

"Should environmentalist groups fully abandon to advocate the mitigation of climate change in favour of campaigning for adaptation efforts?"

(e.g. building sea walls, genetically modified crops, exploring alternative living habitats)

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Since the beginning of the industrial revolution, the world has already warmed more than one degree Celsius. The Paris Agreement signed in 2015 calls for global warming to be limited to significantly below two degrees Celsius (so called two-degree target) compared to pre-industrial times. Otherwise, ecological and climatological tipping points would be exceeded, with catastrophic consequences for life on Earth. But the two-degree target is also criticized for not being sufficient to avert the worst consequences of climate change. Rather, the global temperature rise must be limited to below 1.5 degrees compared to pre-industrial times.

Current studies by the United Nations Intergovernmental Panel on Climate Change (IPCC) show that it is both possible and feasible to limit global warming to below 1.5 degrees. However, this would require immediate and fast reduction of greenhouse gas emissions as well as the technological removal of CO₂ from the atmosphere. To achieve this, action would have to be taken immediately. Despite promising declarations of intent, most countries are still doing far too little to reduce their emissions and achieve the climate targets set out in the Paris Agreement.

For this reason, some experts are advocating that limiting global warming to 1.5 (respectively 2) degrees Celsius is hardly possible from a realistic point of view. Rather, a temperature rise of three degrees over pre-industrial level is the realistic minimum to which we must be prepared. Recent calculations show that a temperature increase of up to 3.2°C is to be expected if climate policies remain at their cur-

rent level and are not significantly intensified. However, there is currently little evidence that this will happen in the foreseeable future.

Some environmental activists therefore argue that mitigating climate change and its consequences is no longer possible anyway. Instead of continuing to adhere to the principle of sustainability, it would be better to invest all efforts in measures and strategies to adapt to climate change. For example, investments could be made in building sea walls to protect coastal regions from the expected rise of sea levels. Or genetically modified crops could be used that are more resistant to drought.

However, not all countries have by far the same means to take effective measures to adapt to climate change. It is the poor regions of the world that are most vulnerable to the impacts of climate crisis. To abandon efforts to mitigate climate change would mean abandoning these people to suffering and misery and further increase social inequality on a global scale.

Moreover, it is not yet clear that technology is the saviour it is made out to be. Some climate change adaptation strategies (e.g., the search for alternative living habitats) are just science fiction and far outside the realms of what is realistically possible. Finally, technologies are not always ecologically safe (e.g. genetically modified seeds) and may have negative consequences that are not yet foreseeable.

Further

QUESTIONS

1 Should the concept of sustainability be abandoned because it refers to a target (namely, the prevention of climate change) that, realistically speaking, can no longer be achieved anyway?

2 How should the use of technologies to adapt to climate change be (ecologically) evaluated? What are the possible risks and unwanted side-effects that can arise from the use of technologies? Are there historical examples for such side effects?

3 Should the wealthy industrialized nations support poorer regions of the world financially and technologically in adapting to climate change?

4 How could it be achieved that the international community intensifies its efforts to tackle the climate crisis and meet the 1.5°C target?

Further reading:

- Rich, Nathaniel. *Losing Earth. A Recent History.* Farrar, Straus and Giroux. New York. 2019.
- Manemann, Jürgen. *Kritik des Anthropozäns. Plädoyer für eine neue Humanökologie.* Transcript Verlag, Bielefeld. 2014 <https://www.oxfam.de/system/files/oxfam-ka-tastrophen-klimawandel2015-factsheet.pdf>
- <https://www.nationalgeographic.com/environment/article/global-warming-overview>
- IPCC Report: *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty*

Global greenhouse gas emissions and warming scenarios

Our World
in Data

– Each pathway comes with uncertainty, marked by the shading from low to high emissions under each scenario.
– Warming refers to the expected global temperature rise by 2100, relative to pre-industrial temperatures.

Annual global greenhouse gas emissions
in gigatonnes of carbon dioxide-equivalents

150 Gt

100 Gt

50 Gt

Greenhouse gas emissions
up to the present

0

1990 2000 2010 2020 2030 2040 2050 2060 2070 2080 2090 2100

No climate policies
4.1 – 4.8 °C

→ expected emissions in a baseline scenario if countries had not implemented climate reduction policies.

Current policies

2.8 – 3.2 °C
→ emissions with current climate policies in place result in warming of 2.8 to 3.2°C by 2100.

Pledges & targets

2.5 – 2.8 °C
→ emissions if all countries delivered on reduction pledges result in warming of 2.5 to 2.8°C by 2100.

2°C pathways
1.5°C pathways