

International group of citizens and scientists creates feasible visions of a resilient, net zero future

November 1 2021



Mangroves from the nursery at the University of the West Indies at Port Royal are being planted at the bay opposite Kingston. Credit: [United Nations Environment Programme](#)

As part of COP26, we asked people in six regions to imagine a globally net zero, climate-resilient future. Here's what they came up with.

To create a globally net zero, climate-resilient world by 2050, there are

two things we need to know: what solutions are feasible, and what is desirable. The COP26 Futures We Want project brings these things together.

Six groups of academic experts collated existing research and evidence on relevant risks, mitigation, adaptation and resilience solutions within the context of their region. Then, based on this evidence, six groups of citizens came together to share their hopes and ideas for the future. This gives us something new: visions of a globally net zero, climate-resilient world that people actually want to live in.

The COP26 Futures We Want project is releasing its findings just before the start of the international climate summit in Glasgow. The project was commissioned by UK Government in their role as COP26 President and has been coordinated by Cambridge Zero, the University of Cambridge's climate initiative.

This collaboration involved communities from the UK, Jamaica, Brazil, Kenya, United Arab Emirates, Saudi Arabia, and India, and explored diverse views and solutions to address the real impacts of climate change, such as electricity generation, agriculture, waste and water management, building design, reforestation and ocean conservation.

"Work which addresses the global emergency of climate change at the regional level, and brings together academic and community perspectives, is a crucial part of building a climate-resilient world," said Emily Marchant, Cambridge Open Engage Programme Manager, Cambridge University Press.

Dr. Emily Shuckburgh, director of Cambridge Zero, and chair of the project's International Expert Committee said: "COP26 can be the start of building a new, positive future if there is sufficient ambition. Partners and collaborators from around the world helped us to put citizens and

evidence at the heart of informing policy.

"Together, we visualized a set of possible desirable futures by identifying many of the challenges and solutions that must be addressed to achieve a global zero-carbon future that is just and beneficial for all."

The final visions can be found on www.FuturesWeWant.world.

Following on from the Visions, Cambridge Zero collaborated with the project's International Expert Committee, the Met Office and academics in each region to compile the scientific evidence underlying the visions of each region into detailed papers, which are now freely available on Cambridge Open Engage via the links below. These peer-reviewed technical reports highlight many of the challenges and threats posed by the climate crisis, but also the wider benefits of ambitious climate action:

[Arabian Peninsula \(United Arab Emirates & Saudi Arabia\):](#)

- Climate change will exacerbate already extreme weather conditions and could make parts of the region uninhabitable by late-century, and adaptation will be essential.
- As a largely hot arid desert region, water scarcity is a critical issue and habitability is highly energy intensive, due to demands for cooling and water desalination/ irrigation, and heavy dependence on imports. Significant innovation across all sectors of the economy, including energy and water, the built-environment, food and agriculture, and transportation are required to tackle the high carbon footprint.
- Abundant renewable sources of energy, and energy systems expertise available in the region, combined with significant sovereign wealth available for investment, present unique opportunities to benefit from the net zero transition and position the region as a leader in the energy transition.

Brazil:

- Agriculture and livestock contribute the most to Brazil's carbon emissions and are the largest drivers of deforestation and land-use change.
- Brazil is one of the world's most unequal countries in terms of access to productive resources, especially in rural areas; the "Future We Want" in Brazil must consider structural inequalities to provide a just transition for the poorest Brazilians under principles of sustainable production.
- The energy sector in Brazil primarily relies on hydroelectric power, which is promising in terms of low carbon emissions, but it is also vulnerable to changing rainfall patterns caused by climate change.

India:

- India has made considerable progress in its efforts towards decoupling [economic growth](#) from greenhouse gas emissions. Between 2005 and 2016, India's emission intensity of gross domestic product (GDP) has reduced by 24%, earlier than the target year of 2020.
- Over half of country's 1.3 billion people are dependent on climate-sensitive sectors for their livelihoods. It's vital that India sets a net zero target in a manner that also supports its development priorities.
- Greater uptake of nature-based solutions can provide a range of environmental, social and economic benefits while combatting the accelerating loss of biodiversity.

Jamaica:

- There is considerable potential for nature-based solutions to

provide benefits for both climate change adaptation and sustainable development in Jamaica.

- Following a 'late, disorderly transition pathway' as opposed to a 'steady, orderly, persistent transition pathway' for climate change adaptation will lead to substantially greater risk to the environmental, economic and social stability of Jamaica.
- Developing and strengthening governance and authorities is key to enabling a coordinated climate response, enabling economic and social improvements and aiding in preventing unequal distribution of transition benefits across the Jamaican population, leaving people behind and causing a serious risk to life.

Kenya:

- In Kenya, a development-compatible pathway to net zero emissions needs strong support from the global community to ensure that economic value chains, particularly in transport, agriculture, industry standards, and financial services are climate-proofed.
- There is a need for strong local leadership to implement appropriate regulatory frameworks and industry standards, and to support community-oriented data generation and scenario building.
- It's vital to connect climate-friendly innovations and investments with socioeconomic inclusion, with a particular focus on young people, women, remote populations, and informal settlements.

United Kingdom:

- The UK is a world leader in finance and innovation—both of which will prove key in reducing emissions.
- The UK has a large role to play in developing, and re-directing capital toward greener technologies.

- Solutions must also be accompanied by behavior change, such as encouraging active travel, and nature-based solutions, such as extending the coverage of hedgerows and diverse forests.

Provided by University of Cambridge

Citation: International group of citizens and scientists creates feasible visions of a resilient, net zero future (2021, November 1) retrieved 23 May 2024 from <https://phys.org/news/2021-11-international-group-citizens-scientists-feasible.html>

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