean that the same climate units have already been registered for nationally. The EU requires its member states to report all climate units that take place within their borders to evaluate how well they are staying within their climate goal. Therefore, when we - as a Finland-based organisation - buy climate offsetting products that take place in Finland we are supporting Finland to reach its national target of becoming Carbon Neutral Finland 2035. Somewhat ironically, If we were to decide to buy the climate units from outside the EU, we would be able to claim that they count towards producing carbon neutral culture.

It is important to be aware of the double counting factor as the knowledge, legislations and general awareness of issues relating to sustainability increase the general statements and promises that organisations need to be correct but also will become more regulated. Although we in TaikaBox are working towards creating carbon neutral cultural activities our communications should state that we are contributing to Finland's carbon sink. Claiming more than what is possible is not part of sustainable practice. It is greenwash – whether it is done consciously or unknowingly. Audiences, our partners and artists will need to be able to trust the promises that our organisation makes. This is becoming increasingly more important. Through transparent and honest communication about our sustainable practices we are attracting like-minded people to become our partners or to apply to our artist residency programmes. The purpose of this communication is to inspire others to become more sustainable. We are genuinely interested in building communities and in searching for new solutions with others – whether they are an individual or organisation. After all, we are in the same boat heading towards an increasingly more volatile future.

Glossary

Carbon footprint = the total amount of greenhouse gases (including carbon dioxide and methane) that are generated by our actions

Carbon sink = the amount of carbon dioxide that is absorbed from the atmosphere, generally factored on a national level. This amount is reduced by actions like deforestation and pollution of seas, but can be increased by actions like planting new forests.

Climate indicator = a formula that helps calculate an organisation's carbon footprint

Emission factor = a representative value that tells us the quantity of a pollutant released to the atmosphere by a specific activity

Greenwash = when an organisation spends more time and money on marketing itself as environmentally friendly than on actually minimising its environmental impact