Technological changes and new low-carbon lifestyles, key to mitigating climate change

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In order to mitigate climate change impacts and achieve a more sustainable society, it is necessary to transform the current energy system based on fossil fuels into a model based on renewable energies, and to

change society's lifestyles, accepting less mobility, low-carbon diets and smaller-sized dwellings. These are the main conclusions reached by the more than 400 scientists who met virtually last week at the International Conference on Low-Carbon Lifestyles, organized by the Institute of Environmental Science and Technology of the Universitat Autònoma de Barcelona (ICTA-UAB).

The conference discussed the social changes needed to ensure a less polluting economy and lifestyles that contribute to climate change mitigation. After three days of intense debates, the main conclusions highlight that, to meet the objectives of the Paris Agreement, it is critical to consider scenarios in which technological solutions and new low-carbon lifestyles share the spotlight. "Low-carbon lifestyles must stop playing a marginal role to become mainstream," conferees said.

However, this is not an easy task since lifestyles are defined by situational, behavioral and cognitive circumstances, which means that policies and social practices can strongly shape their evolution. "The goal is to reduce citizens' resistance to change by showing them that lifestyles coherent with climate targets are possible and necessary," they stated. It is therefore necessary to insist on the "co-benefits" of these new ways of life, and not only on climate objectives.

For instance, reducing the use of cars is not only positive in a climate change perspective, but also for health issues (air pollution, physical activity, etc.). Framing the message around issues that almost everyone agrees upon (such as health) allows to bypass traditional political divisions," the text indicates.

However, the population must be motivated and made aware that sustainability depends on collective rather than individual efforts. In this regard, they stressed that the climate impact of "small gestures" (recycling, turning off the tap, etc.) tends to be overestimated, leading

people to think that implementing them is sufficient to fight climate change. These low-impact behaviors continue to be promoted, perhaps because they are considered less "threatening" to individuals.

Changes can lead to a significant reduction in carbon use, but citizens must be informed on how this is possible. "In the field of mobility, it is necessary not only to introduce technological changes but also to minimize the number of passengers, the kilometers and the need for travelling," the conclusions state, in which other industrial sectors are highlighted. "We must reduce energy in all phases of the food system, and change current behaviors and diets for more sustainable ones, eating less meat or reducing it completely," they indicate.

Air travel, with recent social movements around the world in favor of reducing flights, and fashion, with proposals advocating for clothes exchanges or personal manufacturing of garments over other proposals such as sustainable fashion or the recycling of vintage clothing, are other sectors where changes should take place.

How is it possible to translate the objectives and proposals of new sustainable lifestyles into political measures? In the face of general disinformation about climate policies among the population, experts advocate information as the main measure for its acceptance. "Citizens know very little about their carbon footprint, and this information could contribute to better decision-making," says the text, recalling that it is not only necessary to "apply climate policies to reduce emissions, but also to reduce inequality or poverty." They also explain that the communication-based policies implemented in countries around the world have a greater acceptance than legal measures. Scientists believe that advertising can contribute to lifestyle changes, and recall that the scientific community must influence and guide society. "We must be coherent and consistent to influence others, and demonstrate in practice our own scientific beliefs," they indicate in the document. "To achieve

significant lifestyle changes, we must gather support for collective measures to be taken," they insist.

Life after COVID-19

Regarding the exceptional situation generated by the COVID-19 pandemic, they stress that the crisis offers us the opportunity to break with our habits and reconsider our lifestyles. In this sense, the first weeks after the quarantine will be very important to build new habits, coherent with low-carbon lifestyles. Furthermore, economic recovery policies should take into account climate objectives, avoiding actions such as subsidizing polluting sectors.

This scientific conference itself is an example of these new lifestyles. The meeting was converted into a virtual format, avoiding travel and logistical expenses, which meant less environmental impacts. They stress that the health crisis highlights the high cost of acting too late, as well as the need for swift and radical action. These are valuable lessons that should be applied to the climate crisis.

Provided by Autonomous University of Barcelona

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