reconciliation with the living

exhibition guide

#Artists4theLiving

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artivism
digital

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Artists for the living

All experts agree: the climate crisis is the greatest challenge of the 21st century. We are in a race against time to conserve our natural habitats, their beauty and diversity, to protect our ecosystems and natural resources, and to pass them on to future generations. Change does not only depend on political and legal agreements, even if they are vital for the future: it requires a change of attitude and a new perspective on man's place in nature.

Given the increasing influence of digital technology in public discourse and the fact that people's perspectives are now being shaped online, we have chosen to explore the work of digital artists who delve into the themes of life and biodiversity. Because artists are producers of universal messages, we hold the firm conviction that their artistic output possesses immense significance in facilitating a shift in humanity's collective mindset with regards to our place in the Universe and, specifically, on our planet Earth. By raising our awareness, they help us think about how to reconcile humanity with itself and the living, and represent, whether they state it openly or not, a form of art that builds the momentum of the environmental cause, which we might call "green artivism".

The artworks displayed in this physical space bring us face to face with the living. They challenge our ideas about how to cohabitate intelligently — ideas our species must adopt for its own benefit.

You can support this artistic movement, which intends to remain active long after this exhibition has closed, by posting pictures on social media with the hashtag #Artists4TheLiving.

Enjoy your visit!

Joël Milgram
President of Culture
For Causes Network

Rachel Guez
Vice-President of Culture
For Causes Network

Benjamin Benita
Author
of the exhibition

You cannot address these ecological questions without the Arts. If you don't have the affects capable of metabolising the ecological situation, you're cooked!

Bruno Latour
"Interview with Bruno Latour",
Arte.tv, 2021

Landscape
with Carbon
Offset 2022,
zancan,
110 cm x 195.5 cm
Courtesy of
6529 Capital.

Landscape
with Carbon Offset

I was a very young boy when I was stunned by a machine in a store: a typewriter with an LCD segment display. It was tangible proof of a dream future, then called "the year 2000", which would bring us flying cars and helpful humanoid robots. I grew up and organized my professional and creative life inhabited by this childhood fascination for the marvels of technology. You have to mature enough to understand when adhering to these promises of a benevolent and playful future makes you a devoted consumer. I broke later with this utopia of abundance, ease and technological comfort, not without difficulty; Having become a critic of my own desires, I now live with this torment: our energy to build carries our own demise.

There are those gurus whom we love to revere, those makers of jewels, pleasures and riches, who chant the promise of our individual happiness in technological progress. These make solutions up that stir up the very problem. "Always control your speed," said the driving instructor; today no one knows how to brake. Everything I create today is inhabited by this doubt and this guilt, in the realization that my innocent pleasure of creating depends on what fuels our race towards disaster.

Yet energy is the engine of men. Art has this kind of energy, charismatic and unifying. If I believe little in technology to save humanity, I keep hope in humanity, in its conscience, in the universality of its love. If only one power is given to artists, it is that of being able to touch, sometimes, the hearts of men, and in this sense, I have this duty to continue to try.

"Landscape with Carbon Offset" is an honest critique of my own consciousness as an artist working with technology. The canvas where the desire to explore new forms of art is expressed, will always remain stained with the hydrocarbons that I participated in burning ; the technological solutions that we place our faith in are barely more than ways to wash away our guilt. For these reasons, through the hard times, more than ever, we need beauty in our lives.

Michaël Zancan

Landscape with Carbon Capture was created by zancan in November 2022 on the occasion of the campaign #Artists4theLiving organized by the non-profit Culture For Causes Network in coordination with UNESCO. It is a generative artwork, meaning that it was created through the use of programming code and math formulas   Moreover, the artwork was accessible for purchase during the campaign by NFT collectors, who could buy various versions of it as the algorithm made alterations to the artwork on-the-fly. These unique pieces showcase the exciting possibilities that digital tools are enabling, as they usher in a new era of artistic creations that are captivating entire communities of NFT art aficionados.
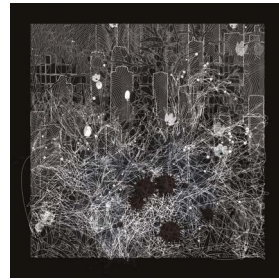

Landscape with Carbon Capture #1028, 2022, zancan, 36 cm x 36 cm.
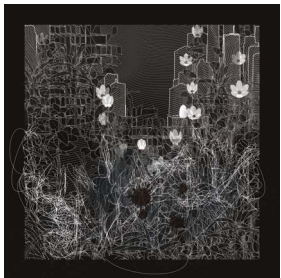Courtesy of Kylo

Landscape with Carbon Capture #10175, 2022, zancan, 36 cm x 36 cm.
Courtesy of Darek.eth

Landscape with Carbon Capture #9900, 2022, zancan, 36 cm x 36 cm.
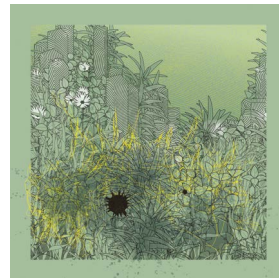Courtesy of Aramunu.eth

Landscape with Carbon Capture #6887, 2022, zancan, 36 cm x 36 cm.
Courtesy of agksys

Landscape with Carbon Capture #4543, 2022, zancan, 36 cm x 36 cm.
Courtesy of Confused Collector

Landscape with Carbon Capture #6869, 2022, zancan, 36 cm x 36 cm.
Courtesy of Paranew

Landscape with Carbon Capture #4183, 2022, zancan, 36 cm x 36 cm.
Courtesy of Bernardo Café

Landscape with Carbon Capture generation process, zancan, 2022

What makes generative art so interesting is that it is not static or fixed, but rather evolves and changes over time. Each output is unique and cannot be reproduced in the same exact form, making it a dynamic and unpredictable form of art.

In the case of "Landscape with Carbon Capture," the generative process allows for the creation of an ever-changing artwork that is never quite the same as before. The algorithm developed by zancan introduces random aesthetic variations that add an element of chance and unpredictability to the artwork's appearance. This creates a sense of liveliness and movement that is not present in traditional static art pieces.

Generative art is a type of art that is created through the use of algorithms, computer programs, and sometimes artificial intelligence. It relies on a set of rules or instructions to create complex and unique visual or auditory outputs that are not predetermined by the artist, but rather emerge through the algorithmic process.

About zancan

Michaël Zancan is an artist from Bordeaux, France, who has worked as both an oil painter and a creative programmer since the early 90s. In 2021, he discovered in blockchain technology the ideals of decentralization, and in NFTs, a tool that challenges the art market and gives artists and collectors the ability to connect and the freedom to invest in art and engage in social projects without prejudice or intermediaries.

Zancan practices a genre of art that he describes as "generative-figurative" with a focus on rendering nature using computer code and mathematical formulas. His series "Garden, Monoliths" or "Lushtemples" encourage discussions about virtuous and toxic interactions between technology and the natural world. Zancan is currently the most sought-after artist on Tezos, a blockchain known for its minimal environmental impact.

zancan.art

Make Kin, Make Kin, Matthew Plummer-Fernández, 2021,
109 cm x 109 cm

Make Kin, Make Kin

I have long been fascinated with using computational tools to depict or inspire other places and ecologies, both real and imaginary. In my previous series 'Cave Paintings', I used prompt-based AI image generators that I self-assembled, to create subterranean landscapes that blurred the distinction between nature and culture, fusing the pop of the modern world with natural elements. Rock faces in these caves appeared to be curiously carved into recognisable forms not associated with caverns, brought into being by the software's recollection of the human world and culture it had been trained on.

This new project further expands on my work and reimagines AI generated image-making as a collaborative process involving the local ecology and wildlife found in my garden. The garden is never fully wild, nor fully human-led, it is in itself an ongoing cooperation to make a more hospitable environment for both humans and other species, involving a negotiation of needs. The artworks are generated by photographing the different plants and animals in the garden, and using these as prompts to steer the image-making process, alongside my own written requests and previous artworks as prompts. The AI process then has to find a compromise and generate images that satisfy both goals. The resulting images appear comprised of elements evoking everything from stones or stems, topiary or tunnels, ferns or faces, fossils or found objects. The AI is purposefully constrained in its ability to resolve the image, abstracting outcomes and impeding categorisation. In addition, this series uses shaders to animate the outputs, suggesting flows of information interconnect and ripple through all the elements in the assemblage.

In my project Make Kin, Make Kin, I make reference to Donna Haraway's provocative plea to "make kin, not babies", suggesting that an urgent response to biodiversity loss is to imaginatively expand our understanding of the persons we care for to include nonhumans. In doing so, we would care for other species as extended family. The title also subverts the premise of the dystopian book Make Room, Make Room that played out fears of out-of-control population growth, to reimagine a future characterized by a surge in biodiversity and more-than-human kinship. This project is as much an ongoing performance as well as a series of outputs, in which I am prompted by the artistic process to foster a deeper connection with the local ecology and be more attentive to the co-inhabitants of a shared garden.

Matthew Plummer-Fernández

About
Matthew Plummer-Fernández

British/Colombian artist Matthew Plummer-Fernández works across physical and digital media, critically and playfully examining the interrelation of algorithmic systems, popular culture, and contemporary issues. Their work fuses Generative Art, Critical Design, and Internet Art, and has been exhibited extensively, commissioned by institutions including the Victoria & Albert Museum in London, AND Festival in Manchester, and ZKM in Karlsruhe. Several works are in the permanent collection of Centre Pompidou in Paris, and was recognised with an award of distinction at Ars Electronica in 2014.

plummerfernandez.com

Paweł Grzelak, Specimens, 2023

What I find particularly fascinating about "Specimens" is how it highlights the interconnectedness of different forms of life. Despite the vast differences in scale and environment between the deep-sea creatures of the Mariana Trench and the digital creations of the artist, there are clear parallels in their form and function. By bringing these two worlds together, "Specimens" encourages me to look beyond my own limited perspective and appreciate the diversity and complexity of life in all its forms.

"Specimens" is a testament to the enduring fascination and wonder that the deep sea continues to inspire, even as we venture into new frontiers of exploration in the digital realm. Through the power of art and technology, the artist has created a unique and mesmerizing collection of creatures that challenges my perceptions of what it means to be alive and reminds me of the endless possibilities for discovery and creativity that lie ahead.

Paweł Grzelak

Specimens

In 1960, we accomplished a historic feat when we reached the deepest known point on the Earth's surface - the ocean floor of the Mariana Trench, which lies at a depth of 10,916 meters. As scientists, we had long assumed that no multicellular organisms could survive in such a harsh environment. However, to our surprise, we found that the deep sea was teeming with life, with many species still waiting to be discovered.

Fast forward to today, and I find myself exploring a new frontier of discovery - the digital realm. "Specimens" is a collection of 3 procedurally generated and animated imaginary creatures that draw inspiration from the deep-sea organisms discovered in the Mariana Trench. Using a combination of patterns, behaviors , and structures from these organisms, along with the peculiar appearance of microscopic imaging, the artist has created new, digital living forms that blur the lines between science and art.

As I study each of the three creatures in "Specimens," I am struck by the intricate patterns and movements that simulate the complex behaviors of their real-life counterparts. From the glowing tendrils to the pulsating, tentacled bodies, each creature is a unique creation that captures my imagination and inspires wonder.

About
Paweł Grzelak

Paweł Grzelak is a three-dimensional artist who has transitioned from design to art over the last two decades of experimentation in the field. Specializing in the procedural approach enables him to mimic natural processes such as growth or decay. In his animated series, he combines the patterns, behaviors, and shapes observed in deep-sea species with the distinct appearance of microscopic imaging, resulting in the creation of new, digital life forms.

behance.net/pawelgrzelak
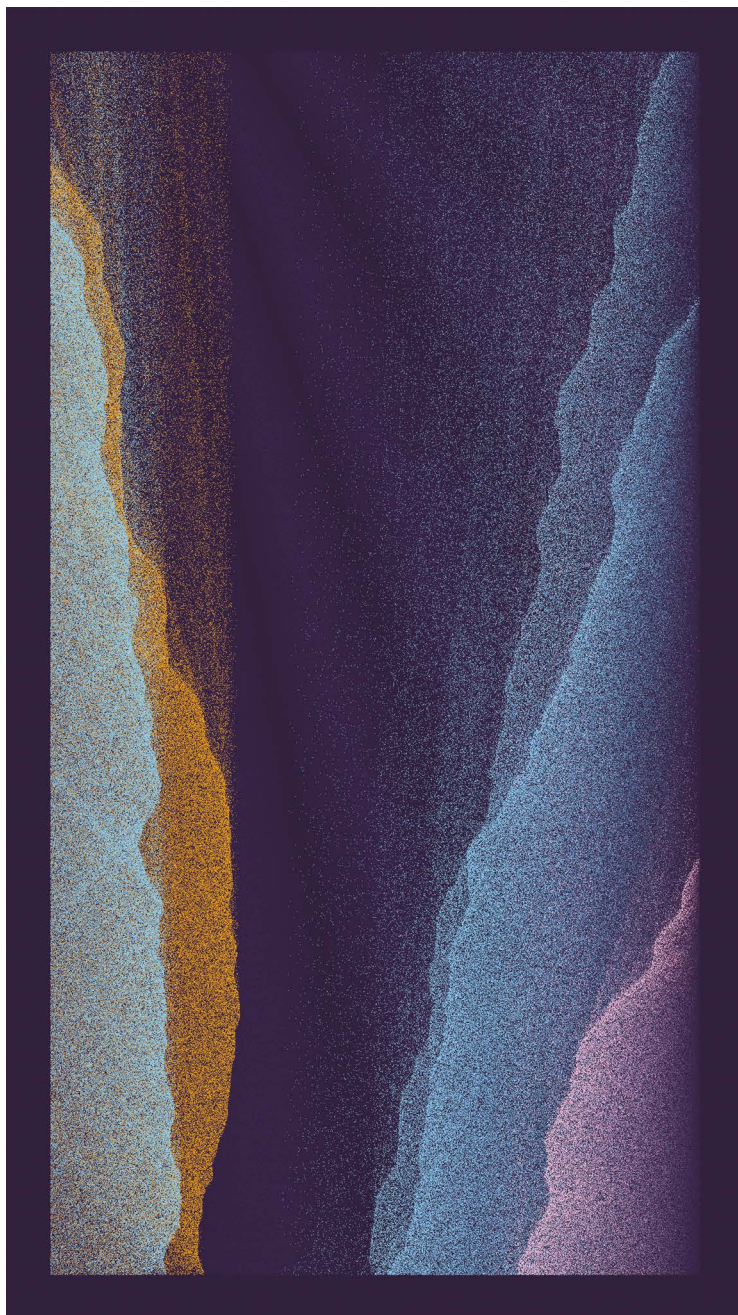
Co(r)ral,
Phaust,
2022

Co(r)ral

Co(r)ral is a generative art collection reminding us of the importance of gathering together to confine our impact on ecosystems. The collection consists of 100 unique artworks which were generated from a single algorithm on December 4th 2022.

The collection looks to examine the theme of "reconciliation with the living" through the lens of coral bleaching. Coral bleaching occurs when coral is stressed, causing it to expel the colourful zooxanthellae that live inside the coral providing energy and nutrients. The most common cause of stress leading to coral bleaching is rising ocean temperature, although pollution can also be a factor. Between 1985 and 2018, 87% of the world's reefs experienced bleaching level heat stress and in March 2022 91% of the Great Barrier Reef was impacted by bleaching.

If water temperature and other conditions return to normal then coral can recover from bleaching, rather than dying. Co(r)ral seeks not only to highlight the dramatic impact of coral bleaching but also to remind us that the damage can be reversed.

The colours of Co(r)ral are inspired by the vibrancy of coral reefs and the rich marine life they support. In some pieces you can see rays of sunlight illuminating the scene, in others that light is occluded.

There's a total of nine different colour palettes, each named for a type of coral: Bubble, Carnation, Gorgonian, Leaf, Pipe, Precious, Starlet, Sun and Vase. Colour is typically applied per layer but occasionally forms a gradient across the piece.

Like the coral inspiring it, Co(r)ral is a dynamic artwork. Interacting with a live piece triggers an animation loop between its healthy, colourful state and its stressed bleach state. Clicking again will pause the loop. Each piece has an initial state which is either healthy, mixed or bleached, thereby reflecting the different states of coral reefs across the world. Just as coral can recover from bleaching if temperatures drop and conditions normalise so Co(r)ral loops between those states – a reminder of our responsibility to act to reverse the damage.

Co(r)ral can be displayed in triptych to highlight the change in state. It can be displayed as a looping, live artwork or as a single interactive piece. When viewed up close, you can see the distinct dots that create the piece – with each artwork consisting solely of two to three million coloured dots.

Phaust

About Phaust

Phaust is a generative art collective based in London and Brighton. With backgrounds in computer science and neuroscience, their work explores the eternal intersection between art and science. Randomness is explored and embraced as a creative force and a way of examining our place in increasingly complex systems. Embracing the liberty of deploying code for aesthetic means, they also look to investigate the nature of collaboration. Be that collaboration between individuals, between human and machine, between us and nature, or with those who came before us. They are excited by the dynamic possibilities of generative art and the many different ways we can learn through it.

phaust.art

Underwater Painting Voyage, Nikolina Kovalenko, 2022, 4m 38s

Underwater Painting Voyage

"Underwater Painting Voyage" is an immersive video journey inside my painting series "Utopian Reefscapes" where I paint a fictional ocean of abundance- the one we are losing due to coral bleaching and other environmental threats.

I love that second when the veil of the sea lifts and reveals this mysterious and magical universe. One thing was clear to me since my first dive -the underwater world is incredibly fascinating, the most beautiful thing I've ever seen. It felt like I was exploring a new planet, with alien life, colors, textures and shapes.

I imagine a diver of the future seeing nothing but dead monochromatic ocean bottom, deprived of color, texture and movement. I feel it's my duty to convey the mesmerizing underwater world while it lasts. Instead of meticulously documenting particular images I took while diving, I paint the underwater garden of Eden where corals of all shapes and colors thrive.

50% of the world's coral reefs have already been destroyed, and another 40% are expected to disappear in the next 20 years due to warming oceans, pollution, overfishing, and habitat destruction-all caused by humans, directly or indirectly. By 2100 coral reefs might cease to exist. Coral reefs will become history and slowly sink into oblivion. How can we care so little about the underwater world when it covers 70% of our planet? We are just guests on this Earth- very demanding guests, with horrible manners, who keep talking about themselves while never stopping to listen or ask questions.

I'm hopeful "Underwater Painting Voyage" will inspire in viewers a curiosity, awe, joy, and sense of shared responsibility for our beautiful, fragile planet earth.

Nikolina Kovalenko

About
Nikolina Kovalenko

Nikolina is interested in humanity's psychological connection with Nature and strives to expose the consequences our everyday actions have on the environment. The artist works with fragile ecosystems creating artwork inspired by locations specific to each project. Her subjects range from global warming, deforestation and coral bleaching, to processing and interpreting visual landscape and cultural associations.

Nikolina Kovalenko received her MFA from Moscow Surikov Art Institute (Moscow, Russia) in 2011 and studied at Universität der Künste (Berlin) in 2010. She holds a Gold Medal from the Russian Art Academy. The artist currently lives and works in Brooklyn, NY.

nikolinakovalenko.com

Blooming Spring, Polina Kuznetsova, 2020

Rivers and Shadows, Polina Kuznetsova, 2020

Magic Landscape 3, Polina Kuznetsova, 2021

Enchanted landscapes series

For years, I've been creating my "enchanted landscapes" series. This series of paintings is not an attempt to depict the forests or fields as they are. What I try to do is to bring onto my canvas a sense of a forest, a feeling of a field, a palpitation of a heavy mist, of a damp soil, and of a meadow that's like the warm back of some furry animal.

For years I've been fascinated by the interlacing of the leafless branches of late autumn or early spring when leaves have fallen off or have not yet popped out of the buds. I see these netted twigs as an infinite, interconnected web that hides some veiled mystery, and I want to come inside, right into this spellbound meshwork. I create each enchanted landscape as if creating a mandala. Painting them is more of a meditation for me than anything else.

There was a time in my life when I was going through a rough patch and everybody was calling me, asking me "How are you?" and "Are you doing all right?" to which my response was: "I am now OK, I'm painting a meadow". This meadow became the first painting in this series, although at the time I didn't know it would actually become a series, but it felt like I had finally found something that is really important to me. The year was 2012.

I was quite young then, and it was a period of an intense search for my creative self. Sometimes I wanted to take on topics that had a social focus or do something conceptual. But now, when I create my enchanted landscapes, I think that if people were to listen more to the feeling one gets standing on a hilltop looking down at the fur-coated grasslands, or a bewitching sense of magic one feels entering an enchanted forest - sensations well-known to people of different cultures and social classes - then there will certainly be less evil on this Earth.

Once, this November, I came to my favorite forest. The woodlands were moist and the forest was purple. The soil was rusty-red, crimsoned by the fallen leaves that had started to decompose. I looked at all this beauty and thought: "This is so sublime, that I wouldn't be sad to die and blend into this magical world." I paint my landscapes as patterns, as abstractions. I am not interested in exact physical likeness.

Polina Kuznetsova

About Polina Kuznetsova

Polina Kuznetsova is a contemporary artist born in Kharkiv (Eastern Ukraine).
One of the main places in her art practice is the landscape, as evidenced by the poetic glorification of Ukrainian nature in the series "Magic Landscapes". Polina graduated from the Kharkiv State Academy of Design and Art. Her works were presented at numerous international exhibitions including the United States, EU, China, and the Philippines.

 polin.ua
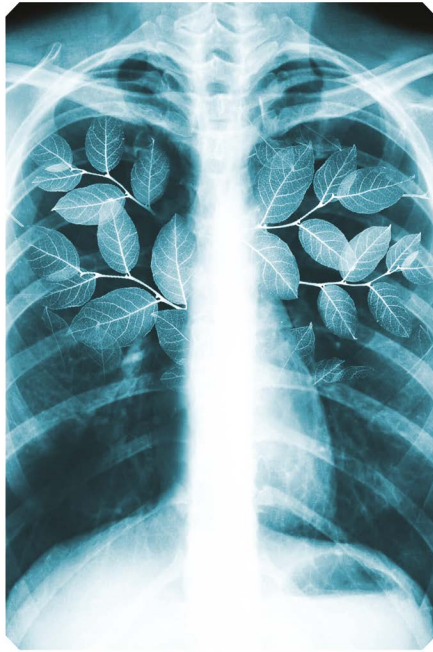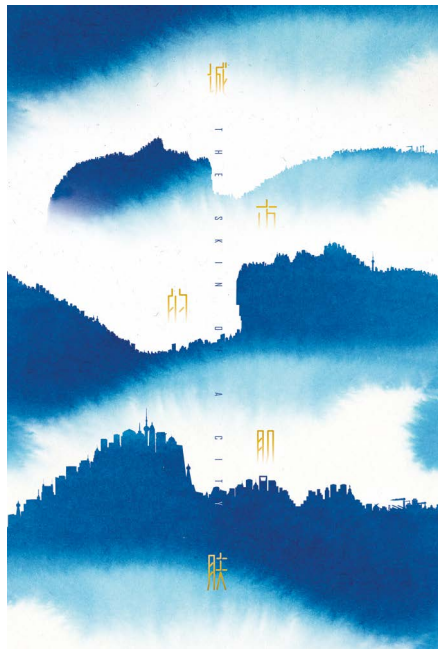
We are One with Nature

Abbas Berrangi, Iran, 2020, 90 cm x 60 cm

There are too many things we take for granted. We have to stop, take a breather and realize how dependent we are on our environment. Every tree we cut down makes our collective breath that much shorter.

Biophilia

Hiroyuki Matsuishi, Japan, 2020, 90 cm x 60 cm

Our planet is not a warehouse of re- sources for humanity to utilize or consume. It is our home and home for millions and millions more other creatures that share this world with us.But in ad- dition to the planet's natural resources, it also has something that cannot be quantified - a sublime beauty that is all around us. All we have to do is choose to see it for ourselves.

The Skin of a City

Xiang Tianping, China, 2020, 90 cm x 60 cm

When we create our brick-and-mortar city landscapes, we bring to life our personal, segregated world that is separated from the natural world that is the home of all the other living things. Biophilia is the idea of bringing the two worlds together, making them a single and harmonious ecosystem.

Nature and Human

Oktay Barkin, Türkiye, 2020, 90 cm x 60 cm

Life cycle is an evolution - a constant trans- formation of one living thing into another. We have to ensure that future changes to the natural world will continue to be ben- eficial to us as a species and to do that we need to be a beneficial element of our en- vironment. This is what the idea of Biophilia teaches us - to be mindful of not only our own lives but of life itself and respect the entire biosphere of this planet.

Biophilia

Dmitry Mirilenko, Russia, 2020

In this world beauty is everywhere - in the works of art made by human hands and in all the living things created by nature. Biophilia teaches us to appreciate both the beauty found in art and the beauty found in the environment because it is a natural beauty that makes this planet so special and unique.

And now a little bit of pedagogy

About The 4th Block

Association of Graphic Designers The 4th Block together with the PosterTerritory initiative presents selected environmental graphics that are part of the Biophilia Poster Collection.
Association of graphic designers The 4th Block is a non-profit organization that has united graphic designers worldwide to find new ideas for overcoming the world's environmental and social problems through the art of posters. Nowadays, the International triennial of eco-posters "The 4th Block" is the most significant design festival in Eastern Europe.
PosterTerritory initiative is a multimedia platform that launches environmentally conscious poster exhibitions and graphic design campaigns in the US and abroad. The projects under its umbrella promote environmental, social, and political causes and feature works by many renowned contemporary artists.

the4thblock.org

Blockchain & environment

There is a direct link between the design of blockchains and their impact on the environment. Proof-of-Stake blockchains require the least energy to run. They have a relatively limited impact and are increasingly focused on offsetting their carbon footprint.

A 2021 study by the Crypto Carbon Ratings Institute ranks blockchains by carbon footprint. It reveals major disparities between blockchains and highlights the need for discerning choices. We are using Polkadot, the blockchain with the smallest carbon footprint, for the online version of this exhibition.
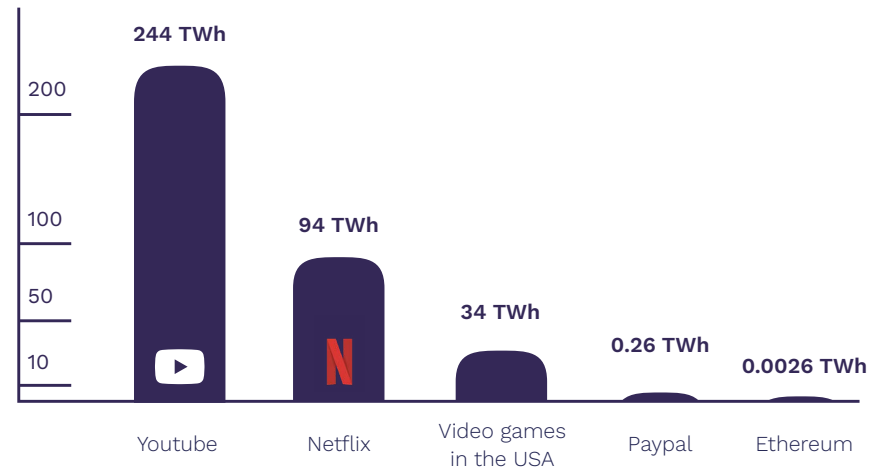
Carbon Footprint of Proof-of-Stake Blockchains
Source: CCRI Crypto Sustainability Indices, October 2022

Blockchains	Electricity consumption (annualised)	Carbon footprint (annualised)
ethereum	2851.38 MWh	953.56 metric tons of CO_2
Solana	4129.75 MWh	1895.56 metric tons of CO_2
Polkadot	70.25 MWh	32.24 metric tons of CO_2
Avalanche	558.84 MWh	256.51 metric tons of CO_2
Algorand	786.24 MWh	360.88 metric tons of CO_2
Tezos	124.41 MWh	57.1 metric tons of CO_2

It is useful to compare the carbon footprints of these blockchains with other activities to understand the benefits of a digital tool and its impact on the environment.

Annual Energy Consumption in Terawatts Per Hour (TWh)
Source: Ethereum.org, November 2022

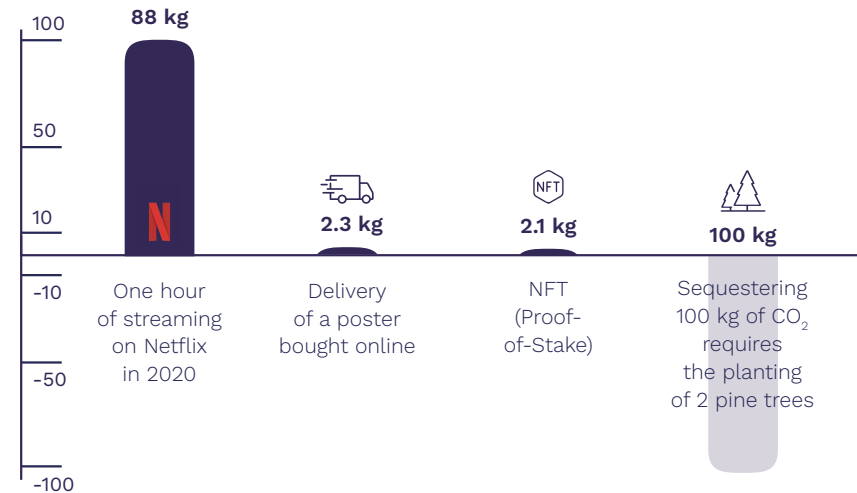|	244 TWh	94 TWh	34 TWh	0.26 TWh	0.0026 TWh
	Youtube	Netflix	Video games in the USA	Paypal	Ethereum

Non-fungible tokens (NFT) and the environment

The carbon footprint of NFTs

Creating an NFT emits forty times less carbon than streaming a video on Netflix for one hour. This challenges our assumptions and puts our uses into context.

Carbon Footprints Compared with the Impact of NFTs (in kg CO_2)
Source: Quartz - South Pole, 2022

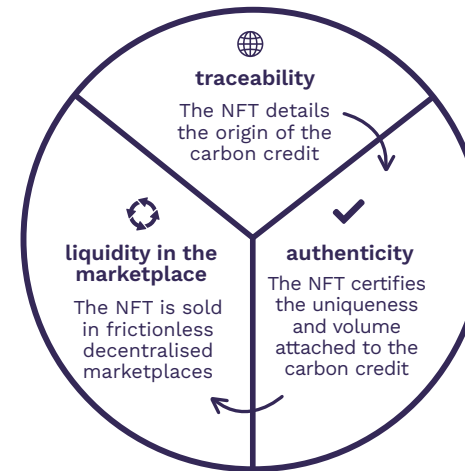|			
88 kg	2.3 kg	2.1 kg	100 kg
One hour of streaming on Netflix in 2020	Delivery of a poster bought online	NFT (Proof-of-Stake)	Sequestering 100 kg of CO_2 requires the planting of 2 pine trees

NFTs: helping protect the environment

Carbon credits are certified emission reduction units created under the Kyoto protocol to limit and reduce carbon emissions. They can be legally transferred and traded, meaning a company can sell its unused emission rights to other companies. NFTs are now used to make carbon credits more transparent and accessible.
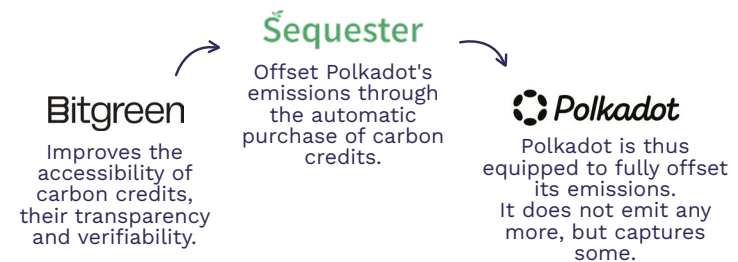
NFTs are used to ensure traceability control of carbon offset actions, for example by planting trees (1), to convert these actions into certificates (2), and then to make them easier to trade in fully accessible marketplaces (3).

Many actors in this field are working to make the market more transparent and to actively drive its growth. Here are some key actors in the Polkadot ecosystem.

NFTs make the carbon credits market more transparent and accessible

traceability
The NFT details the origin of the carbon credit

liquidity in the marketplace
The NFT is sold in frictionless decentralised marketplaces

authenticity
The NFT certifies the uniqueness and volume attached to the carbon credit

How a blockchain can automatically offset its carbon emissions to become "carbon negative"

Bitgreen
Improves the accessibility of carbon credits, their transparency and verifiability.

Šequester
Offset Polkadot's emissions through the automatic purchase of carbon credits.

Polkadot
Polkadot is thus equipped to fully offset its emissions. It does not emit any more, but captures some.

**Benjamin
BENITA**

Author and producer
of the exhibition

**Antonio
BUDETTA**

Director
Aria Art Gallery

**Paweł
GRZELAK**

Artist

**Nikolina
KOVALENKO**

Artist

**Polina
KUZNETSOVA**

Artist

**Mimi
NGUYEN**

Curator for the
generative art room

**Matthew
PLUMMER-FERNÁNDEZ**

Artist

**Nataša
RADOJEVIC**

Curator, Art advisor,
Director Drina Gallery

**Chunmeng
YANG**

Gallery Manager
Aria Art Gallery

zancan

Artist