

What if technology and culture combined to boost a green recovery?

Technological innovation has always been an indispensable part of recovery from economic, social and environmental crises. Technology is often diametrically opposed to matters of aesthetics and culture. Yet historical experience and foresight suggest that in times of recovery technology and culture can combine to create a virtuous feedback loop. This could facilitate the EU's post-pandemic recovery and also help tackle the potentially disruptive effects of the 'green transition'.

With its current European Green Deal plan, the EU is striving to achieve climate neutrality in its economy by 2050 and, simultaneously, set itself on the path to recovery from the adverse effects of the global pandemic. Technology will inevitably play a significant part in this process. However, history also suggests that culture and aesthetics have a significant role to play in recovery from a crisis, be it war, economic recession or an epidemic.



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Well-known artistic and architectural movements such as the Renaissance, Romanticism and Neo-Classicism came about in direct or indirect response to various shocks in Europe, for example, the plague of the 13th century, the Industrial Revolution of the 18th century, and political upheavals of the 19th century. Most recently, the 20th-century modernist movement was spearheaded by the recovery from the two world wars and skyrocketing post-war economic growth. None of these cultural movements developed autonomously from technology, however. Modernism, for example, was underpinned by the invention of steel and concrete construction techniques.

Potential impacts and developments

It is logical to assume that the EU's unprecedented green transition to a carbon-free economy will be accompanied by new technologies and also, perhaps, a new cultural movement. Some policies featuring cultural and technological aspects have emerged in recent years, in the form of the [Davos Declaration](#) and [Baukultur](#) and, most recently, the [New European Bauhaus](#) initiative of the European Commission. Yet the question remains: how can technology and culture align to further a green post-pandemic recovery in Europe, particularly given the extreme negative impacts of the pandemic on the cultural sector?

Among the many pertinent aspects of the interconnected dynamics of technology and culture, two in particular stand out:

- There is a disruptive side to every recovery, as the many accompanying changes leave 'stranded assets' in their wake: investments that prematurely lose their value. Rapidly changing technology is often a factor that contributes to this phenomenon. For example, recovery from the Great Depression was closely related to the rise of the automobile industry, leading to the decline of American urban city centres. The green recovery, which is based on renewable energy technologies, is generating different kinds of stranded assets, for example, coal mines and pipelines or the beautiful but single-glazed windows of historical buildings. The rapid rise in teleworking is leaving a massive amount of unused office space as stranded assets. Culture could be the answer in cases such as these. To match the circular

economy, a new aesthetic of car-free urbanism and '[green and blue](#)' cities is emerging. Likewise, [re-purposing](#) old coal plants and empty office buildings into green neighbourhood and museum clusters is an increasingly popular and effective solution. In this regard, culture is helping to tackle the social impacts of technological disruption.

- Conversely, culture itself can benefit from technological change. This has been seen during the pandemic, in which digital technologies have greatly aided the creative sector. Museums, concert halls and other cultural institutions have taken to live-streaming, online events, and open access to digital material. It is likely that these technologies will continue to serve the cultural sector in the recovery phase as well. However, the question is how sustainable this online content is, both for the economic survival of institutions and creators, and for the alignment of digital technologies with environmental targets.

Overall, however, both culture and technology have the potential to open up opportunities for sustainable and inclusive recovery. According to a recent [analysis](#) by the Organisation for Economic Co-operation and Development (OECD), cities and regions should consider the cultural and creative sectors and cultural participation as drivers of both economic and social advancement.

Anticipatory policy-making

When it comes to maximising the effectiveness of the contribution of technology and culture, anticipatory policy-making is key. In recent years, future-oriented strategic thinking has proliferated in new cultural domains, including architecture, design, and heritage. Foresight in these cultural domains can help policy-makers design policies to aid the green recovery. As far as the technology–culture nexus is concerned, anticipatory policy-making could explore the following three areas:

Citizen-centred approach: People's collective memories, beliefs and attitudes to particular aesthetics constitute what anthropologists call 'tacit culture'. It functions as a link between function and form, and appears to transcend political preference, age and ethnicity. For example, a recent [poll](#) suggests that 75 % of Americans prefer a classical style in public buildings, whereas only 25 % prefer a modernist style. Another [study](#) examining the views of hospital patients in Europe and Japan showed a consensus across countries on what people consider important in terms of the aesthetics of a hospital environment. This means that when working out policies on how buildings should be retrofitted to be rendered climate-neutral and how cities need to change according to circular economy principles, policy-makers would benefit from considering these tacit cultural trends and consulting widely on citizens' aesthetic preferences. A useful step towards citizens' dialogues would be the inclusion of cultural and heritage-oriented themes in the [Conference on the Future of Europe](#) process.

Strategic foresight and impact assessment: As EU policy-making is currently undergoing a profound embedding of foresight and impact assessment into its workings, culture remains somewhat overlooked. The current Better Regulation guidelines list environmental, social and economic impacts as the most important, with increased attention being directed towards the impact on the United Nations sustainable development goals (SDGs). As culture and heritage are at the [heart](#) of the SDGs, there is room for a more robust assessment of European added value in the fields of culture and heritage. Useful work has been done in this regard by Unesco, putting [heritage impact assessment](#) (HIA) on a par with the more widely used environmental impact assessment (EIA). The impact of new technologies in the cultural sector, such as digitalisation and AI, could be improved with the aid of such assessment.

Culture as innovation: As the OECD [report](#) notes, cultural institutions have difficulties gaining recognition as an innovative sector and accessing support measures that are typically reserved for more technological forms of innovation. While many innovations in the cultural sector do include technology – digitalisation, for example – there are other forms of innovation that are based on creative content. Examples include [projects](#) in which citizens 'adopt' a monument, social-media [projects](#) that popularise sustainable renovation and cultural heritage among young people, and grassroots non-profit [cooperatives](#) that promote and facilitate the salvage and reuse of construction materials.

This document makes use of material published in the STOA [Briefings](#) *How artificial intelligence works* and *Why artificial intelligence matters*. It is prepared for, and addressed to, the Members and staff of the European Parliament as background material to assist them in their parliamentary work. The content of the document is the sole responsibility of its author(s) and any opinions expressed herein should not be taken to represent an official position of the Parliament. Reproduction and translation for non-commercial purposes are authorised, provided the source is acknowledged and the European Parliament is given prior notice and sent a copy. © European Union, 2020.