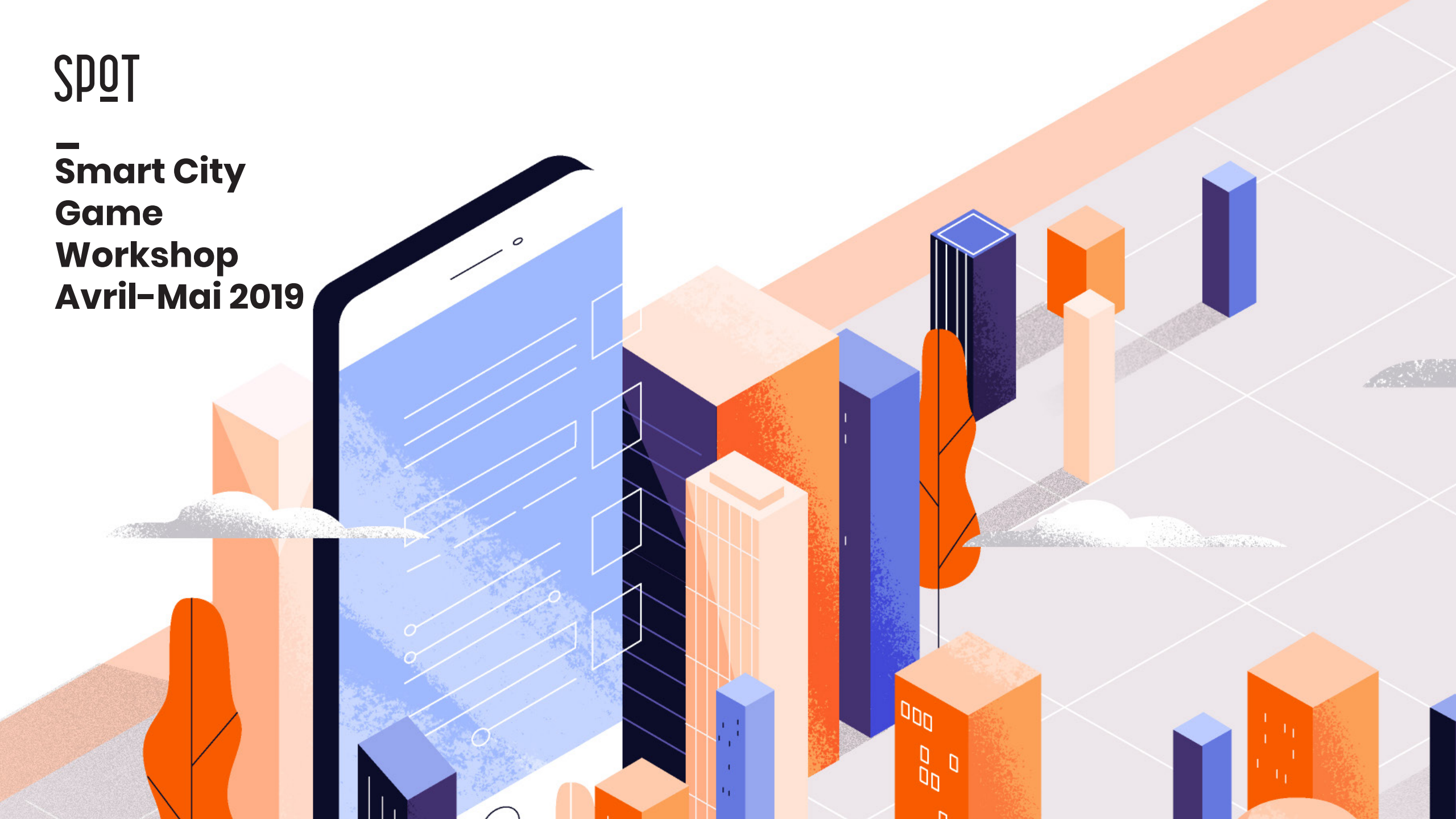


SPOT

Smart City  
Game  
Workshop  
Avril-Mai 2019



**The SPOT association proposes the conception of a game to raise awareness of the energy and ecological transition.**

**This transition is a way to fight climate change.**



**SPOT is teaming up with Colucci Design to organise a workshop with the Masters class students from the Media Design department of HEAD in Geneva.**



**This workshop allows students to meet experts in the fields of climate and energy.**

**Media Design professors explore these issues with students, who conceptualize solutions in the form of scenarios and interactive objects.**

- 1. concept and presentation**
- 2. organization**
- 3. teachers and speakers**
- 4. preparation phase**
- 5. work**
- 6. thanks**

SPOT

— **concept and  
presentation**

01



**The Smart City game project is inspired by traditional board games using elements of new interactive technologies.**

**Smart City provides an introduction to climate issues and opportunities to positively influence renewable energy decisions.**



**The results of the workshop include scenarios, futuristic or off-the-shelf proposals, interactive objects and mobile applications.**

**These proposals are primarily conceptual in the spirit of Design Thinking, and are not always quantifiable and measurable in technical or scientific terms.**



**The proposed works do not necessarily lead to the creation of an immediate, tangible or practical application, but stimulate reflection on topics related to ecological transition.**

SPOT

organisation

02



**The Smart City workshop is organized by HEAD, Colucci Design and SPOT.**

**The head of the Media Design section of HEAD, Ms. Alexia Mathieu, defines with the designer Claudio Colucci and Charles Hieronymi of the SPOT association the brief given to the students.**

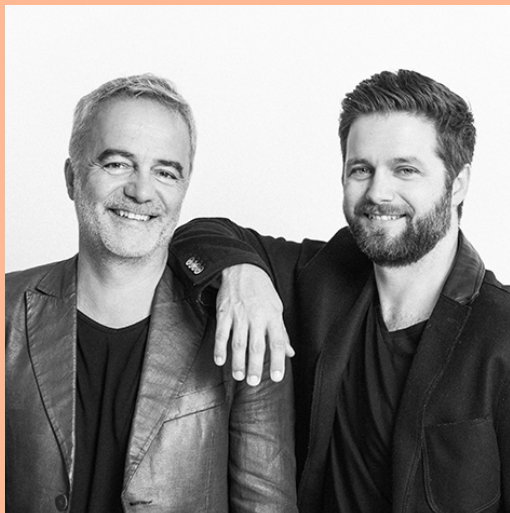
**«What challenges will you face as a designer in a world facing climate change in the coming decades? What role can you play in the energy transition?»**

**In this workshop you will create an object, interface or game that familiarizes and sensitizes people to the energy transition on a daily basis. »**

**«Your project must take place in the context of a» Swiss house «– this can be an eco-neighborhood, a shared apartment, a cooperative, a neighborhood ...**

**You will choose your context and document how people organize their collective lives. You will then imagine your object, game or interface in relation to your target audience..**

**Your approach can be speculative, critical, playful, poetic ... provided that your purpose helps to understand the positive impact of renewable energies in our everyday lives. »**



## Colucci Design

[www.colucci-design.com](http://www.colucci-design.com)

**Founded in 2000 Colucci Design has been present for 20 years, in Europe and Asia with a representative office in Tokyo and Beijing.**

**Thanks to a double know-how in architecture and product design, the office draws everything.**

**Their ideas are confronted with all the know-how, starting with the search for materials, from the most high-tech to the most traditional.**

# HEAD Master Media Design

[www.hesge.ch/head](http://www.hesge.ch/head)



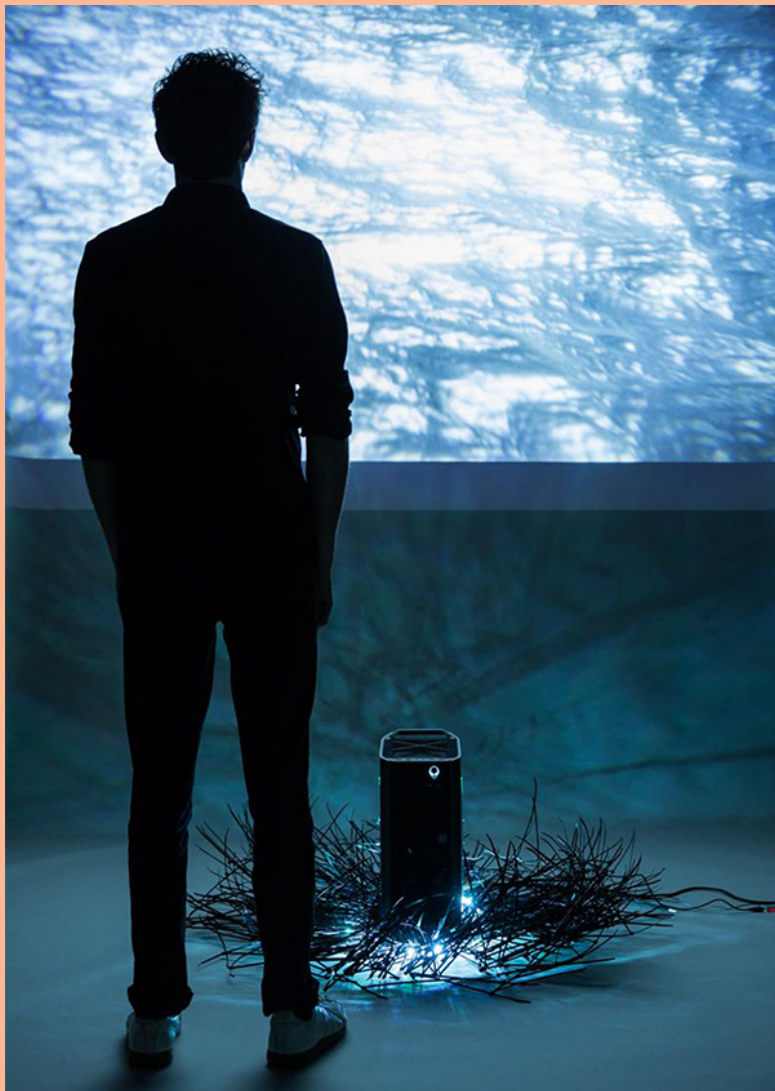
**The HEAD Master Media Design explores the future of interaction design by creating new types of products, experiences and interfaces.**

**The Master focuses on three areas of teaching:**

- **Graphical user interface interactions**
- **Tangible / product interactions**
- **Design interactions service / prospective scenario**



# HEAD Master Media Design



**Through this Master's degree, students master ethical and cultural issues of society in the future in order to anticipate inventively the impact of technology on our daily lives.**

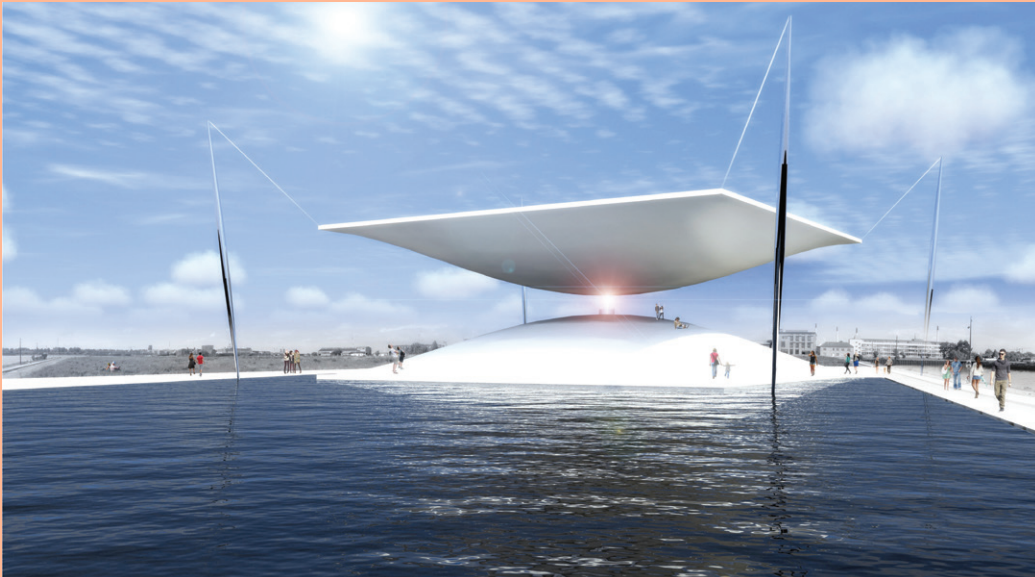
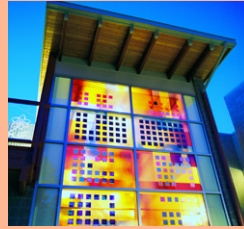
**This goal is based on a thorough understanding of user experience design issues, but also on mastering the design and prototyping processes of product design and information design.**



# SPOT

**The SPOT non-profit organization is based in Geneva.**

**SPOT aims to promote renewable energies through a fun and didactic way, fully integrating the expression and creativity of young audiences.**



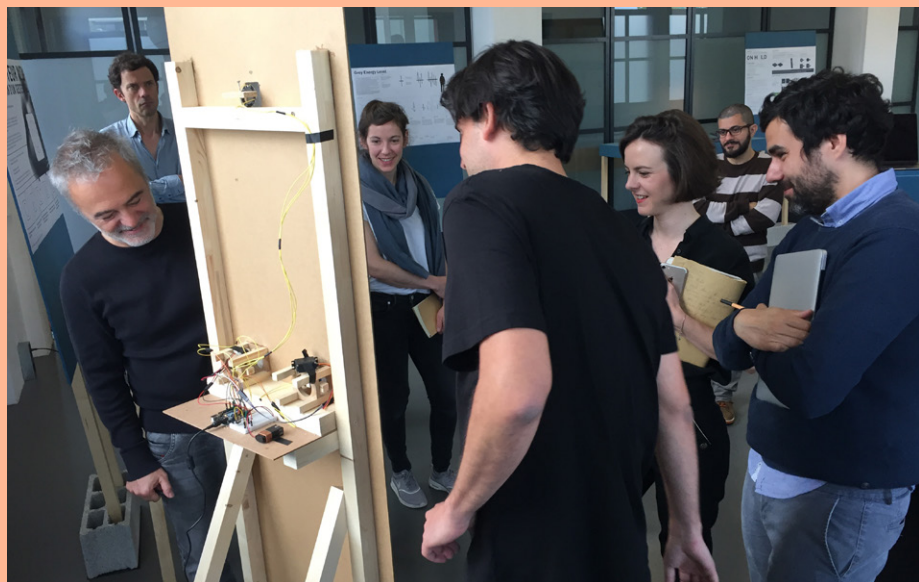
## SPOT

**SPOT communicates through the web, the creation of films and through playful and educational objects.**

**On its website SPOT presents the works of artists, designers and adventurers who use solar energy in their action.**

- **A detailed usage scenario**
- **A document in PDF format that compiles the student's research, its final concept, the use scenario as well as images of its object**
- **A semi-functional model of the connected object or the interface**

## Venue and dates



**The HEAD workshop in Geneva was held with 8 students who worked from 8 April to 28 May 2019 on 10 sessions.**

**The sessions and the final presentation took place in the HEAD building at 5, avenue de la Châtelaine, Geneva.**

**An interim presentation took place on May 8, 2019.**

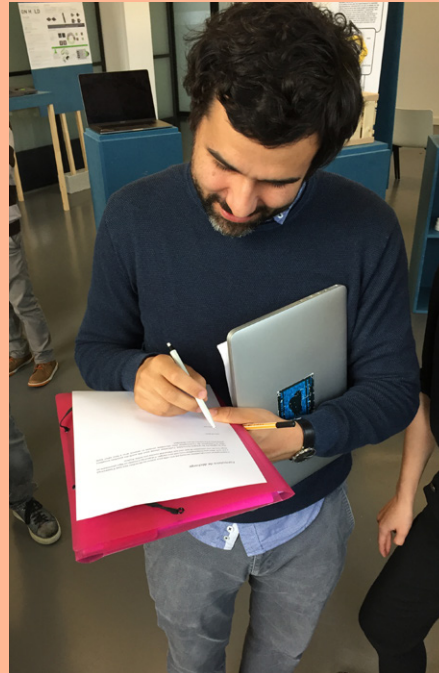
**The jury met to mark the models on May 28, 2019, and experts and speakers were invited to appreciate the work and give their opinion on the presentations.**

SPOT

teachers

03





**The Media Design professors follow the students during the workshop to help them define their concepts and allow them to finalize their objects, apps and presentation.**

## Alexia Mathieu



**Alexia Mathieu is Head of the Media Design Master at HEAD in Geneva.**

**In addition to formulating the educational vision for the department, Alexia teaches the process of strategy design for connected products.**

**After obtaining her Master's degree in 2012, Alexia participated in the development of several connected products in San Francisco for the agency New Deal Design.**

## Gordan Savičić



### Professor Master Media Design

**Gordan Savičić, born in 1980 in Vienna is a professor at the High School of Art and Design (HEAD – Geneva).**

**Author of the book «Unpleasant Design» and «120 days of \* buntu», he has also been working as interaction designer and creative technologist in Switzerland since 2012.**

**Savičić is co-founder of media lab moddr\_ (Rotterdam), weise7 (Berlin) and co-author of the Critical Engineering Manifesto.**

# Laure Krayenbuhl



## Speaker Master Media Design

**After studying product design Laure graduated from ECAL in 2009.**

**She worked as a project manager and designer at the *atelier oï* in Switzerland.**

**During her stay there, she was brought to work on various projects and products for clients such as Bulgari, Foscari, Louis Vuitton, Moroso, Ruckstuhl and USM.**

**Expert speakers invited to speak with students enrich their vision on climate and energy issues.**

**The speakers represent the world of climate, research and energy industry scientific and political actors.**

## José Romero

[www.bafu.admin.ch](http://www.bafu.admin.ch)



**José Romero is the Chief International Environmental Scientist at the Federal Office for the Environment in Bern (FOEN).**

**Mr Romero is also the point of contact for the Swiss Confederation of the IPCC.**

**His contribution to the workshop makes it possible to situate the problematic and the framework proposed to the students at the scale of the climatic problems which concern us all.**

**Mr Romero offers us to understand the stakes of the energy transition for the climate.**



## Martin Gonzenbach

[www.smartlivinglab.ch](http://www.smartlivinglab.ch)

**Martin Gonzenbach is the director of operations at EPFL Fribourg and EPFL's Smart Living Lab.**

**Mr Gonzenbach shares with us his experience in the field of scientific research and the need to create bridges between the world of design and science.**

**He presents us in Fribourg the advances of the new building of the Smart Living Lab. This unique project is a laboratory designed to function as a research site dedicated to the habitat of the future.**

## Federico Quevedo

[www.romande-energie.ch](http://www.romande-energie.ch)



**Federico Quevedo is Business Line Manager at Romande Energie and head of Smart Living.**

**Mr. Quevedo shares with students the challenges of the energy transition for an electricity generation and distribution company.**

**He introduces us to the Innovations of the Smart Living platform in IoT and Smart Grid, and the new solutions and services for optimizing energy consumption in homes.**

SPOT

—  
preparation  
phase

04



# EPFL Fribourg / Smart Living Lab



**The visit to EPFL Fribourg and the Smart Living Lab was organized by Martin Gonzenbach.**

**It allowed students to become familiar with the concepts of optimizing the use of energy, grey energy and the lifecycle of materials and fossil fuels.**





# NeighborHub

[www.enoki.ch/neighborhub](http://www.enoki.ch/neighborhub)

**Students were able to discover the NeighborHub house through a guided tour by the Enoki team.**

**The purpose of this neighbourhood hub concept is to encourage people to reduce their energy consumption and to preserve the country's natural resources in the long term.**

# Crowd Energy project



**The Crowd Energy game project developed at the Smart Living Lab simulates the use of information technology and connected objects to support the energy transition.**

**A model reproduces the houses of a neighborhood that shares electricity through a smart grid. Digital tablets allow each player to view transactions and energy exchanges between homes..**



SPOT  
works

05



**Each student presents an original and personal vision of the problem of energy and ecological transition.**

**The proposed solutions are varied, and touch on issues related to the use of electricity in homes, grey energy from consumer products, water saving and biodiversity.**

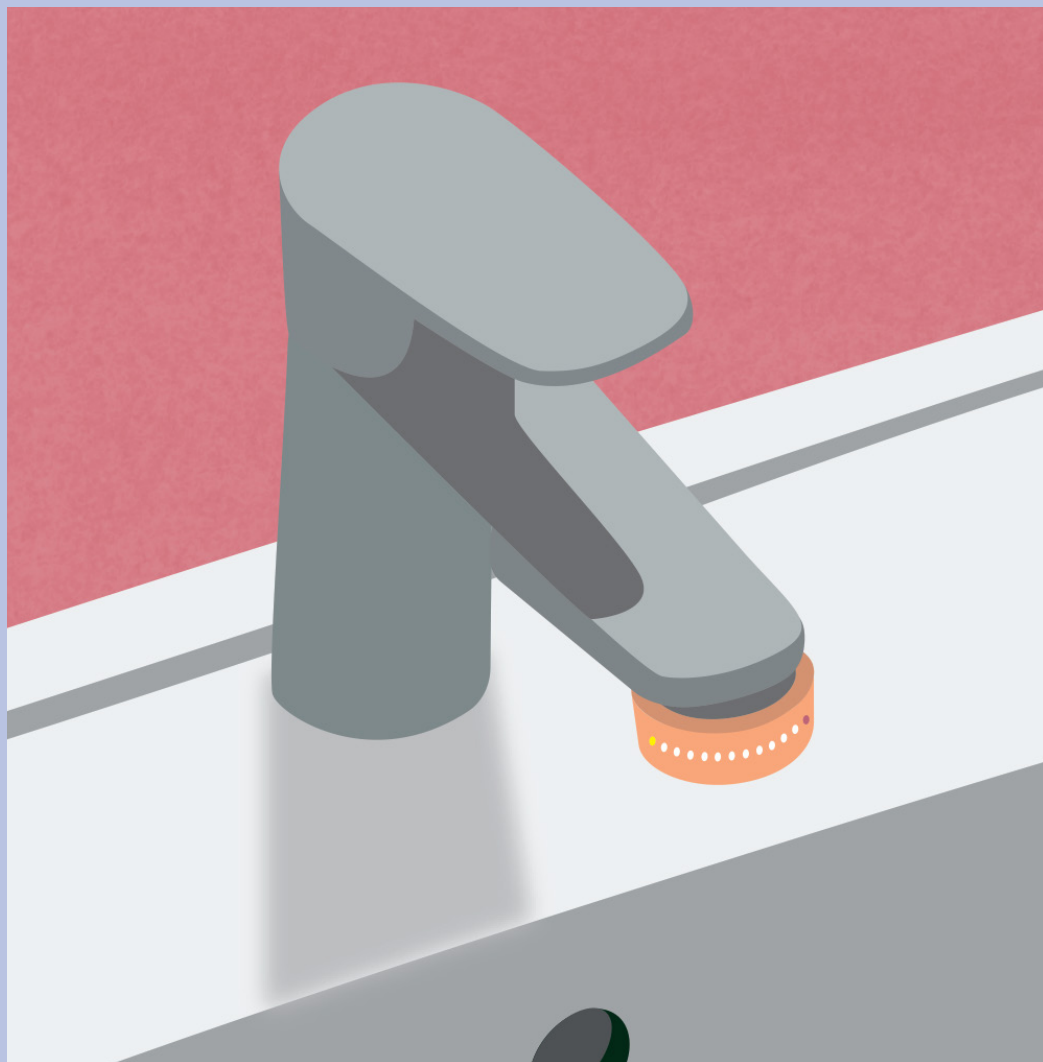


**Catia Barreiras**

**The tale of a drop is a kit made up of rings that can be hung on different water outlets of the apartment.**

## The tale of a drop





## The tale of a drop

**Linked to an application where you can set goals to reduce water consumption, the ring works as a gauge that informs us of the state of our daily use of faucets, shower and washing machines.**

**As a reward for accomplishing these daily challenges, the app offers a series of animations on the ecological transition that can be unlocked at the end of the day if the goals set in the home are met.**

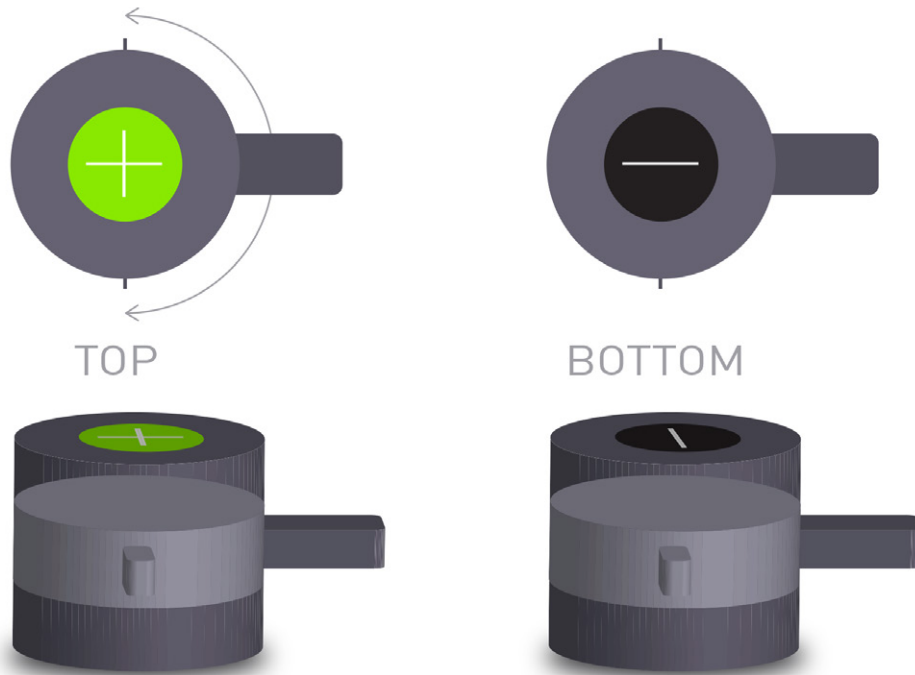


**Francois Harik**

**A speculative approach based on a series of lifestyle-inspired devices in 2050 in a household shared by 2 people.**



## ON HOLD



**These devices extract energy from the human body, transforming it into usable power such as electricity and water for example. They will allow us to experiment in the present with what it would be like to live in 2050 when we will have to collaborate to face the scarcity of resources.**

**WILL EXTRACT THE INTERNAL ENERGY  
FORM IT INTO A POWER (ELECTRICITY, WA**



**Vincent Belet**

**The soft switch deforms according to the time spent on its on or off state.**

## Soft switch



## Soft switch



**This project explores a new way of questioning citizens about everyday actions that can have an impact on the environment.**

**Today, pressing a switch to turn on an electrical device or a light, is a gesture totally banal and innocuous.**

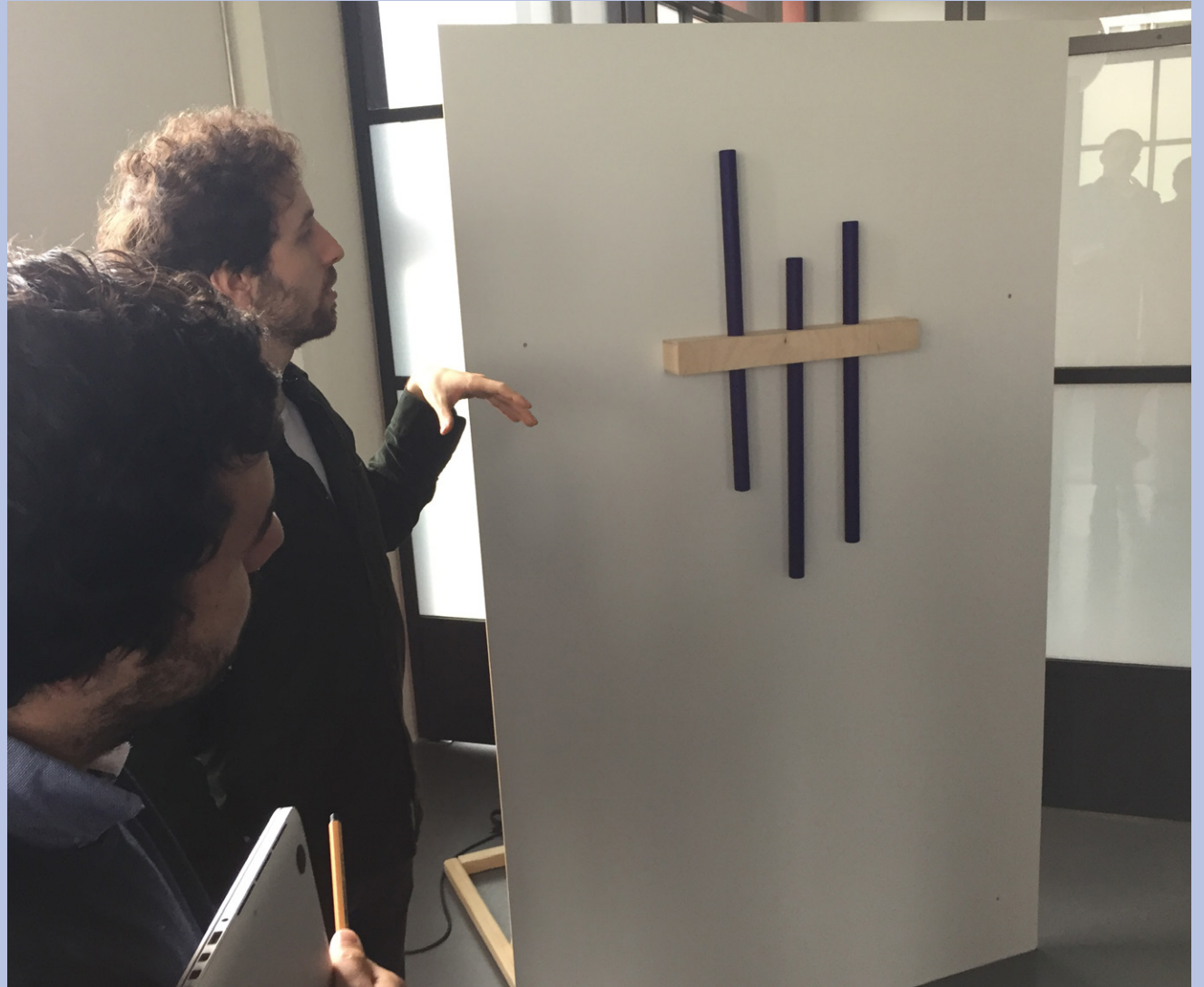
**The soft switch tries to reverse the trend by challenging the user by the sensation it offers to the touch and by its variant shape. Thus, the reflex gesture of pressing a switch becomes conscious.**

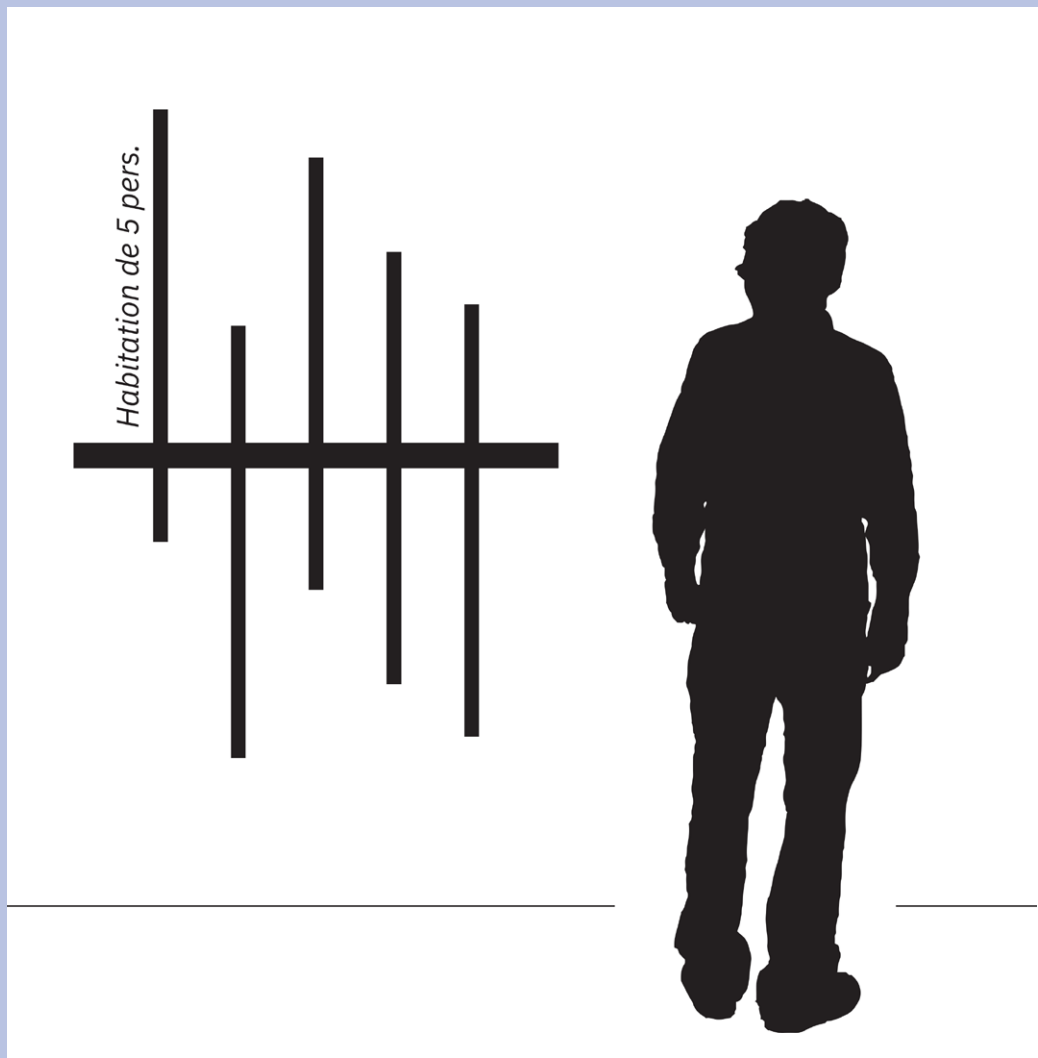


## Théo Francart

**This object, a kind of sculptural energy meter, allows to visually present the consumption of grey energies of its owner.**

## Grey energy level





## Grey energy level

**In 2045 the climate emergency is declared. There are five years to go before the deadline for the anticipated ecological disaster of 2050.**

**The Swiss government then decides to put in place a draconian system of accountability of its energy consumption. From now on each product is given an energy tariff indexed on the amount of gray energy of its entire life cycle.**

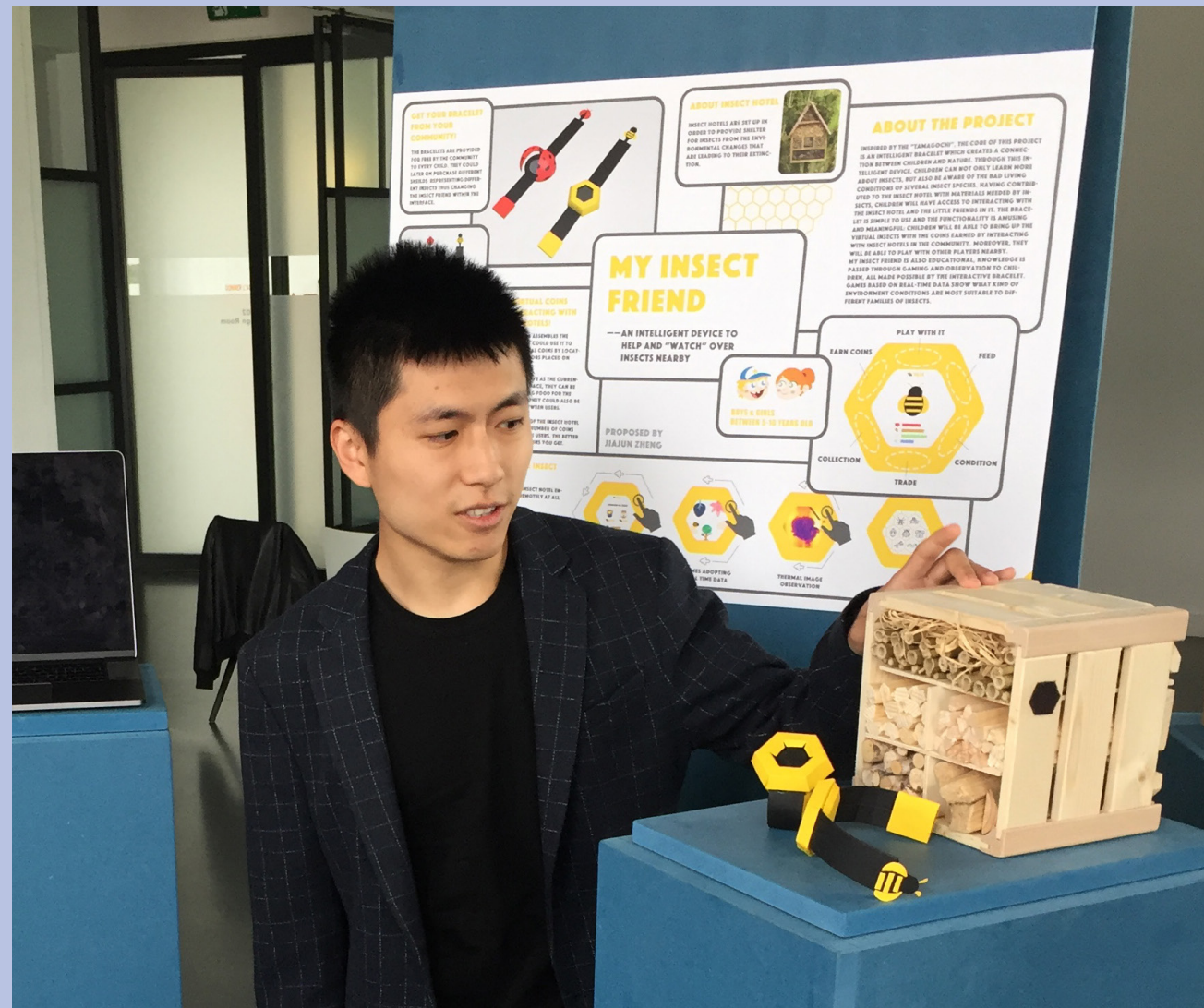
**Citizens then have a fixed and universal amount of «grey energy credits» on a monthly basis, allowing them to consume these products at the monetary and energy tariffs.**



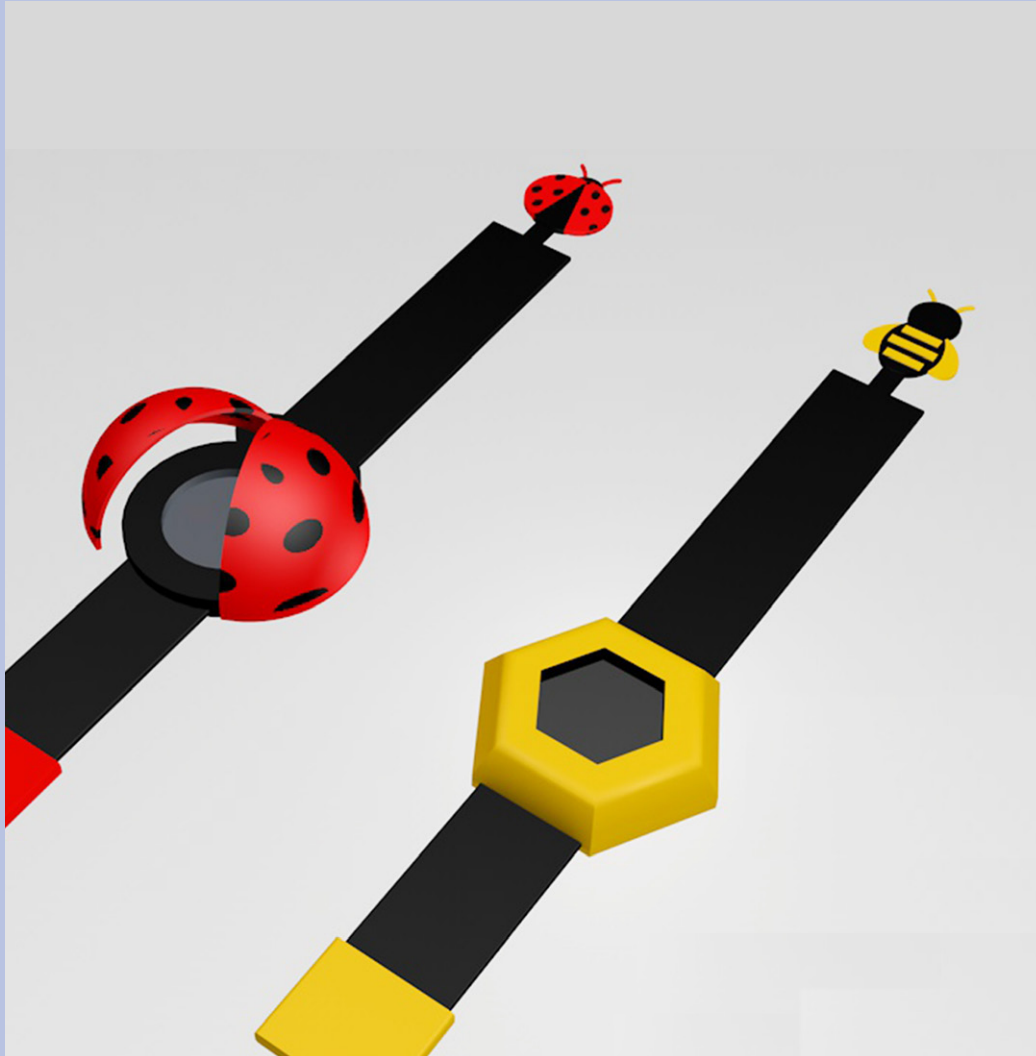
## Jiajun Zheng

Inspired by the «Tamagochi», the heart of this project is an smart bracelet that creates a link between children and nature.

# My insect friend



## My insect friend



**Thanks to this intelligent device, children can not only raise their digital insect friend, but also be aware of the poor living conditions of several species of insects.**

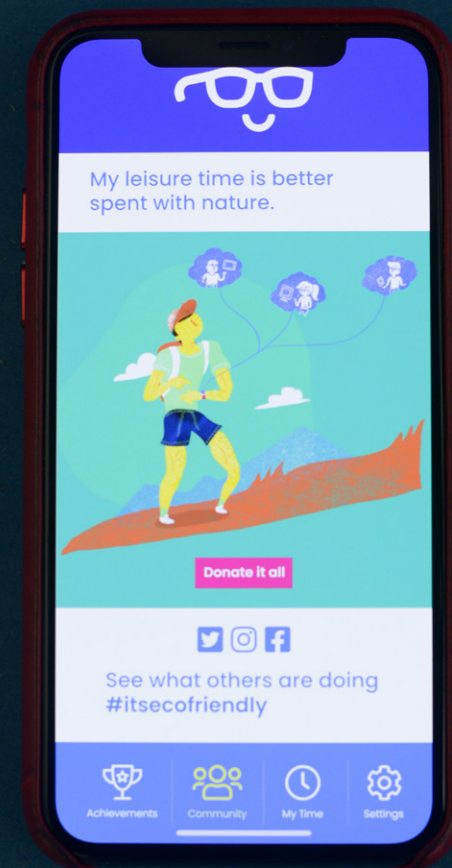
**The bracelet is simple to use and its features make sense: children will be able to raise virtual insects with the «coins» gained by interacting with insect hotels in the community. They will be able to know the condition of insects by playing video games in the bracelet whose adopted data are the real data of nature.**



**Tammara Leites**

**Alec is a conscious form of consuming series and movies, an intelligent way to activate energy-based services.**

## Smart Alec





donate



## Smart Alec

Smartphones and smartwatches collect information related to your physical activity: cycling, walking, climbing stairs. So you opt to use the bike instead of the car, as you choose to take the stairs instead of the elevator. These simple gestures are good for the planet.

However, when you watch series or movies non-stop, you undo the good you have done. Smart Alec can help. Just connect your favorite streaming service to the app. Smart Alec will automatically collect health data from your device and give you temporary access to the chosen service.

**Léa Lansiaux**

**Carbonosphere makes it possible to visualize the carbon footprint of a supermarket's products.**

# Carbonosphere



## Carbonosphere



Scanners are intended for all customers of Carbonosphere's partner supermarkets. They contain the data of each product of the supermarket.

When a product is scanned, a cloud of gas whose color and volume vary according to the impact on the environment is collected and assembled. A product that emits a large volume cloud will have a negative impact on the customer's carbon footprint balance.

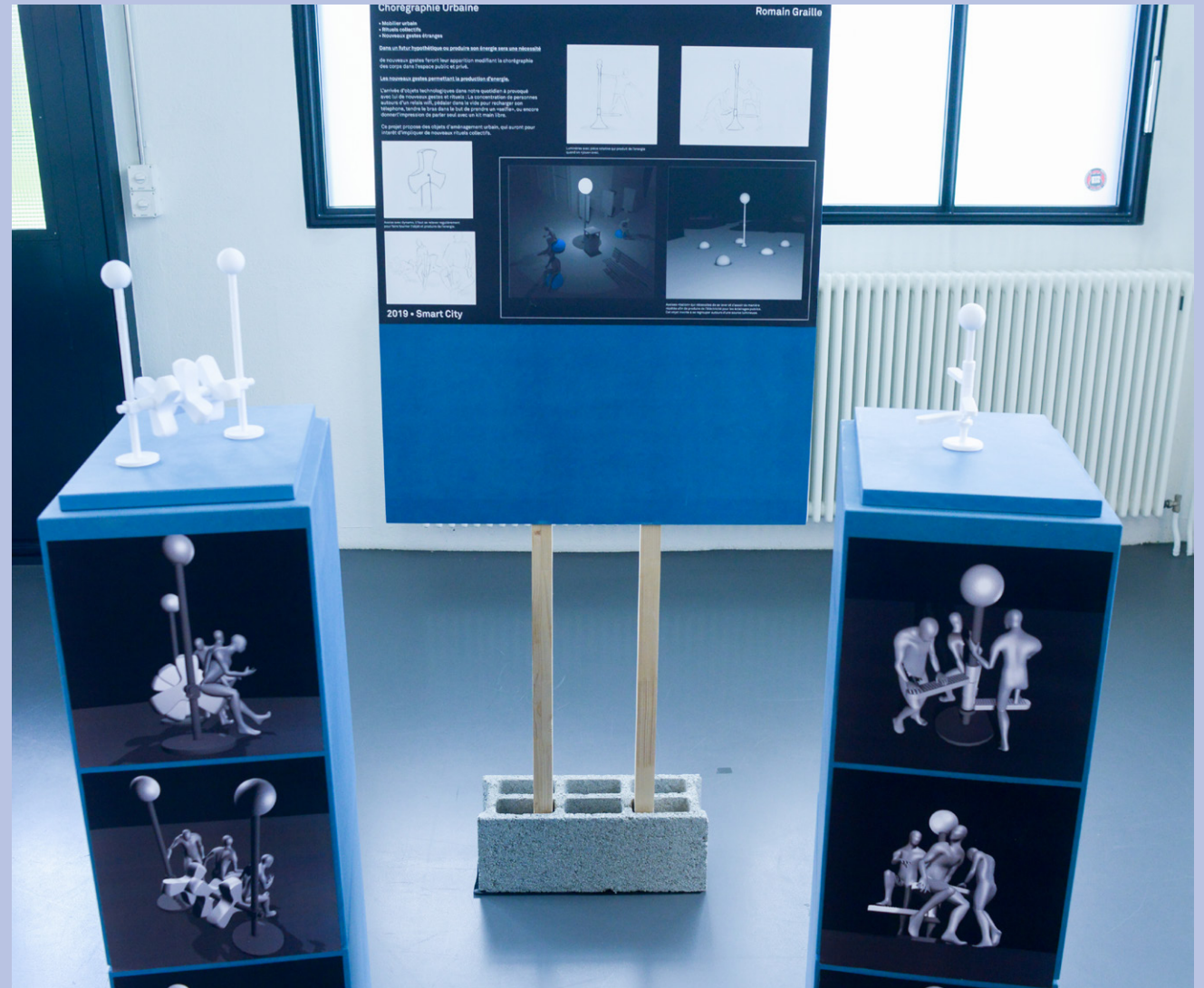
At the end of the shopping session, the gas clouds merge to form a star corresponding to the balance of the carbon footprint the items that you bought.



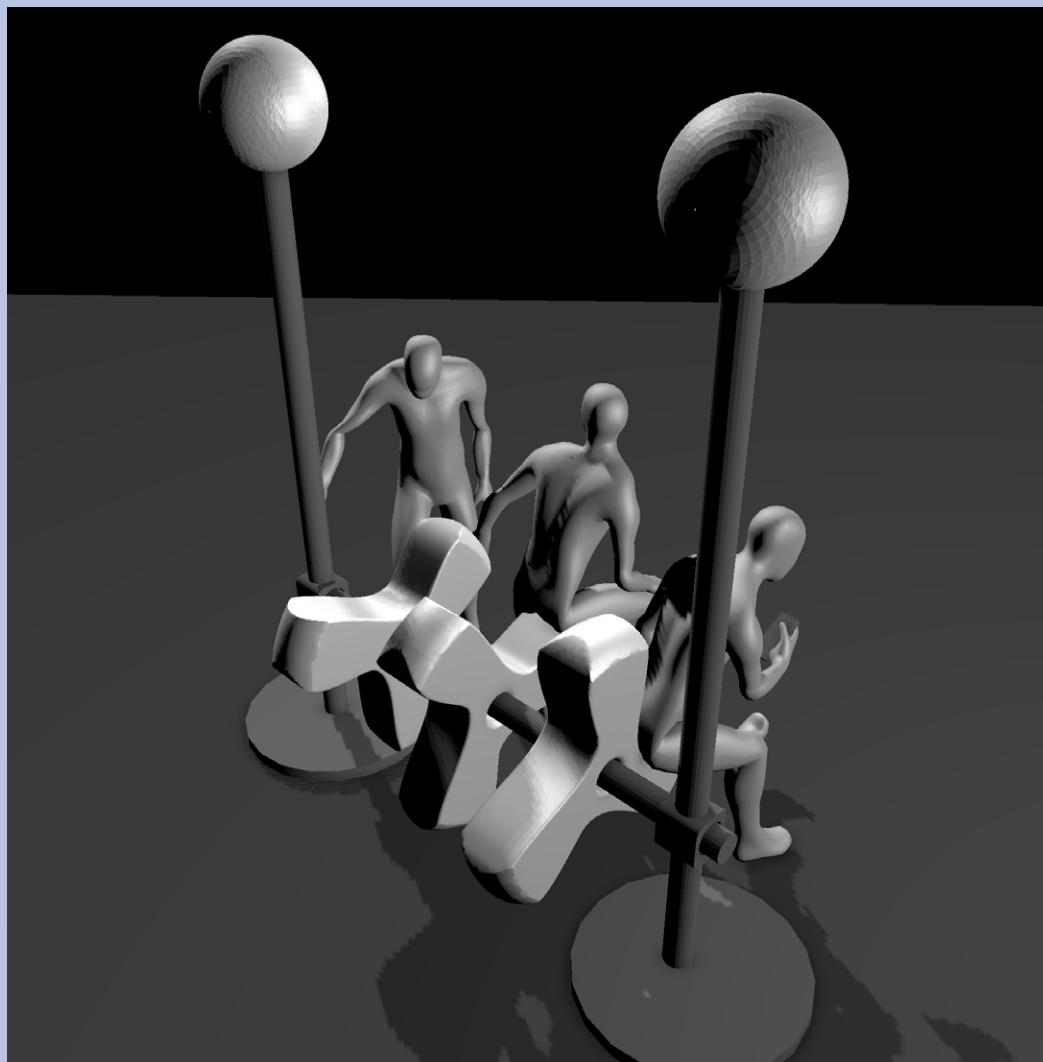
## Romain Graille

**In a hypothetical future where producing one's energy will be a necessity, new gestures will appear that modify the choreography of bodies in the public and private space.**

## Urban choreography



## Urban choreography

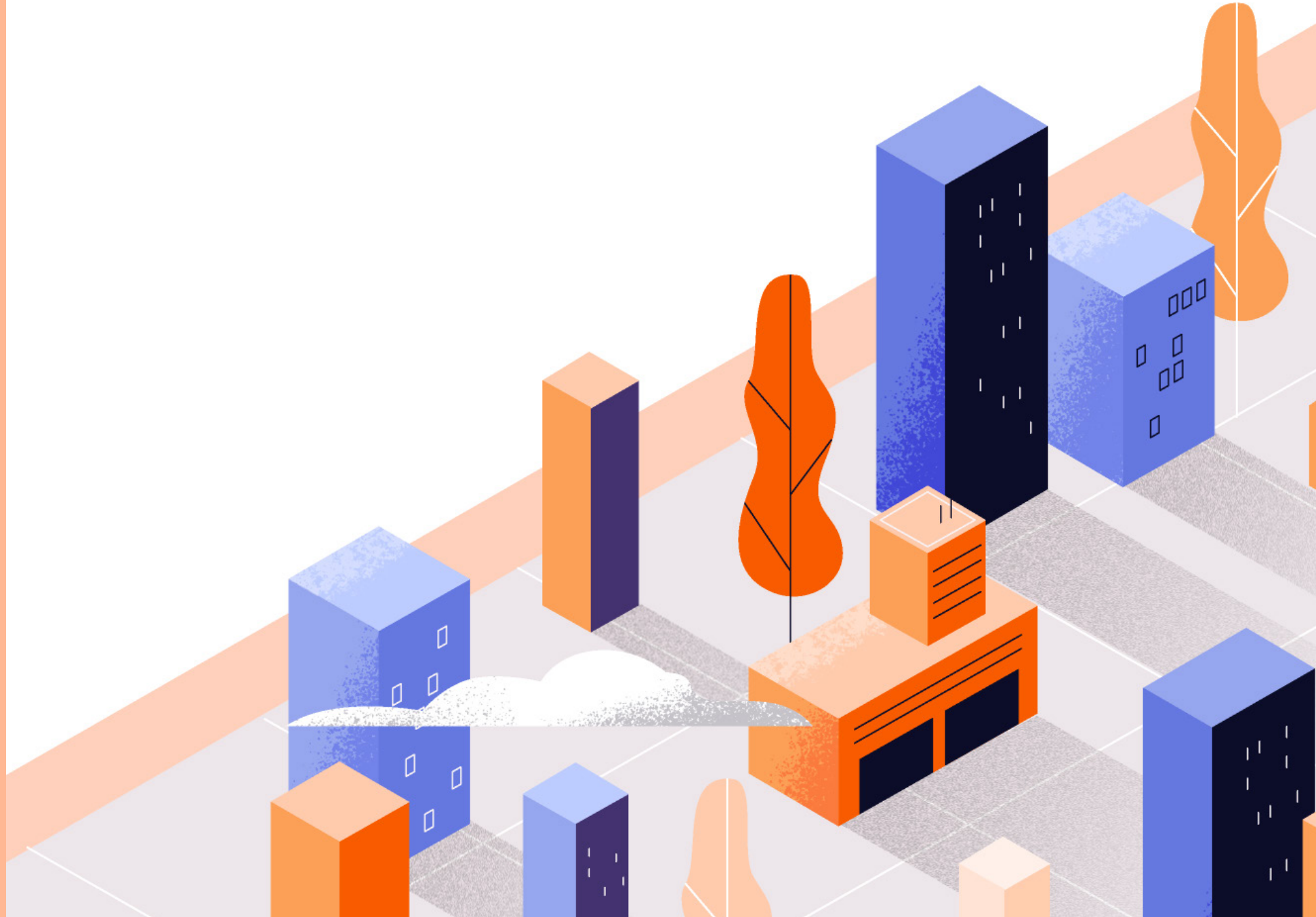


**The arrival of technological objects in our daily lives has provoked with him new gestures and rituals: The concentration of people around a wifi relay, pedaling in the void to recharge his phone, reaching out in order to take a «selfie», or still give the impression of talking alone with a free hand kit.**

**This project proposes objects of urban development, which will have for interest to imply new collective rituals.**

thanks

06




### Organisation

— HEAD  
Genève

  
colucci & colucci  
DESIGN

SPOT

### Participation et soutien

 Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra  
  
Office fédéral de l'environnement OFEV

EPFL

 smart  
living  
lab

 REPUBLIQUE  
ET CANTON  
DE GENEVE  
  
POST TENEBRAS LUX

 ROMANDE  
ENERGIE | smartlab

ENOKI  
conception  
durable 

**Claudio Colucci** (CCD)  
**Alexia Mathieu** (HEAD)  
**José Romero** (OFEV)  
**Martin Gonzenbach** (EPFL)  
**Federico Quevedo** (Romande Energie)  
**Justine Roman** (Building 2050)  
**Anton Sentic** (iimt)  
**Loïc Simon et Mathieu Farine** (ENOKI)

**Daniel Chambaz** (OCEV)  
**Olivier Andres** (OCEN)  
**Emile Spierer** (OCEN)  
**Cédric Petitjean** (OCEN)  
**Danilo Bertocchi** (Green Motion)  
**Remy Zinder** (SCDD)  
**Giancarlo Copetti** (SCDD)  
**Thomas Wenger** (DCS)

Credits

**Graphic design : Superposition**

**Portrait Photography : Miguel Bueno**

**Cover illustration : Julia Hanke for Mumba Studio**

# SPOT

## contact

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