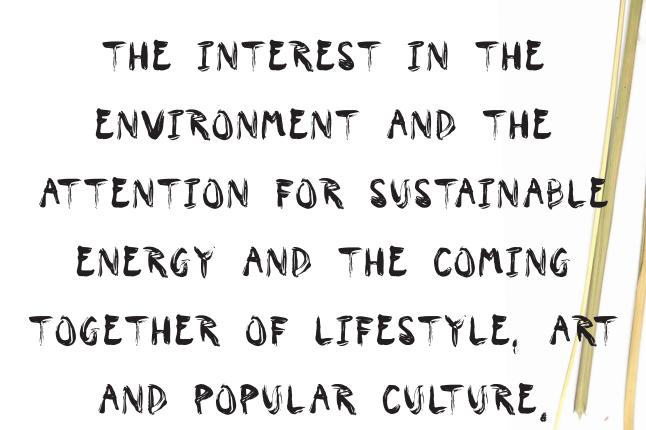
In celebration of the anniversary of the Hanze University and Academy Minerva in the year 2013, the research group Popular culture, Sustainability and Innovation (Centre of Applied Research and Innovation Art & Society) and Academy Minerva presented the first edition of the Energize Festival for sustainable art, design and lifestyle last November. I am happy to present this limited edition catalogue box with inspiring research posters and one minute movies by our students that formed the heart of the Energize Festival Exhibition. However, before informing you in more detail about the content of this box, I would first like to provide you with some background information on the festival's theme...

## Self-sufficiency, Taking Matters into your own Hand?

As climate changes are manifesting themselves more clearly, more and more messages are coming through to us about alternative energy. Increasingly people are interested in producing their own energy, buying shares in windmills, growing their own local produce and in working actively (together) to reduce their ecological footprints. In practice however, this turns out not to be that easy. 'The market' is not ready for it and political agendas move slowly. Therefore it is time to take action. Recently this has brought the ideal of autarky, self-sufficiency and independence from a top-down structured market, back into focus. At the Energize festival and Energize conference there will be experiments, research, exchange and debates, together with diverse specialists AND with energy consumers (you and me), to study how realistic this striving for autarky is, where this renewed interest in autarky comes from, how this can be interpreted and what the possible consequences for the energy market will be.



## Art, Design and Architecture

We often see the autarkist vision emerge in autonomous, which is to say, in the non-functional expressions of fine arts. Think for example of idiosyncratic art-machines and rural-installations which perform useless actions with enormous precision. The art of the useless? It is when we see the useless as a driving force for reflection on the things which matter to us, for giving meaning to, or for putting our perception into perspective (Boomkens et al). So also our perception concerning energy problems. Also where art touches the domain of design and architecture, autarkist scenarios frequently appear. In this way discussions concerning mobile architecture have become relevant once more because of the threat of climate change. To stay ahead of rapid changes in our climate, it would be very handy if living would no longer depend on location. Mobile architecture could be a very good solution. A growing group of architects and artists is trying to visualise such a, more nomadic, lifestyle or to give it shape with the design of housing units which are transportable (e.g. Transportable Autarkic House by Booosting) or even houses which can transport themselves (Walking House by N55). Mobility itself often is not the biggest problem here, but the disconnecting from existing water, energy, sewer and information systems does provide challenges. In addition these models for a possible nomadic future give rise to interesting questions concerning the disconnection of social structures, such as economy and state. As a result of this these projects invariably lead to new insights into, and important questions about, self-sufficiency and independence from existing structures. Many recent design projects are aimed at self-sufficiency and independence from existing structures by showing how estranged we have become from our natural resources and traditional

The interest in operating independently, outside the established order, goes back a long way in the arts.

<u>Lifestyle</u>

Modern-day autarky immediately brings forward associations with the recycling of philosophical movements such as romanticism (Jean-Jacques Rousseau et al) and with hippies from the 1960s. The new concept of autarky however, embodies a much more pragmatic point of view than romanticism, even if there are a few similarities compared to the hippie ideals. Provided we don't let ourselves be distracted by external stereotypes, the hippie-lifestyle certainly had a few ideas which are very relevant today as well. What stands out especially is the interest in the environment and the attention for sustainable energy and the coming together of lifestyle, art and popular culture. But the way this was expressed, in an iconographic log cabin on the moors, does raise a few questions in the 21st century! Another aspect often associated with the hippie culture are hallucinatory drugs. This is also not in accordance with the business perspective on the new survival strategies we are searching for. Pragmatic survival strategies? This brings to mind the so-called Doomsday prep pers, the kind of (American) folk who prepare themselves for the end of the world and all kinds of possible catastrophes. This reference is not very suitable either. The preppers' survival strategies are based on a fatalistic attitude to life: make sure your bomb-shelter is in order, so you can be one of the survivors, because a catastrophe of some kind is inevitable. What seals the fate of the preppers exactly, I don't know, but they certainly do not have it in their own hand. And this is the most important difference between them and the modern-day autarkists Energize is about. This is a festival and a conference with and about people who DQ take their fate into their own hands, undertake action and do not wish to be dependent on the established system.

production processes. For example, by examining the relationship between natural resources and final products (PIG 05049 and One Sheep Sweater by Christien Meindertsma) or by showing how difficult it is to reproduce even the simplest domestic appliance by hand (The Toaster Project by Thomas Thwaites), designers show how little we understand today of how things are made and what they are made of. This only becomes clear when designers show us how it was once made by hand or how it could be made by hand. In other words: when they make the same product, but outside the existing industrial infrastructure. Indirectly these projects demonstrate the danger of a too great dependence on the industry. Can we survive independently should we have to? And do we even know what we bring into our house when we buy something?

This last question is certainly cause for a lively discussion when it concerns food. And in this area artists and designers are doing important work as well. Exemplary in this is how artists and designers participate in the debate concerning the meat industry. Generally three positions are taken up in this debate: you eat meat; you eat only organic meat, you are a vegetarian. A number of art and design projects about the meat industry show that many more points of view are possible. Such as, you only eat meat for which no animal died through the consumption of cultivated meat. Or you eat products for which an animal only donated blood but did not die (Black Market Pudding by John O'Shea). Another point of view in the debate inspired by art is that of getting a kind of driver's license for meat consumption by demonstrating that you are capable of butchering an animal yourself (Meat Licence Proposal).

These projects, which show how estranged we have become from our natural resources and production processes, oppose top-down structured systems either directly or indirectly. They promote self-sufficiency and independence by telling us to be critical regarding the industry; they warn us about the disadvantages of industrial processes and they show us that there are more alternatives than the industry would have us believe.

## Ecology - Technology - Economy

Autarkists' living and working environments as a phenomenon are as old as the hills. Think of convents, eco-communities, urban nomads and things like that. Autarkist communities have expanded the meaning of self-sufficiency to include collaboration, think for example of the cooperative idea of combining forces and funds, which makes it possible to circumvent public utility companies. In addition to these forms of autarkist art and autarkist communities, we increasingly see the networked autarkist, for example the Do It Yourself (DIY) movement from a creative angle and the Open Source movement in the technological field. These movements are connected by the emphasis on quality improvement and collaboration, and this way they provide an alternative for the fixation on economic gain. In addition the DIY concept is more and more often applied to new forms of engaged art, community art and participative design processes. In these forms of art we see a shift from the attention for the work of art as a final product to making a work of art as a shared creative experience by artists and the public. This allows for a greater involvement of the participants (formerly the audience) and a shared awareness concerning the theme or the subject of the work of art. Here art and culture function as an experimental crowbar or supercharger for debate and awareness (Brian Massumi). These participative forms of art and the DIY culture are also perfect examples of the dynamic exchange between professionals and amateurs. The artists and designers who work with these process forms, have undergone a metamorphosis from expert to supercharger. And now we look at the participants as experts with local knowledge, where before they were considered amateurs, or the audience (Anne Nigten). We increasingly see this change of roles, or rather this combination of roles, fulfilled simultaneously. The difference between professionals and amateurs or between producers and consumers is disappearing; we are surrounded (online) by pro-ams or pro-sumers. This is one of the phenomena which is the result of a networked society. And this will also be given shape in Energize; in the preparation for Energize various artistic and technological experiments are set up in which artists, technicians

and energy consumers are replaced by superchargers and energy pro-sumers. The experiences gained here will be

shared with energy-market experts during the conference. Let's for a moment return to the social networks. As mentioned before, traditional role divisions, power structures and task divisions are under pressure as a result of social networks. For a large part this is caused by the joining together of social structures. With this we initially mean people and not technology, who make the internet into a platform of autonomy. Social movements are increasingly able to organise themselves via the internet, therefore the internet is of great importance for new forms of autarky. This way it can organise itself into a worldwide organisation with local roots.

What also stands out is that the groups which strive for autarky, deal with information in a different way. They are not satisfied with the standard, minimal information about the system (Nussbaum), but have their own methods for obtaining system information. Sustainable autarkists work with Manuel Castells' adage: think local, act global.



# **Energize Festival**











Behind the (Kitchen) Scenes









Sustainable Conversations





Lights & Sound Event









# THE STUDENTS LEARNED HOW TO THINK AND WORK WITH RESEARCH QUESTIONS AND RESEARCH METHODS. THEY APPLIED NEW MATERIALS AND TECHNIQUES AND PLACED THESE IN A SOCIAL CONTEXT.

#2

## Catalogue Box: Student Works

Prior to the Energize festival the students, supervised by teachers and experts, worked in project weeks and professional development classes. The introduction of this thematic approach and the role of the student as artistic researcher is special in relation to Minerva's usual professional art education programme. For many of the Bachelor students from Academy Minerva (Hanze University Groningen) involved this was their first introduction to the subject of sustainability and ecological autarky (self-sufficiency). They worked on their personal artistic and design research in professional development classes and during project weeks. The students were supervised by teachers, specialists in the field and (international) guest teachers from the professional practice. This new approach clearly met a need, considering the great interest. One of Minerva's supervising teachers, Allie van Altena, put it as follows: 'The students learned how to think and work with research questions and research methods. They applied new materials and techniques and placed these in a social context. They communicated and they discussed. There were guest teachers and the PSI professor was closely involved in the teaching trajectory as well. The students presented their detailed projects, both orally and in the shape of an exhibition. A professional development class, or project week, of such an innovative nature, within the context of professional art education, requires more than average curiosity, courage and perception from the students. They really 'go for it'. The students are aware that this way of thinking and working gives them more control and a greater say about their own lives. Artistically speaking as well, these professional development classes were a first and special step. The students' projects can be characterised by diversity in both quality and content. All students were prepared to do some critical thinking and they were motivated to contribute to a more beautiful and better world. And while doing this, thinking about the role of the arts and their

Over 50 Academy Minerva students submitted their artistic or design research as a poster or a one-minute film for the Energize GasTerra Award. The contributions show a very diverse picture of how students from the art academy view sustainability and ecological autarky. The ten contributions on the jury's short list are part of this catalogue.

## <u>Aspects of Investigations</u>

Our students investigated several aspects of ecological autarky and sustainability in 5 clusters:

In XYZ Open City the participants designed a self-sufficient city with the Danish artists/designers collective N55, lecturers: Bart Barnard and Bjorn Eerkes.

the city with Theater Group De Jongens, guest lecturer Nathalie Beekman and lecturer: Gert-Jan Mulder.

In Sustainable Safari's the students took the audience on a tour of

In Food for Thought students investigated creative and tasty cooking and designing with guest lecturer Erik Woltermann and

In Traveling Farm our students researched eco-friendly concepts

for a travelling farm, with guest lecturer Sjef Meijman.

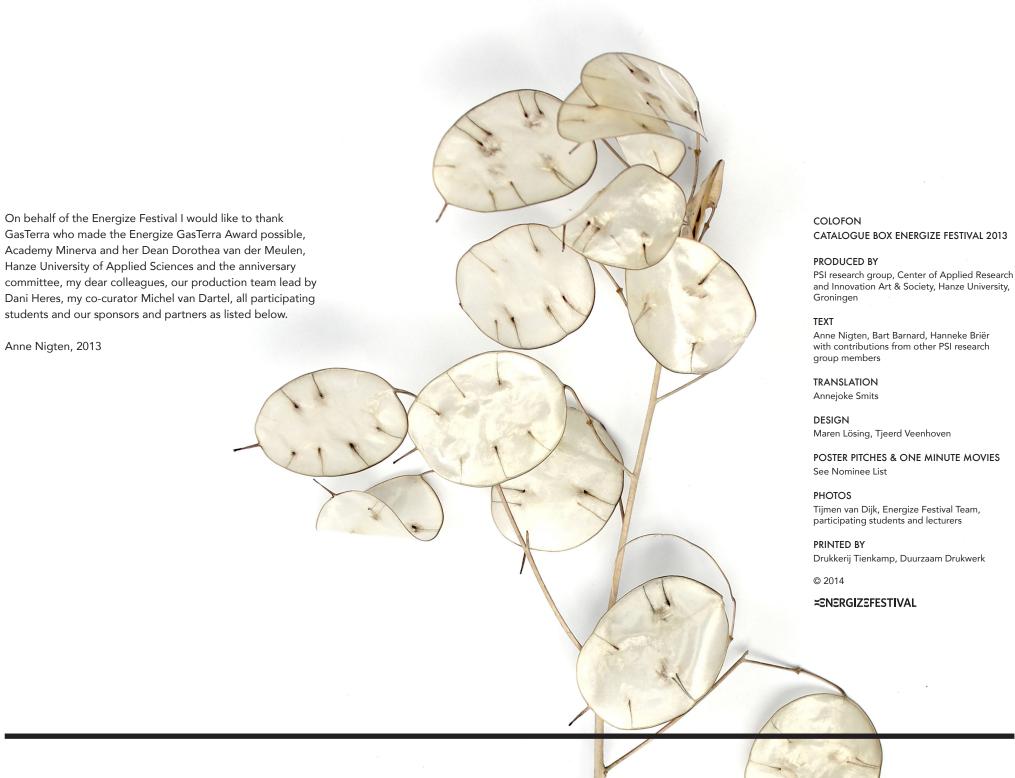
a a voluntary post-course workshop with Elles Kiers.

In *Urban gARTening* artistic and concepts for green interventions were developed by our students with lecturer Allie van Altena and many urban gARTeners in Groningen.

In *BioBased materials*, under construction practice based research was executed into the possibilities of (bio-based) materials with an emphasis on characteristics, sustainability and applications. Lecturer KP Lindeman supervised this project week, experts from House of Design and others joined the experiments.

During the Festival itself the Workshops Electronics and Bamboo gave visitors and students the possibility to experiment with the sustainable (re)use of these materials. The posters, films and the work of all participating students formed the heart of the Energize Exhibition in Academy Minerva. In this catalogue box you'll find the jury nominees for the Energize GasTerra Jury Award.

- 1 Don't judge a banana by Vera Mulder (Poster Pitch)
  Winner of the Energize GasTerra Jury Award
- 2 BioBased materials by Jurrien Veenstra, Jesper Veltrop, Rieke van Dijk (One Minute Movie)
  Winner of the Energize GasTerra Public Award
- 3 Flippable field by Marlies Draaisma and Kelly van Binsbergen (Poster Pitch)
  Energize GasTerra Honorary Mention
- 4 Traveling farm by Anniek Mol (Poster Pitch)
- 5 Makkie Bakkie by Lotte Bolwijn, Janneke Meijer, Jessica Prickartz (One Minute Movie)
- 6 Dop je eigen boontje! by Nine Marije Ligtenberg (Poster Pitch)
- 7 How fast is food by Mariel Peters, Wouter van Breevoort (Poster Pitch)
- 8 Floating farm by Martijn Feenstra (One Minute Movie)
- 9 Master farm by Willemijn Meester (Poster Pitch)
- 10 Buxus city by Floor van Meeuwen and Fenna Kootsra (Poster Pitch)





gentschap NL

















# BioBased Materials





Food for Thought







gARTening



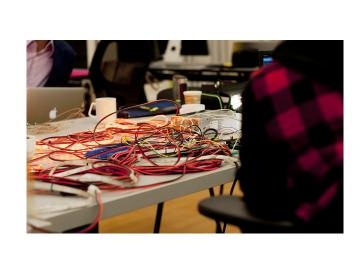


de eetgar stad

Traveling Farm









XYZ City



# **RESEARCHING THE IMPACT** OF THE ENERGIZE FESTIVAL

## Measurements and Results

Starting up the Energize Festival, we decided to research the impact of our actions on participants. Based on discussions between specialists, an adapted specification was drawn up concerning the Energize target group. First we have the innovators: citizens from the region of Groningen who already have an interest in energy and sustainability problems. During the first six months, the research conducted by the project group was aimed at this group of people only. In the next six months this group became larger and concerned a more general audience, who had already indicated an interest in sustainability problems, but had not taken action in this direction. This group is referred to as the Early Majority. The research group Popular Culture, Sustainability & Innovation decided on this distinction so people who already had a certain degree of energy-awareness could act as ambassadors in the further trajectory. The division between Energize experts and a target group was based on Everett Roger's Diffusion of Innovations theory (1962). Rogers uses the terms Innovators, Early Adapters, Early Majority, Late Majority and Laggards.

The Benchmark for Early Adapters took place during The Night of Art & Science 2013, based on an online survey among visitors of the round table conversations at Academy Minerva.

This survey (or an adapted version) was used with every practice-based activity, and the location, the nature of the activity and the audience (based on information from the audience itself) was recorded. The questionnaire was drawn up by PSI researchers. For making the questions experts from PSI's group of researchers were consulted, among whom social scientists, experts from the technological sciences, and from art and culture studies, such as prof. dr. R.W. Boomkens, professor of social and culture philosophy (University of Groningen, external advisor NL), prof. dr. Linda Hardman, extraordinary professor Multi Media Interaction (University of Amsterdam, Centrum Wiskunde & Informatica NWO, external advisor, NL), dr. Martijn Stevens, university professor (Radboud University Nijmegen, external advisor NL). After consultation with these experts from various fields of study, a broad questionnaire was drawn up which expresses the connection between energy and a sustainable lifestyle. The questions were based on research results of various researches, for example Anju and Krishna Gopal Agrawal (2013); D. Goulson, G.C. Lye and B. Darvill (2008); Hanafiah, Marlia M., Marguerite A. Xenopoulos, Stephan Pfister, Rob S. E. W. Leuven, and Mark A. J. Huijbregts (2011) and Brian G. Henning, (2011). The motivation for this stems from the experts' conviction that the energy problem is an inextricable part of a sustainable lifestyle and that awareness should probably not be communicated from technological perspectives, but rather, for example, based on emotional

experiences. The measurements were repeated in the autumn at various events, aimed at both the front runners of the Early Majority and at a wider audience. A total of 209 visitors completed the questionnaire.

Based on the first open interviews the objective of the questionnaire was fine-tuned. From this moment on we started to aim at making manifest a possible discrepancy between what people think and what they do. Respondents were asked five questions about their daily activities in relation to sustainability, and this continued with questions about their opinions concerning sustainability. Although both questions clearly contained elements of sustainability, the researchers' intention was to not let this stand out too clearly. This way they tried to gain insight into the sustainability of people's daily activities.

The questionnaire consisted of six questions: five questions about the activities of the respondent and one about his or her opinion. The first five questions were asked in a sequence on one page, the last question got its own page, this to avoid that respondents would give socially desirable answers. The questions were asked both in Dutch and in English and it was possible to fill in the questionnaire on paper or online. The table below shows the text of the questions, with an abbreviated version for reference in the histograms in the last column.

QUESTION	SHORT
I keep all my files in the cloud	datacloud
I take a shower every day	douche
I fly to my holiday destination	holiday
I eat meat	meat
I wear jeans	jeans
I would hate for the bee to go extinct	bee

#### A THE QUESTIONS

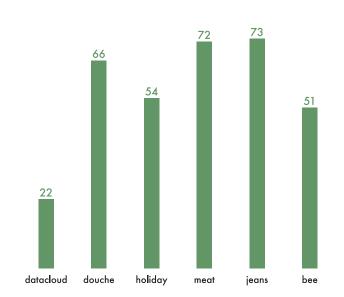
The questionnaire was given to a total of three groups of respondents: the visitors of De Nacht van Kunst en Wetenschap in Groningen (The Night of Art and Science, 1 and 2 June 2013) as Early Adapters, the visitors of the Energize Festival (14 to 17 November 2013) as Early Majority and the students who participated in the lessons which were taught within the framework of the Energize Festival as Innovators. This last group received the questionnaire twice, namely prior to the lessons and after the period in which these lessons took place. In addition to the questionnaires, we invited the British collective The People Speak, for additional open interviews with students and inhabitants of the city of Groningen during the Energize Festival.

## **Expectations**

It would make sense for the number of 'yes' answers to the first five questions to be inversely proportional to the sixth question of the questionnaire (see table 1). People who store their data in the cloud, eat meat, et cetera (the first five questions) seemingly are less concerned about environmental issues (question six). Another result the researchers aimed for concerned the answers given by the students. If the lessons had been successful in bringing about awareness concerning sustainability problems, the answers these respondents gave should show a greater awareness. Answers in the second round of questions should show an increased awareness compared to the answers of the first round.

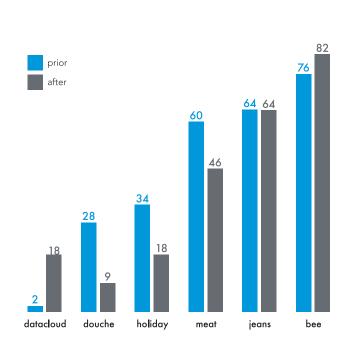
### <u>Results</u>

The histograms below illustrate the results of the questionnaire. Each bar in the histogram corresponds to the percentage of 'yes' answers to the specific question. For example, 25 percent of all respondents at the Night of Art and Science answered 'yes' to the question whether they stored their data in the cloud.



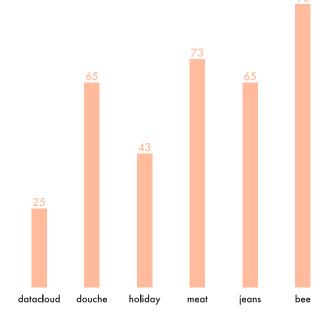
B VISITOR RESULTS THE NIGHT OF ART AND SCIENCE (%)

This diagram shows that circa half of all visitors to 'The Night' would consider the possible extinction of the bee a problem. Most respondents have a shower every day, eat meat and wear jeans. Remarkable is the low percentage of respondents who store their data in the cloud. This question was added because experts suspected that storage of data in the cloud is a method with which a lot of respondents work, but that the owners of this data do not experience this to link to energy usage.



C STUDENT RESULTS PRIOR TO AND AFTER THE LESSON SERIES (%)

The results of diagram 2 show interesting differences between the two moments which were measured. After the period in which the lessons took place, the respondents showered less, ate less meat, and flew less often to their holiday destinations. At the same time it became clear that a possible extinction of the bee would concern a larger number of correspondents. The lower number of 'yes' questions concerning non-sustainable actions, such as showering and eating meat, suggest that students started to act more sustainably. This may indicate that the lessons were successful in creating more awareness concerning sustainability problems. A remarkable result is the great increase of online data storage. This could be explained by the fact that the lessons of this period made a more intense use of online data storage. While interpreting these outcomes, it should be kept in mind that the number of respondents of the second round only concerned a quarter of the number of the first round, which makes the chance of a deviation in these measurements more likely.

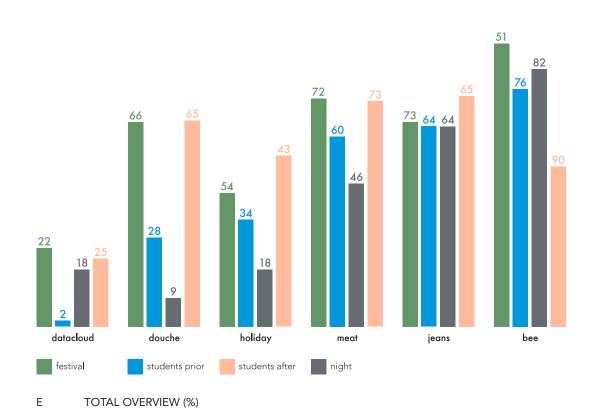


D VISITOR RESULTS FOR THE ENERGIZE FESTIVAL (%)

This is a clear example of the differences between what people do and what they think. By far the larger part of these respondents (90 percent) considers the possible extinction of the bee unacceptable, but their actions do not contribute to the prevention of this. Many respondents eat meat, shower daily and wear jeans - actions which all create a large ecological footprint, and threaten the habitat of the bee. These propositions are a fine-tuning of the research results concerning the connection between consumer behaviour and ecology, as Brian G. Henning (2011) found:

These statements highlight the research results concerning the connection between consumer behaviour and ecology, such as that of Brian G. Henning (2011): "We will find that the mass consumption of animals is a primary reason why humans are hungry, fat, or sick and is a leading cause of the depletion and pollution of waterways, the degradation and deforestation of the land, the extinction of species, and the warming of the planet. [...] Though important and morally relevant qualitative differences exist between industrial and non-industrial methods, this essay will conclude that, given the present and projected size of the human population, the morality and sustainability of one's diet are inversely related to the proportion of animals and animal products one consumes."

Remarkable in this group is also that a considerable part (about a fourth) make use of online data storage. This may say something about the kind of visitor of the Energize Festival: they might simply be more familiar with online tools, and therefore, rather than being aware of the ecological consequences of this usage, they sooner see it as 'hipper' or 'more modern'.



## Conclusion Questionnaires

In general the respondents of the questionnaire are concerned about threats to the continued existence of the bee. This conviction however rarely has consequences for their daily activities: they still eat meat, wear jeans and have daily showers. Less than half of all respondents fly to their holiday destinations and less than a fourth make use of online data storage.

It appears to be a valid conclusion therefore, that there is a difference between what people think and what they do when it comes to sustainability: the respondents do not think that the extinction of the bee is acceptable, but they keep wasting large amounts of energy for the production of animal proteins and large amounts of water needed for showering.

Of course it is possible that the correlation between the activities they were asked about and threats to the continued existence of the bee's habitat was not clear to this group of respondents. This would mean a rupture of the connection between action and meaning. In order to either clarify this or to influence this, more research is necessary, specifically aimed at knowledge about this kind of causal connections between behaviour and consequences.

## **Outcomes Activities**

**OBJECTIVE** Measurements concerning gaining insight into why the messages of energy transition and sustainability are not reaching citizens.

## **ACHIEVED RESULT**

We conclude that there is a difference between opinion and behaviour. We worked with both open and closed questions. The answers also show that the interviewees do not immediately recognise energy and sustainability problems in daily situations.

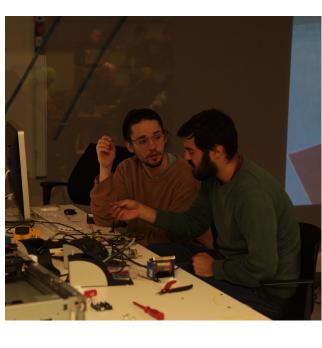
SUGGESTIONS FOR FOLLOW-UP RESEARCH In the other real-life Energize People experiments we aim to set up playful activities which can contribute to bridging the gap between opinion and behaviour through experience. The general audience and the professionals were able to follow the progress and the results of the project via the website: http://i-share-energize-people.nl/. The presentations of the activities of the Energize festival can also be found on the website of the Energize festival:

## **ENERGIZE GASTERRA AWARD**

http://energize-festival.nl/

Link between the energy sector and the audience. GasTerra is the sponsor of the Energize GasTerra Award for students of Academy Minerva's art courses. With the contest we wanted to draw attention to awareness concerning energy and sustainability in the general audience. The students worked on posters, 1-minute films and installations. The festival, the exhibition and the award winners were all mentioned in articles in local newspapers such as Dagblad van het Noorden, Gezinsbode and local radio and television.

# Workshop Electronics







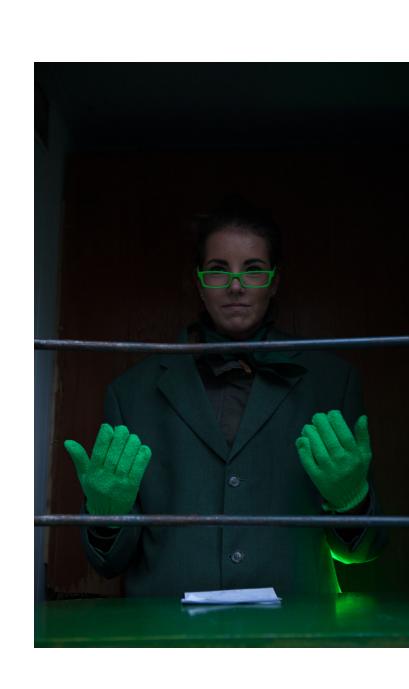


Sustainable Safari's









# Bamboo Workshop

