

New pathway to mitigate climate change and boost progress on UN Sustainable Development Goals

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A world that combats climate change while simultaneously improving on all 17 Sustainable Development Goals (SDGs) is possible, a new study finds. Scientists from the Potsdam Institute for Climate Impact Research (PIK) and the German Development Institute have developed a new

integrated strategy that combines ambitious climate action with dedicated policies for development, food and energy access, global and national equity, and environmental sustainability. It sheds new light on bottlenecks, but also synergies for boosting progress towards climate and sustainable development targets.

"Climate policies are crucial, but on their own they will not be sufficient to achieve the transformation towards a sustainable and prosperous world for all—a vision that policymakers committed to by adopting the Paris Agreement and the SDGs in 2015. Not even one of the 17 SDGs will be met until 2030 if the world continues along the current trajectory. And this was even the case prior to the COVID-19 pandemic," states PIK scientist Björn Soergel, lead author of the study to be published in *Nature Climate Change*. "But the good news is: We also have the means to change this."

Policy interventions for decent living within ecological boundaries

In the new study, the scientists present a Sustainable Development Pathway—a dedicated strategy that safeguards people from [climate change](#) while at the same time moving towards the targets of the SDGs. To this end, the scientists examined different areas of action, like food, energy or global and national equity, and their effects on the prospects of meeting the SDGs. The model framework used in the study specifically aims for a broad coverage—of SDGs reaching from no poverty and zero hunger to climate action and other environmental goals—as many of them interact with each other and cannot be considered isolated.

In addition to climate policies consistent with the Paris Agreement, the pathway includes additional measures like healthy nutrition, international climate finance and a pro-poor redistribution of carbon pricing revenues.

"These are some of the levers to make real progress towards the SDGs by 2030 and to continue along this track until 2050 and beyond. They allow us to reconcile a decent living for everyone with respecting the ecological boundaries of our planet," Soergel states.

Supplying healthy diets while protecting healthy ecosystems

While climate policies on their own could potentially increase [food prices](#)—among other reasons due to increased demand for bioenergy—this is not the case when climate protection is combined with other targeted policies and a change of lifestyles: "A change in our dietary habits towards less animal protein, as in the 'Planetary Health' diet recommended by an expert commission, proves to have far-reaching positive effects," explains PIK scientist and co-author Isabelle Weindl. "The 'Planetary Health' diet is nutritionally balanced and contains only modest amounts of animal-source food, and is thus much healthier than the average diet in industrialized countries. In addition, food production would require a lot less land, water and fertilizer, and would generate fewer [greenhouse gases](#), compared to diets with a high share of meat or dairy. Changing our [dietary habits](#) thus helps to protect the climate and our ecosystems."

How to make climate policies benefit the global poor

Similarly, a transition away from energy-intensive lifestyles in high-income countries would balance out the increases in energy consumption required for decent living standards and infrastructure build-up in low-income countries. Another intervention area includes global equity and poverty alleviation in the form of international climate finance and a pro-poor redistribution of carbon pricing revenues: "We found that [climate policies](#) can also reduce poverty in the Global South. Our analysis shows

that pricing greenhouse gas emissions, and using part of the revenues from industrialized countries to support sustainable development policies in low-income countries benefits both the planet and people," explains Soergel.

"A 'silo mentality' regarding climate change as an isolated issue would fail us. We need to combine [climate](#) protection with a broad sustainability strategy. This implies a mix of [policy](#) measures, with carbon pricing as an important cornerstone, but also includes, for example, redistributive policies and measures to promote healthy and sustainable diets and reduce our energy demand," concludes Elmar Kriegler, co-author of the study. "Our analysis presents a possible pathway towards a more sustainable future and shows that human well-being can be reconciled with planetary integrity. It is up to policymakers and society at large to turn this vision into tangible action."

More information: A sustainable development pathway for climate action within the UN 2030 Agenda, *Nature Climate Change* (2021). [DOI: 10.1038/s41558-021-01098-3](https://doi.org/10.1038/s41558-021-01098-3), www.nature.com/articles/s41558-021-01098-3

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