

ÜBER LEBENSKUNST LIFE CYCLE ASSESSMENT

ASSESSED BY ÖKO-INSTITUT E.V., SUMMARISED BY FLORIAN SIEVERS

1. INTRODUCTION

How should we live in the future so that we don't destroy the very foundation of life itself? In seeking answers to this question, **ÜBER LEBENSKUNST**, an initiative project of the Federal Cultural Foundation in cooperation with the Haus der Kulturen der Welt, came up with new ideas for and approaches to sustainable models of living between 2009 and 2012. The theme of the **ÜBER LEBENSKUNST** project made it almost mandatory for the project itself to be as environmentally and climate friendly as possible; and for the environmental footprint left behind to be scrutinised after the events, attended by around 13,000 visitors and participants, were over. As a result, **ÜBER LEBENSKUNST** not only developed an environmental concept in cooperation with the Freiburg Öko-Institut, it also contracted with the research institute to perform a life cycle assessment, making **ÜBER LEBENSKUNST** a pioneer. Even though conferences and conventions that receive public funds now have to present integrated environmental concepts and even many sporting events today have these kinds of concepts in place, art and cultural events have some catching up to do.

2. THE ÜBER LEBENSKUNST ENVIRONMENTAL CONCEPT

The **ÜBER LEBENSKUNST** environmental concept aimed to minimise the negative impact on the environment right from the very outset. In areas where this wasn't possible, the goal was to compensate for the effects. The most important starting point for the environmental concept was participant mobility. More than half of all greenhouse gas emissions from events like **ÜBER LEBENSKUNST** stem from transportation for organisers, participants and visitors. Air travel is particularly damaging to the climate. **ÜBER LEBENSKUNST** thus tried to avoid air travel as much as possible – for example, by using a videoconferencing system that saved international speakers the trip to Berlin. If travel was unavoidable, organisers and presenters gave precedence to train travel over air travel wherever possible – even for trips within Europe. Another goal was to motivate visitors to use public transport or to come on foot or by bike.

The area of communication was almost as important. **ÜBER LEBENSKUNST** aimed to raise awareness among the general public about sustainability and resource conservation – and this involves a way to communicate with the public that is as sustainable and resource-saving as possible. **ÜBER LEBENSKUNST** therefore

tried to consume as little paper as possible – for example, visitors were only able to print out the festival programme if necessary.

Other areas of activity were procurement, public utilities and waste disposal. The first covers all purchases of goods and services. To this end, organisers only bought environmentally-friendly and certified products and services. Through various measures, **ÜBER LEBENSKUNST** saved electricity and water at the event venue. And in the area of waste disposal, the initiative prevented waste creation wherever possible, e.g. with recycling systems. The goal was also to recycle waste generated despite these measures in an environmentally friendly way, for example, by means of composting.

3. LIFE CYCLE ASSESSMENT

Which **ÜBER LEBENSKUNST** measures worked well – and which didn't? The Öko-Institut's life cycle assessment aims to make it possible to evaluate the initiative project after the fact, to learn from the results and make use of the experiences for future events and projects. The assessment shows: the results in the five areas of focus – mobility, communication, procurement, utilities and waste disposal – were very different.

3.1 MOBILITY – A SUCCESS STORY

The **ÜBER LEBENSKUNST** mobility concept was successful in terms of environmental protection and resource conservation. Mobility for this type of project includes transportation for the project organisers as well as the participating artists, presenters and visitors. The vast majority used environmentally friendly means of transport. More than two-thirds of all trips made by organisers, participating artists and speakers were by train. In contrast, only 12 per cent came by plane and another ten per cent by car. This assessment was improved because **ÜBER LEBENSKUNST** replaced 34 flights, that would have been more than 5,000 km long, with a videoconference system. This saved 180 tonnes of greenhouse gas emissions – more than transportation for all of the organisers, presenters, artists and visitors combined.

The **ÜBER LEBENSKUNST** event organisers surveyed visitors before the event and during the festival to assess the success of the mobility concept. These surveys showed that most visitors came by public transport, bike or on foot. This positive result was due in part to the fact that only a small number of visitors made an extra

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trip to this event and to the festival itself from outside Germany – in total only around one per cent. This also shows the role visitors from abroad play in the greenhouse gas emissions produced by an event. Despite the small percentage of foreign visitors, their arrivals and departures accounted for 70 per cent of all emissions – mainly because many of them flew. The fact that visitors used environmentally friendly means of transportation probably also has to do with **ÜBER LEBENSKUNST**'s appeal to an audience that is already very aware of environmental issues. In addition, most of the events were graced with good weather which makes it easier to decide to come by bike or on foot. Nevertheless, visitor travel to and from the events, at a total of 103 tonnes, released more greenhouse gases than any other item in the overall assessment.

3.2 COMMUNICATION – CUTTING CORNERS WITH CONSEQUENCES

ÜBER LEBENSKUNST structured its internal and external communication relatively successfully in terms of minimising resource use – primarily because the project used as little paper as possible. **ÜBER LEBENSKUNST** eliminated one of the largest paper consumption line items for events of this kind: the festival programme. Instead, visitors had to print it out themselves. On average, each guest printed out just 1.3 DIN A4 pages. Some visitors, however, complained that they missed being able to leaf through a traditional festival programme. It took some getting used to for a few. But successfully: the printing stations and the paper they consumed released a total of just 60 kilograms of greenhouse gas emissions. This is 98 per cent less than would have been generated for a conventional festival programme using offset printing – and just one per cent of the total emissions for printed materials for **ÜBER LEBENSKUNST**.

The majority of these emissions were attributable to the four high-circulation publications, mainly two supplements in the city magazine "Zitty" and two books that were published in relation to the project. They are responsible for 54 per cent of the total paper consumption. Another 27 per cent was accounted for by tickets and flyers which used up 1.7 tonnes of paper in their production. Around eight tonnes of greenhouse gas emissions were generated by paper consumption. Overall, paper consumption, however, contributed only three per cent to the greenhouse gases of **ÜBER LEBENSKUNST**.

3.3 PROCUREMENT – PARTIALLY SUCCESSFUL

"Environmentally friendly procurement" played a major role in the **ÜBER LEBENSKUNST** project: all of the products and services purchased were supposed to be sustainable, low-emission and resource-saving to minimise greenhouse gases as much as possible. This strategy worked particularly well in awarding printing jobs that went to companies certified with the EU standard EMAS (Eco Management and Audit Scheme). Another success was the call for tender to build a wooden structure in the main exhibition rooms in the Berlin Haus der Kulturen der Welt. This was designed in such a way that a local carpenter who used only local wood was awarded the contract.

Catering for the main festival with food that a group of artists had collected from Berlin and the surrounding area over a one-year period eliminated long transport routes or refrigeration chains and thus limited the negative impact on the environment. Festival visitors also learned about the origin of this food in discussions. From the suppliers' point of view, communication of this kind is essential to local food supply. It was a great success as a teaching and learning event. However, it would have been more successful if service staff had been better integrated into the communication concept so that they could have explained to visitors why the food on offer was limited to some extent.

Catering released a total of 11.6 tonnes of greenhouse gas emissions. Two-thirds were accounted for by meat and dairy products – although they only made up twelve per cent of the food sold. Eliminating these types of products would have considerably improved the **ÜBER LEBENSKUNST** life cycle assessment. In contrast, vegetables comprised around 40 per cent of the food eaten by visitors but were only responsible for nine per cent of all catering emissions.

3.4 PUBLIC UTILITIES – NOT OUTSTANDING

The area of public utilities is divided into water and electricity supply. Water use during the main **ÜBER LEBENSKUNST** festival was determined by reading the water meters before and after the event. This was not possible for the decentralised events leading up to the festival or the work of the organisation team throughout the year. Overall, 516 cubic metres of water flowed through the pipes during the festival at the Haus der Kulturen der Welt. This represents the average annual consumption of two and a half 4-member families in Germany. This means that the event still

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falls below the average consumption of the Haus der Kulturen der Welt. But calculated per visitor, consumption came out to 39 litres per person and thus 15 litres more than on average than for similar major events.

The largest portion of greenhouse gases was generated by electricity production. As a result, **ÜBER LEBENSKUNST** tried to reduce its own electricity consumption. The life cycle assessment includes electricity consumption for the festival, the events leading up to the festival and the organisation team. In total, **ÜBER LEBENSKUNST** used 130,000 kilowatt hours of electricity – this is equivalent to average annual consumption of 30 families in Germany. As a result, the project released 78 tonnes of greenhouse gas emissions. The festival accounted for 61,000 kilowatt hours which released 36 tonnes of greenhouse gas emissions. This is a lot – and may have had to do with the extensive use of technology (projectors, computers, lighting) and the construction of complex wooden structures in the exhibition rooms. However, the electricity consumed per visitor was still comparatively low thanks to the high number of visitors.

3.5 WASTE DISPOSAL – MIXED RESULTS

The life cycle assessment for waste disposal – i.e. everything that has to do with waste, rubbish, recycling and reuse – produced mixed results. On the one hand, a deposit system was used to serve food and drink in porcelain plates and real glasses to ensure that next to no waste was produced. It also proved effective to create and use printed materials sparingly. The result was that **ÜBER LEBENSKUNST** produced much less waste paper than similar events. Finding new uses for festival objects and structures was also relatively easy.

On the other hand, however, organisers were not able to collect waste separately at the festival as originally planned. Even though it was not expected that large quantities of waste would be produced, the measure was intended to demonstrate that waste separation was part of the festival. Putting this idea into practice ultimately failed because of the additional work it would have created for festival staff. More importantly, however, the Öko-Institut calculated that more household waste was created per **ÜBER LEBENSKUNST** visitor than for other large events – despite all of the efforts to prevent waste in the first place. There could be several reasons for this. It is possible that visitors to the surrounding park facilities and other events produced additional waste before and during the festival. It is also possible that the

calculation method for the waste volume is imprecise. This method only counts how many dumpsters were emptied during the event and not whether these dumpsters were actually completely full.

4. SUMMARY AND OUTLOOK

ÜBER LEBENSKUNST showed that environmental concepts which are today standard practice at major sporting events can also play an important role in climate protection in the area of art and culture. Mobility was a very important aspect in the **ÜBER LEBENSKUNST** environmental concept. Priorities also included raising awareness among the general public and helping to establish sustainable event management in the area of art and culture over the long term. As a result of the initiative project, the Berlin Haus der Kulturen der Welt introduced an environmental management system and is now assessing whether to use “green electricity”. **ÜBER LEBENSKUNST** thus changed the very venue where it was held: All other events at this site will be more environmentally friendly and use less energy and fewer resources than before. This is evidence that project sponsors can very successfully motivate venue operators to actively engage with the issue of sustainability.

The original goal of the organisers was to carry out **ÜBER LEBENSKUNST** without any negative impact on the climate. Still, **ÜBER LEBENSKUNST** was responsible for a total of 281 tonnes of greenhouse gas emissions. This is equivalent to the annual emissions of 25 people in Germany, meaning that the emissions of this initiative project are still 40 per cent less than what a conventional project would have produced.

If you want to get away from conventional projects, however, you have to be well-prepared – so that an environmental concept can still be put into practice as deadlines get tighter and stress increases over the course of a project, which is typical for art and cultural projects. If you want to work in a way that is environmentally friendly and doesn't harm the climate, you need enough time to find the right suppliers and materials without having to default to the easiest solution.

Because offsetting any unavoidable negative environmental impacts cannot currently be financed by public funding, **ÜBER LEBENSKUNST** will not be able to meet its goal of compensating for the greenhouse gas emitted now that the project is over.

The organisers of **ÜBER LEBENSKUNST** hope that the legal frame-

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work will change in the near future. If compensation for greenhouse gases can be included in the project financing in the future, the project sponsors will also potentially become more sensitised to the issue of offset measures – which would lead to less resource consumption and fewer emissions from cultural productions.