

Press Release

## **TOKENS FOR CLIMATE CARE. An Installation by Process – Studio for Art and Design**

Austria's contribution to the London Design Biennale 2021 is presented at the MAK

Opening	Tuesday, 19 October, 7 p.m., Free Admission
Exhibition Venue	MAK FORUM MAK, Stubenring 5, 1010 Vienna
Exhibition Dates	20 October – 21 November 2021
Opening Hours	Tue 10 a.m.–9 p.m., Wed–Sun 10 a.m.–6 p.m.

The interactive installation *TOKENS FOR CLIMATE CARE*, the Austrian contribution to the London Design Biennale 2021 (2 – 27 Juni 2021) by Process – Studio for Art and Design (Martin Grödl and Moritz Resl), will be presented at the MAK starting 20 October 2021. The project focuses on one of the currently most important tasks of humankind—climate care—, which can be triggered by the transformative effect of design. The new *TOKENS FOR CLIMATE CARE* will be presented at the MAK FORUM in a spacial laser installation making the generated data visible in real time. Visitors can co-determine the meaning of the created symbols via their smartphone by selecting three terms from a list of endlessly combinable labels. During this process, the colors of the laser installation alternate.

Austria's contribution, commissioned by the Federal Ministry for Arts, Culture, the Civil Service and Sport and the MAK, directly relates to the motto of the London Design Biennale 2021 "Can we design a better world?". *TOKENS FOR CLIMATE CARE* focuses on the task of climate care by means of the transformative power of design and technology. Process – Studio for Art and Design uses technology based on artificial intelligence (AI) in order to create new and original graphic symbols based on an extensive databank of logos, signs, and glyphs. The data are preliminarily labeled with key words covering a broad definition of climate care—including its social, political, ecological, and economic aspects. Based on the meaning assigned to these key words, the AI model can design its own, new symbols. The interactive laser installation makes the generated output data visible in real time.

The realization of *TOKENS FOR CLIMATE CARE* is based on the machine learning framework GAN (Generative Adversarial Network). "Contrary to many other algorithms for machine learning that recognize images, GAN can create content—in our case images. This is what we make use of," Process – Studio for Art and Design explains. In a first step, many examples for the type of image that was to be created—the mentioned dataset—were created. For this purpose, symbols and symbol-like signs from a row of fonts and symbologies were used. With an own dataset browser, from more than 200,000 possible symbols approximately 7,000 were selected for the first dataset. To take complexity and aesthetics into account, these symbols were sorted and filtered manually and by machine.

In a further step—the so-called labeling—the symbols in the dataset were assigned a meaning. Ascribing the keywords is an essential human contribution to the creation of algorithms. The CLIMATE CARE vocabulary consists of approximately forty unambiguously assigned terms. When generating the personal symbol (token), people can choose from four different categories: natural resources like earth, ground, water; artificial or cultural resources like electricity, work, science; qualities like scarcity, recyclability, fairness, as well as activities like change, progress, care, or revolution.

Based on the created dataset and the key terms linked to it, the neuronal network was trained. To optimize it and generate better results, tests were repeatedly fed into the network and their results were analyzed. The AI learned the visual properties of the symbols it saw as well as the assignment of key terms to these visual representations. The trained model is time-intensive and requires a lot of computing power to generate new symbols—tokens.

„The project aims to increase visibility both in the real space—in solo actions as well as in the context of collective performances—as well as in the digital space. In order to download and use the personally generated token, users must agree to our TERMS OF CARE, which are phrased in a short and understandable way on purpose. They can be seen as a kind of guideline,” the designers from Process – Studio for Art and Design explain. Through the website [tokensforclimate.care](https://tokensforclimate.care) created by the studio, activists but also each individual citizen have the possibility of generating an individual symbol—the token for climate care. The tokens are freely available and without charge.

Process – Studio for Art and Design is an experimental design studio with focus on generative and interactive design. It works in the fields of branding, web, installation, and print. In addition to classic design solutions, Process also designs and develops specific software which can be used as tools for customers. The studio headed by Martin Grödl and Moritz Resl has already realized projects for the Design Museum Holon, the Massachusetts Institute of Technology, The Prodigy, Raiffeisen Bank, MAK, the Royal Museums of Fine Arts, Sagmeister & Walsh, the Vienna University of Technology, the University of Applied Arts Vienna, Wienerberger AG, and the Zurich University of the Art. Furthermore, it represented Austria at the London Design Biennale 2021.

Images are available for download at [MAK.at/presse](https://MAK.at/presse).

Funding and execution:  
Federal Ministry for Arts, Culture, the Civil Service and Sport  
MAK – Museum of Applied Arts, Vienna

Support:  
Austrian Cultural Forum London

Press Data

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Curator	Marlies Wirth, Curator Digital Culture and MAK Design Collection
Design, concept, development	Process – Studio for Art and Design (Martin Grödl, Moritz Resl)
Technical implementation	in cooperation with enliteAI
Exhibition architecture	Some Place Studio (Bika Rebek, Daniel Prost)
Supporting program	Thu, 21.10.2021, 6:30 p.m. MAK im Dialog ONLINE ZOOM-TALK TOKENS FOR CLIMATE CARE Tue, 16.11.2021, 7 p.m., free admission Special-Demo-Tour with Martin Grödl and Moritz Resl from Process – Studio for Art and Design
MAK Admission	€ 14 / Reduced € 11 / Family Ticket € 15 Every Tuesday 6-9 p.m.: Admission € 6 Free admission for children and teens under 19
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Vienna, 13 September 2021