

**compáz**

PRESENT

# Photo- synthesis

PROJECT

**TECHNO-BOTANIC  
INSTALLATION**

**5TH ART AND SCIENCE  
INTERNATIONAL EXHIBITION  
AND SYMPOSIUM (TASIES 2019)  
ACADEMY OF ARTS & DESIGN,  
TSINGHUA UNIVERSITY  
BEIJING**



清华大学  
Tsinghua University

ART & SCIENCE







# Multi— phase

Photo-Synthesis is a two-pronged photovoltaic installation. Both pieces are presented in the form of 5m2 triptychs. One piece is located indoors at the National Museum of China, the other, outdoors in the artistic district 798 Art Zone. Although both locations are 10 kilometers apart, the two pieces initiate a dialog and complement each other.





# Nature as a muse

Photo-Synthesis is an art series about the sun as source of energy. On the surface, it is both poetic illustration and analogy; photosynthesis, a plant's ability to convert light energy into chemical energy. Beneath the surface, it literally converts the sun's energy into electricity by way of silicon cells.



# 科學

## SCIENCE

LOCATION 1.  
PHASE A  
NATIONAL MUSEUM  
OF CHINA  
中國國家博物館



### Phase—A

Interior. Art-Science.  
The art is energized. Science and  
technology as canvas.

# 藝術 ART

LOCATION 2.  
PHASE B  
798 ART ZONE  
ART DISTRICT

艺术工厂咖啡厅  
对面墙面照片

# Mural —Dialog

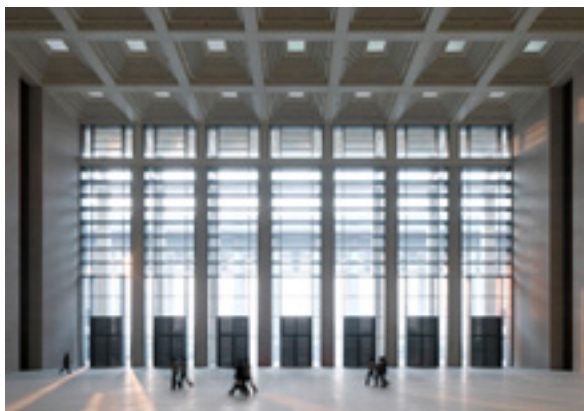


## Phase—B

Exterior. Science-Art.

Photovoltaic panels as art. Giving renewable technologies the ability to transcend their literal applications and affording them seamless adaptations to distinct urban settings.

# PHASE A



In response to Tsinghua University's call for participants for the 5th International Art and Science Symposium and Exhibition (TASIES 2019), Compáz investigates the traditionally passive and inert artistic canvas as a potentially active source of energy. Directly connected to the museum's power network, the art installation modestly contributes to its host's energy performance.

Displayed within the prestigious National Museum of China, the art installation demonstrates the unforeseen potential of the solar panel as artistic substrate.



# PHASE B



The second triptych is supported by the Embassy of Switzerland in China, Beijing and Swissnex; Switzerland's international network dedicated to education, research and innovation. It is the companion to the museum's indoor installation. Outdoors, it reaches its full potential and function as a solar panel whilst initiating discourse.

Installed in the heart of the 798 Art District, the art stimulates debate and reflection about the purpose of public art and its role in the context of renewable energy in the urban setting.

# Watt —is Art

Photo—Synthesis are works of art powered by the sun, figuratively and literally. The top layer; “the art”; is a representation of plants, nature’s undisputed masters of photosynthesis: the process of converting light energy into chemical energy. Alternatively, solar panels; the artwork’s substratum or canvas; is man’s answer to plants’ ability to harness the power of the sun. Not by storing it as sugars, but by converting it into electricity. Photo—Synthesis exhibition is composed of two installations of three 1646 mm x 999 mm (60 solar cells) panels. Built as a triptych composing one single image. One artwork is conceived to work outside and to produce electricity when facing the sun. The other one stand inside as an artwork showing its great potential and the magnificent photographic art work.

## Performance

Peak power of 1 module: 140 Wp

Peak power of the triptych: 420 Wp

Estimated production of the triptych in vertical position: 290 KWh

As a reference, during a year, it allows you to: Watch TV for 870 hours, play with your video game during 290 days, make 290 cycle of your washin machine, work 140 days with your computer or drive your Smart electrical car for 580 km.







# When Art— works

The technologies allowing the integration of images on the solar panels follow a tradition of innovative solutions that will help design new energy strategies for the upcoming generations. The artistic panel makes us forget about the visual aesthetic of photovoltaic panels with breakthrough technologies. The panel integrates and displays stunning images whilst producing electricity from the sunlight. Solar energy can now be seen as a new artistic medium that can stimulate creativity and contribute to a more responsible society.



# About —the artists

Compáz is a collective of scientific and artistic skills, an incubator of ideas that seeks to create, produce and promote projects that will assist social progress. The projects of Compáz are spaces designed to allow for questioning big ideas about society. They are spaces that allow for a growth in consciousness, a different way of looking and conceiving of the world.



Laure is an accomplished scientist, as a former manager at the Photovoltaic division of CSEM, she considers herself to be a passionate and committed researcher. She is driven by studying the impact technology has on our society and how we relate to it's ever increasing importance in our daily lives.

LAURE@COMPAZ.ART

**Laure-Emmanuelle Perret-Aebi**  
**Founder**



Lats has been a successful entrepreneur for more than 20 years, lending his talents to companies in order to inform their digital transformation and to enhance their strategic positioning in a globalized world. He seeks to create an ideal world where there is a harmony of mobility, technology, good business practices and strong ethical values.

LATS@COMPAZ.ART

**Lats Kladny**  
**Founder**



Raf is an avid consumer of images, contemporary art and anything related to creativity, he has garnered a reputation for his ability to simplify complex ideas, transpose difficult topics to make them accessible and for nourishing aesthetics in unexpected places. His rebellious spirit can be seen as the antithesis of the scientific approach yet his creative skills and desire to make the world a better place are key elements to drive the success of Compáz.

RAF@COMPAZ.ART

**Raphaël Pizzera**  
**Founder**



David is a photographer, animator and motion graphics artist. His photographic work explores the relationship of usefulness and formal beauty expressed by commonplace organisms. He sees the photovoltaic substrate as a natural medium for his creations. He cannot imagine a better canvas than one endowed with the power to harness the sun's energy.

DAVID@COMPAZ.ART

**David Hartwell**  
**Artist**





This remarkable technological and artistic feat would not have been possible without the active support of public-private partnerships. The State and the City of Neuchâtel, Switzerland, both positioned as key players in photovoltaics, along the Fondation Casino Neuchâtel, the Embassy of Switzerland in China and Swissnex China, Inox Communication LMNT consultancy and of course, the Tsinghua University in Beijing. and our technological partner Solaxess. All have joined ranks to bring this project to life through their pivotal support, while continuing to inspire new ideas. The applied technology demonstrates the enormous potential for dialogue that exists between the arts, sciences, and eco-sustainability. As an incubator for ideas, Compáz aims to pursue the exploration of these new fields of expression in an artistic, scientific and committed way.

#### PARTNERS



#### TECHNOLOGICAL PARTNER

**SOLAXESS**<sup>+</sup>  
white solar technology  
Building on CSEM technologies

#### WITH THE SUPPORT OF



清华大学  
Tsinghua University



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瑞士驻华大使馆

**Compáz is Member of the European  
Be-Smart Consortium**



The European Union's Horizon 2020  
research and innovation programme  
under grant agreement N° 818009