A European New Bauhaus For The Green And Digital Age: A Network Of Regional Hubs

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The Concept

As society emerges from the most severe crisis in living memory, the relationship between nature, ourselves and technology looks dangerously unbalanced. Now, more than ever, it is crucial to show the seeds of a more sustainable future. Crises, be they wars or pandemics, always fuel social imagination. It's up to us that the ideas that emerge are not those of populism but, rather, those of a holistic, pragmatic, and democratic approach. Now is the time to act upon those forward-looking ideas that could project us into a digital, democratic and carbon-neutral future. Digitization and the green transition pose some of the greatest challenges of our time and can only be tackled in an interdisciplinary manner, through collaboration between art, design and science.

In her State of the Union, the European Commission president, Ursula von der Leyen, stated the climate transition needs "its own distinctive aesthetic", vowing to set up a new European Bauhaus. A co-creation space where architects, artists, students, engineers, designers work together to 'match style with sustainability'. But, most importantly, also a place where we can rethink the present, reflect on its complexity, and develop a more humane and innovative capacity to face the greatest challenges of our time.
 It was the Bauhaus school, at the apex of the modernist era of the 1920s and 30s that formed the cornerstone of the many philosophical models, holistic practices, and physical embodiments of the very concept of "sustainability." With the Bauhaus movement, the science of ecology and design merged and laid the foundation of modernist architecture; Bauhaus-minded architects began to think ecologically while some ecologists lent their ideas to design.

There is plenty to learn from these historical experiences. But it's also important to improve on them in two respects. First, we should strive to ensure that its citizens - not just scientists and designers - who should sit at today's table of sustainable innovation. Second, as a truly European project, the new Bauhaus has to be conceived as an interconnected network of regional hubs rather than just a single geographical outpost. It's through these hubs that further connections to industry, academia, civil society, urban entrepreneurship and the arts could be built.

1. A Space Of Co-Creation That Fosters Citizens' Participation: "The Agora"

VALLDAURA LABS, RESEARCH CENTER FOR THE SELF-SUFFICIENT HABITAT IN COLLSEROLA PARK, BARCELONA, WITH LABORATORIES FOR THE PRODUCTION OF ENERGY, FOOD AND OBJECTS.

The objectives of sustainability and inclusion must be pursued in the context of intensive consultations not only with institutional actors, but also, mostly importantly, with citizens, creative communities, and businesses.

This "bottom-up" approach allows those directly affected to participate in the definition of challenges to be tackled as well as propose most suitable (and, in the long term, probably most sustainable) local solutions to them.

Renewed public debate, both online and offline, could be an important first step in that direction. This is to be followed by the establishment of local assemblies, the modern-day equivalents of the Hellenic public Agora and the Roman forum, as a way of aggregating the opinions of different generations, social classes and ethnic communities.

A collaboration grounded in science, technology and culture can develop innovative projects and activities joining arts and ethical artificial intelligence, music and quantum computing, biotechnology and circular economy, leading to sustainable design. In this way, it is also possible to encourage a broad participation of citizens, improve the public communication, understanding of society, and allow society to better direct technological development towards seeking solutions to today's major social and environmental challenges. It will make use of the local networks of industries and labs, cultural institutions, foundations and research institutions. The involvement of the regional partners & communities through educational programs, festivals and exhibitions are crucial.

Cities will be an important engine for facilitating the ecological transition. It is essential that we reorganize urban life and promote sustainable democratic innovation that doesn't increase social inequalities.

But cities won't be the only such engine; it's for this reason that the architect Rem Koolhaas emphasizes the importance not only of the "smart city" but also of the "smart countryside."

This means 'thinking globally, but acting locally'.

BOSCO VERTICALE, STEFANO BOERI, MILANO, ITALY

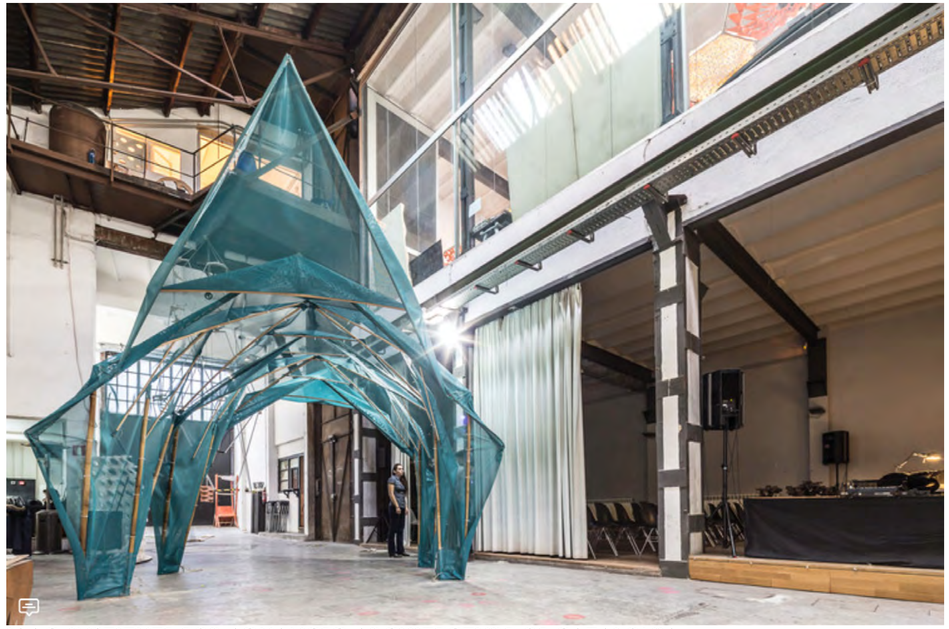
The Bauhaus was not only a revolutionary school – it was also a school built far away from the big cities, attracting an international audience to the remote small towns of Weimar and Dessau. Stefano Boeri the Italian urbanist says that our cities could be transformed into a series of self-sufficient archipelagos: the villages, the "Dörfer", the "borghi", able to minimize travel. Reducing travel does not mean reducing culture, knowledge and information. Those will continue to live thanks to digital technology and access to fast connectivity. The connected countrysides, developed through the lens of a European Bauhaus, could become a field of hopeful experimentation.

For example, the so called "15 minutes city" model implemented by cities like Paris, Barcelona and Milan that is a model of self-sufficient neighbourhoods in a metropolitan dimension, where every citizen will be able to reach the services needed in 15 minutes. The city of Barcelona, where I had the privilege of serving as CTO for four years, has become a champion in supporting a more circular, inclusive, and collaborative economy.

The city promoted the Fab City Manifesto and launched the Barcelona Maker district, a key innovation project to revitalize the future of urban manufacturing, and democratize production in the 4th industrial revolution, by leveraging the power of the maker movement.

THE FAB CITY MANIFESTO

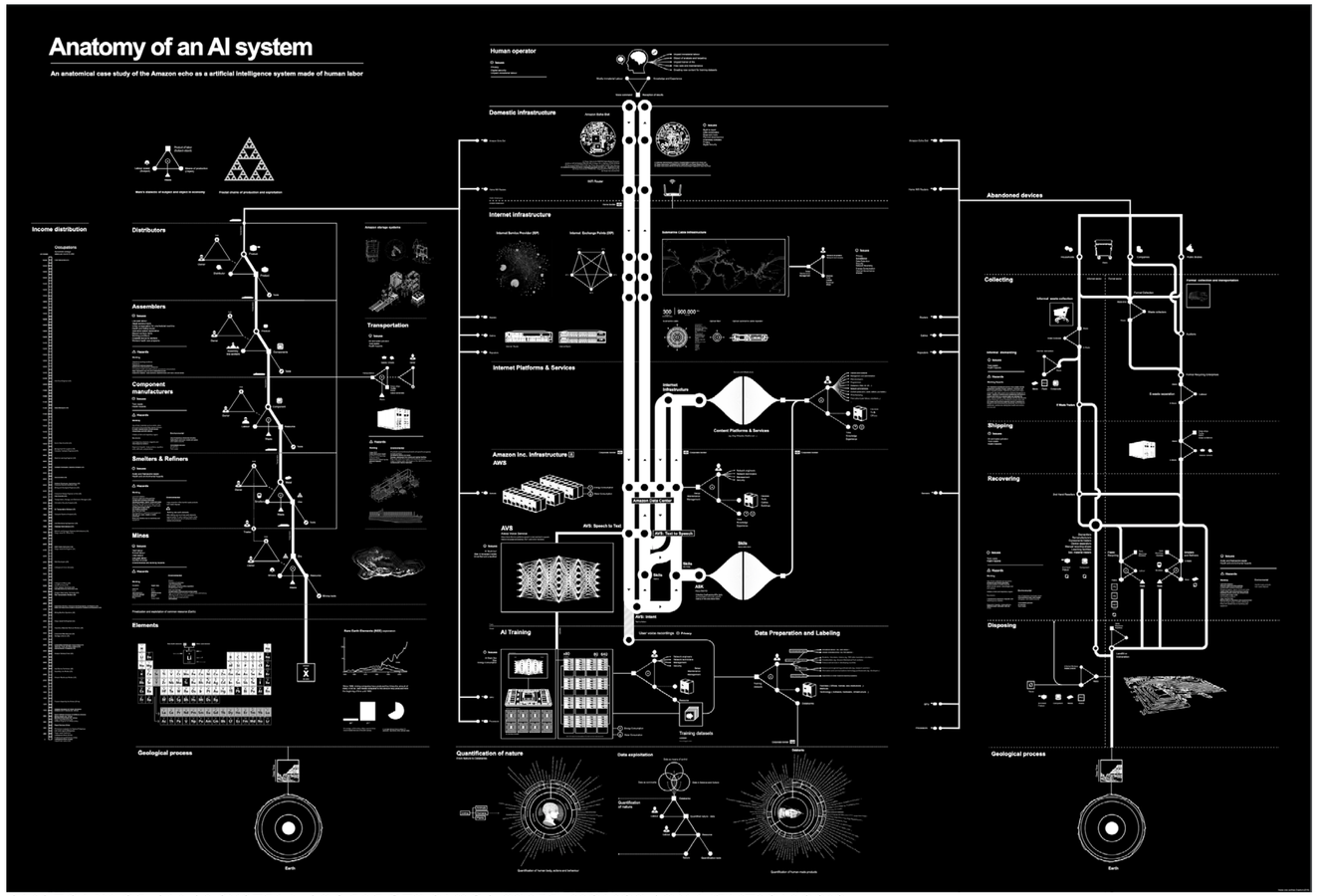
The Barcelona Arts and Science Ecosystem relies on the strong collaboration between BCN City Council, Sonar Festival, the Barcelona Center for Contemporary Culture (CCCB), the Institute for Advanced Architecture of Catalonia (IAAC), the academic ICT network, including the Super Computing Centre, a strong industrial presence, the start-up ecosystem of BCN Tech City, and a strong grassroots innovation movement.



IAAC, INSTITUTE FOR ADVANCED ARCHITECTURE OF CATALONIA

CCCB, BARCELONA

2. Science, Technology And Arts For The Green Deal



ANATOMY OF AN AI SYSTEM, ARS ELECTRONICA PRIZE, HONORARY MENTION 2019

A holistic, creative and sustainable future won’t be possible without the help of artists, the critical but innovative antennae of our society.

The methods grounded in artistic practice are ideal for producing innovations that, while occasionally disruptive and radical, also foster positive, pluralistic, and inclusive change. They reveal futures to come and the paths to achieve them. It's important that these methods and their consequences transcend the artistic milieu and also inform product innovation in industry, helping shape the prototypes of sustainable products of tomorrow. I'm always on the lookout for such art-inspired business projects in my capacity as the President of the Italian Innovation Fund, a 1,5 billion Euro Venture Capital Fund to boost the Italian innovation ecosystem. For the past four years, I've also had the honor to be a jury member and senior advisor to S+T+ARTS (innovation at the nexus of Science, Technology and the Arts). This European Commission initiative aims to foster alliances of science, technology and the arts, that effectively implement a European approach to technological innovation centered on sustainability, human needs and values.

Over the last years, the STARTS movement in Europe has created an ecosystem of creators, artists and innovators, (including spaces like Ars Electronica, Bozar, Centre Pompidou, ZKM, Waag Society working with companies such as Daimler, Telefonica, Bosch, Hyundai and many others). STARTS has developed initiatives such as Residencies, to support and fund residencies of artists in technology institutions that bring original artistic contributions to technology-based projects, the Academy where artists and engineers jointly teach digital skills to citizens and the Regional Centers, intended to expand the STARTS initiative on a local level towards a number of European regions.

The STARTS Prize awards the people and projects that have the potential to make a sustainable positive impact on Europe's economic, technological, social and ecological future, through a successful combination of arts and science.

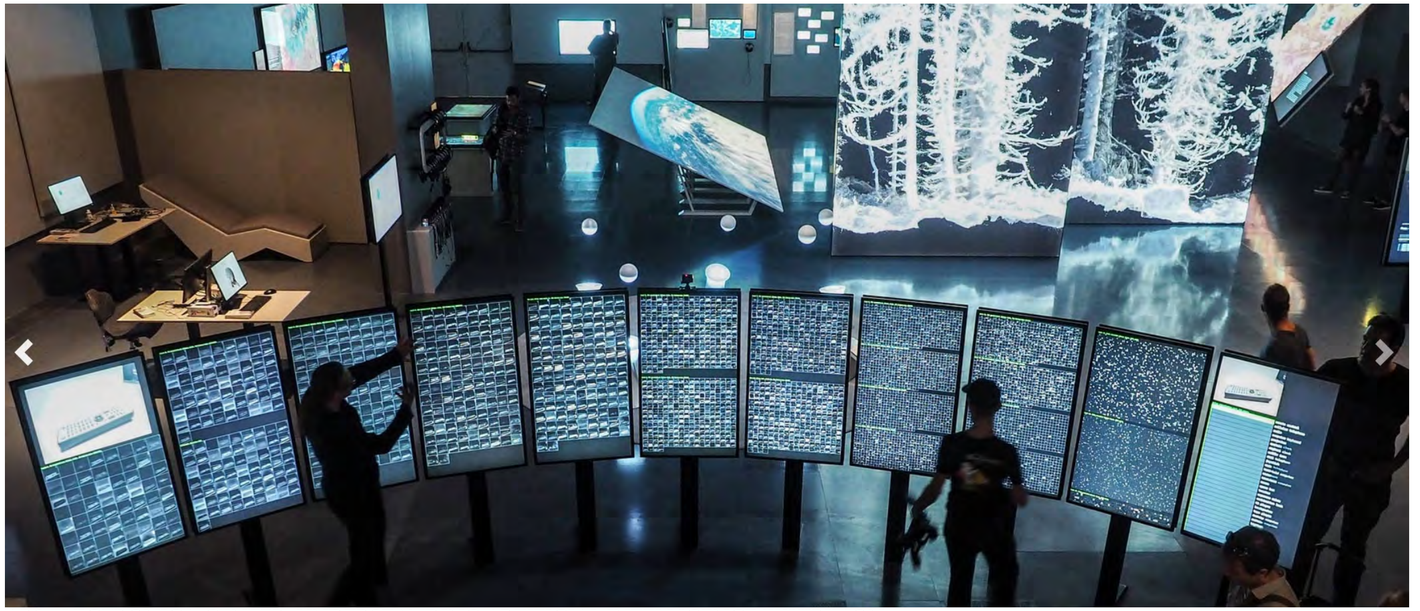
KANAL, CENTRE POMPIDOU

We have extended the STARTS program to Italy, by bringing together some of the architectural, artistic and cultural institutions in the country, such as Foundation CRT and Biennale of Technology in Turin, MAXXI Museum and Center of architectural research in Rome, MEET digital culture center, Triennale in Milan, and the Venice Biennale.

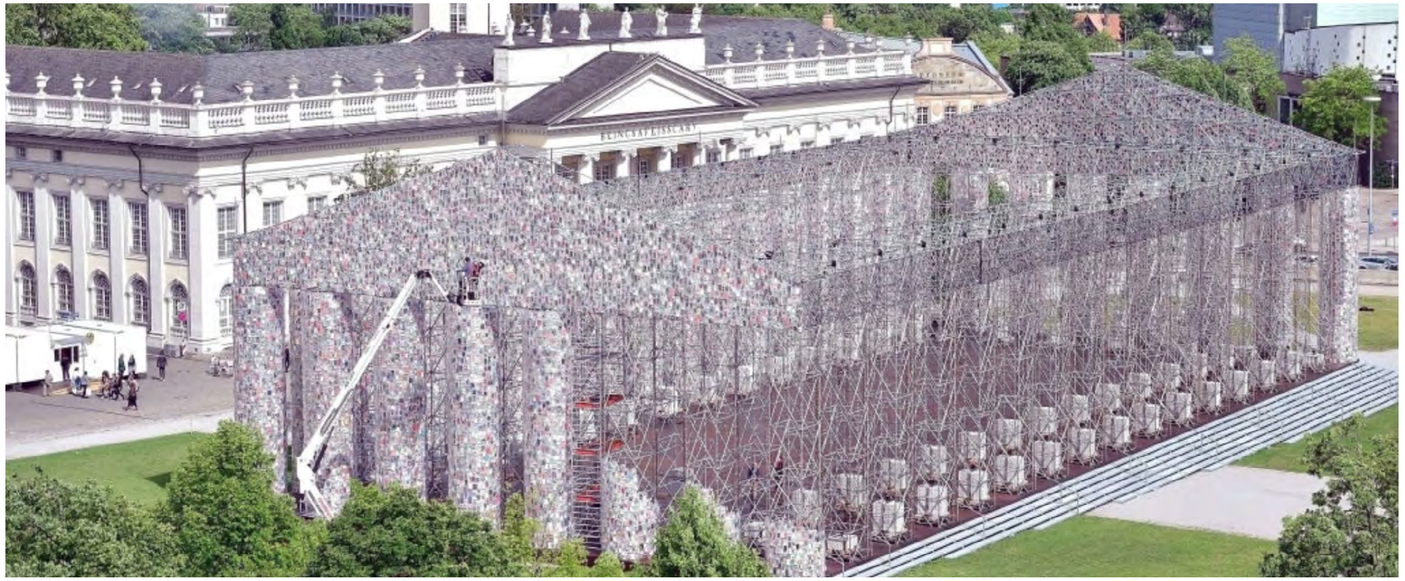
Art and design touch and engage people in a way that technology just can't. In this way, prototypes based on arts-driven technological innovations, can be closer to the market than the basic technologies they rely on, helping to refine research by providing insights from the market and audience reaction to innovation.

The STARTS Ecosystem could be made the backbone of the new European Bauhaus movement.

MAXXI MUSEUM, ROME, ITALY

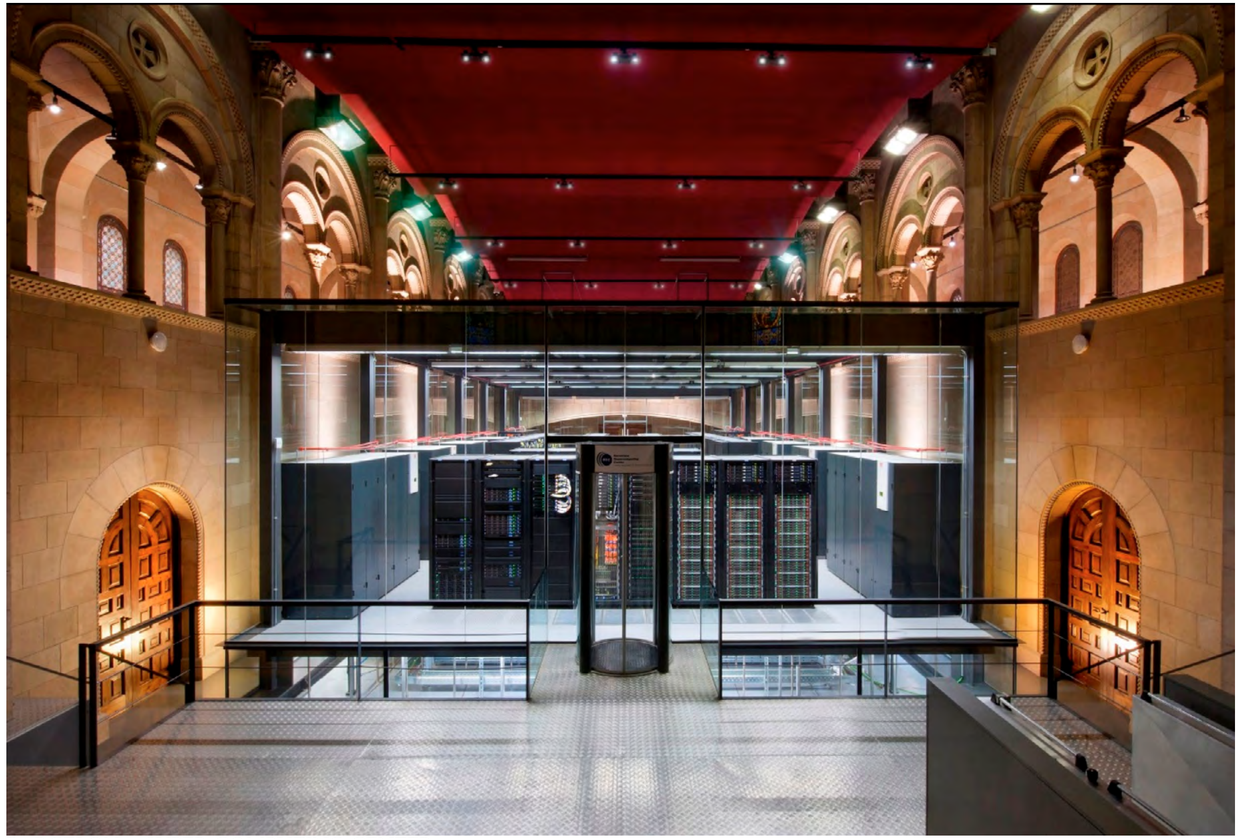


ARS ELECTRONICA CENTER: UNDERSTANDING ARTIFICIAL INTELLIGENCE EXHIBITION



KASSEL, DOCUMENTA

3. The Cultural And Educational Dimension: A Bauhaus For The Digital And Green Age?



BARCELONA, SUPER COMPUTING CENTER

Let me also highlight the immense educational potential of the new European Bauhaus.

The different projects will connect artists, ICT experts, businesses, designers, scientists, and startups to develop and present prototypes that address our big sustainability challenges.

Executed strategically, this could have a massive positive spillover effect into the sphere of education, boosting not only the digital skills but also the ecological awareness of citizens.

These elements need to be developed proactively, with a view of enabling a new kind of sustainable technological transfer. The approach of the New Bauhaus will strengthen the ties between science and industry at the same time as it invests in talent and human capital. At its best, it could be a way of accelerating the path of digital innovation, all while challenging disciplinary boundaries and blending languages and frameworks. This is what science and art have always done in history.

An intensive hands-on multidisciplinary education program will unite experts from the field of culture as well as science & technology, with the explicit goal of accelerating the apprehension of digital skills (learning by doing), initiating youngsters into forward-looking technologies and new views, ideas and concerns around the opportunities, limits and potential pitfalls of digital technologies. Under the auspices of the New Bauhaus, citizens of all ages, alongside artists and scientists, will explore tools and applications that help make sense of the world around us and build an active, critical and sustainable attitude towards their environment and technology.

It is often said that the digital revolution is changing everything more radically than it has been since the beginning of industrialization, but these shifts are no longer reflected in the public spaces of cities, and that's why most of the time the general public is not aware. To that end, we need a Bauhaus for the digital and green age (Niklas Maak, calls it a Centre Pompidou for the digital age in Frankfurter Allgemeine Zeitung, 22. November 2020), a data environment where citizens of all ages can learn what is happening in the digital world, how digitization and Artificial Intelligence work. This is about nothing less than the future of government, governance, and our economies, making sure that our institutions be able to work with this data – to improve public services and to make cities greener, while preserving citizens' fundamental rights.

A Bauhaus for the digital and green age would help making key enabling technologies like data and AI visible and understandable: An hybrid made up of a data center, library and museum of the future, a new educational facility in which schoolchildren, but also politicians, can learn digital skills, where guided tours for school classes and programming courses could be organized to create awareness of what you can do with data if they are made available for public use. For example, the environmental data of all EU member states, compiled in a Green Deal data space, could make it easier to implement the EU's ambitious environmental policies. It could also facilitate using digital technologies as a driver for innovation and for the ecological transformation, which lies ahead of us. In times of rising public anxieties over the

massive concentration of data power, such a Bauhaus for the digital and green age would carry the same symbolic weight as the town hall did against the feudal lord's castle.

Following the democratic nature of the museum, the library, and the public square, this new institution would be an exceptional but also completely ordinary space, a true treasure trove of the digital age. It will be a place to converse and debate over a cup of coffee but also to understand digital technology and data as something that we own in common - the true public good that can help us tackle our big societal challenges, starting with the climate emergency and ecological transition.

In summary,

a Bauhaus for the digital and green Age, imagined as a network of Regional Hubs, will help Europe facing the double challenge of environmental protection and sustainable digitization, paving the way towards the full use of the digital, linked with arts, design and science, for the Green Deal.

STATION F, PARIS, FRANCE

LUMA FOUNDATION

***Pictures are examples of European New Bauhaus Hubs**