

WHY IS EXTINCTION REBELLION ASKING THAT THE NETHERLANDS BE CARBON NEUTRAL BY 2025?

The Dutch government aims at reducing carbon emissions to 95% of 1990 levels by 2050. We argue that this target is much too late and is not in line with the physical realities nor the Paris Agreement. Instead, Extinction Rebellion argues for a much more ambitious target and demands that the Netherlands be carbon neutral by 2025.

After decades of inaction and failure to enact mitigation promises, the opportunity for a smooth transition is lost. The climate crisis already has a destructive impact on nature and communities, which calls for an immediate and decisive reduction of greenhouse gas emissions. We strongly believe that given what is at stake, we need to shift to a risk-based approach, to consider worst case scenarios and to maximize our emission reductions



THE CRISIS IS ALREADY HERE. WE MUST MAXIMIZE EMISSION REDUCTION

- Human activities warmed the Earth's atmosphere by 1.1°C, already causing destruction on communities and ecosystems throughout the world.
- In the 2015 Paris Agreement, all countries promised to pursue efforts to limit global warming to 1.5°C. Such a temperature rise would already have serious consequences, including risks of setting off tipping points that could cause runaway global warming. Every increment on top of that will increasingly worsen impacts and costs. There is no safe level of global warming.
- Even though it is impossible to accurately estimate the amount of harm that will be caused by different levels of warming, we do know every delay in mitigating emission will increase warming and its impacts. We therefore have a moral duty to maximize emission reduction.

FAR FROM BEING AMBITIOUS, REACHING CARBON NEUTRALITY BY 2050 IS MUCH TOO LATE

- The carbon budget computed by the IPCC for having a reasonable chance (67%) of staying below 1.5°C of warming is extremely tiny. Without any mitigation, it would already be used up by 2028. Unconsidered sources such as methane from thawing permafrost could significantly reduce that budget even further.
- Scenarios envisaging carbon neutrality by 2050 are worrisome: they do not consider feedback loops, temporarily overshoot the 1.5°C target, and use extensive negative emissions. The latter relies on technologies that do not yet exist at scale and pass on the burden of removing carbon from the atmosphere to future generations.
- Agreeing on far-away targets is inefficient. The illusion of time allows governments to be praised for setting targets without actually taking significant action.

TO REFLECT CLIMATE EQUITY, THE NETHERLANDS MUST ACT FASTER THAN OTHER COUNTRIES

- The disproportionate historical and current carbon contribution of the Netherlands highlights the need for increased emission reductions in our country compared to the rest of the world, as the government acknowledged when signing the Paris agreement.
- Delocalized emissions due to imported products and non-territorial emissions such as from international aviation and shipping are not accounted for in national computations. The carbon footprint resulting from our way of life is thus even bigger.
- Due to their current wealth and capacities, rich, industrialized countries must take the lead in combating climate change and take a larger share of the burden of reducing emissions.

Given the existential issues at stakes, the immediacy of the crisis, the uncertainties surrounding carbon budgets, and the current and historical responsibility of the Netherlands in carbon emissions, we argue the uttermost need to maximize emission reduction and plead for 2025 as an early target, able to convey the urgency and to give an idea of the scale of the efforts that are needed

Consequences from the climate and ecological crisis are already tangible

Human activities warmed the earth's atmosphere by 1.1 degrees Celsius, which already has destructive impacts. This is not a future crisis anymore, but a very palatable one. Sea level rise, wildfires, heatwaves, extreme storms and droughts are threatening communities throughout the world particularly in the global south, including by impacting health, food production and drinking water.

According to the world meteorological organization, the last 5 years were the warmest on record. In the summer of 2019, strong heatwaves scorched Europe, India and Japan, leading to an increased death rate, including in the Netherlands. In Australia, the turn of the year was marked by monstrous bushfires, intensified by continued drought. Increased climate variability is already contributing to declining food security in already vulnerable countries.

There is no safe level of warming

We find ourselves in the midst of a crisis that will continue worsening as long as we keep emitting greenhouse gases in the atmosphere. We have a moral duty to prevent avoidable suffering by immediately reducing carbon emissions.

The IPCC special report on global warming of 1.5 degrees alerted on the grave danger that lies beyond 1.5°C of warming. But 1.5°C of warming would already cause longer and more intense heatwaves, more frequent and severe droughts and floods, increase the percentage of population exposed to weather extremes and affect water and food security. Therefore, even the most ambitious target of the Paris agreement cannot be considered as safe. Moreover, climate change is not a linear process and feedback loops (self-reinforcing processes), abrupt, or irreversible changes, often referred to as "tipping points", could be triggered already within the levels of warming considered in the Paris climate agreement.

Given what is at stakes, we must adopt the precautionary principle

It is impossible to accurately predict how much harm climate change will cause at different levels of warming. However, the stakes are so high that we must take a risk-based approach and act according to the precautionary principle, striving to reduce harm even though we can't predict or quantify it exactly (just like we're doing when designing dikes for flood defence). We do know that every delay in mitigating greenhouse gas emissions will lead to more warming and worsened impacts, increasing suffering. We therefore have a moral duty to maximize emission reduction.

The carbon budget to stay under 1.5C is very tiny

Carbon budgets play an essential role in climate policies. A carbon budget is defined as the upper limit of total carbon dioxide emissions associated with having a certain chance of staying below a certain global average temperature increase. The IPCC estimated a carbon budget of 420Gt from January 1st 2018 for having a 67% chance of staying below 1.5°C. Given that global yearly emissions were around 42Gt CO₂ in 2019, the budget would already be used up by 2028 if emissions do not decrease.

This approach has many caveats. First, this estimation does not consider permafrost thawing and potential methane release from wetlands, which could cut the budget by up to 100Gt. Different non-CO₂ emission scenarios lead to an additional +/- 250Gt. Uncertainties in the climate response to forcing from greenhouse gas emissions bring even a larger uncertainty around that budget (+/-400Gt)¹. Moreover, given the high stakes, a 1 in 3 risk to overshoot the 1.5 degrees target is not acceptable. The extremely large uncertainties around carbon budgets make it a very risky tool as a basis for climate policies.

Reaching carbon neutrality by 2050 is unlikely to allow respecting the Paris Agreement

Based on this budget, the IPCC computed different scenarios that would maybe allow less than 1.5°C of global warming in 2100, most of which are consistent with halving emissions by 2030 and reaching carbon neutrality around 2050. Nearly all of those scenarios rely on a temporary overshoot of the 1.5°C limit and on carbon dioxide removal (CDR) techniques.

These so-called "Negative emissions" (Carbon Dioxide Removal, CDR) were introduced in the climate scenarios in order to allow for a more gradual transition. They allow for extra carbon dioxide to be emitted, postulating it will be taken out of the atmosphere in the second half of the century. This concept poses a number of issues: No current technology is able to capture carbon dioxide at the scale required, meaning that our ability to remove this extra carbon is still hypothetical. Even natural techniques such as carbon capture by trees present limitations, notably if intended to be deployed at scale. Since the climate system is not linear, even temporarily overshooting emission targets could set positive feedback loops or irreversible changes, such as a threshold in permafrost melt or ice sheet instabilities. It also poses serious ethical questions as it implies for instance burdening future generations with removing our extra carbon from the atmosphere.

Setting far away targets is not effective

As the poor record of the Netherlands in reaching their already weak climate goals shows, we cannot trust the government to make pledges for dates as far as 2030 or 2050.

¹ See IPCC sr15, chapter 2, "2.2.2 The remaining 1.5°C carbon budget" for more details, notably table 2.2

With such long-term targets, governments give themselves the liberty to procrastinate. They set up targets they won't have to act on themselves since they will not be in power anymore when they grow closer.

Long term targets are misleading. They give an illusion of time. The illusion that it is still possible to invest in fossil fuel infrastructure today. This results in absurd situations: Planned fossil fuel projects already contain more than twice the remaining carbon budget for 1.5°C of warming, and would overshoot Paris Agreement goals unless decommissioned before the end of their life.

We need to challenge these misconceptions and call for much earlier targets, both because it is physically necessary, and in order to shift the window of what is seen as acceptable or ambitious in terms of climate policies.

Early industrialized countries have a larger responsibility in this crisis and must make more efforts

Given the imbalance between the responsibilities and impacts of climate and ecological breakdown, the Netherlands and other industrialised nations have incurred an ecological and climate debt to other countries. This notably includes an emission debt for the excessive historical and current per capita emissions of greenhouse gasses.

In 2018, the Netherlands emitted twice as much CO2 per capita as the world average, meaning that if everyone lived the way we do, the carbon budget would be used up twice as fast. The disproportionate historical and current responsibility of the Netherlands in carbon emissions highlights the need for increased reduction of greenhouse gas emissions in our country compared to the rest of the world. This principle was agreed on in 1992 when countries ratified the UNFCCC, and has been acknowledged again with the signing of the Paris Agreement, which, according to its own wording, "will be implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities"

National emission inventories do not include parts of our carbon footprint

National emission inventories only take into account territorial emissions, meaning that neither emissions from international aviation and shipping industry or from embedded emissions (emissions due to our way of life but attributed to other countries, for instance due to manufacturing) are taken into account. Their increase in the last decades is therefore not visible in the Dutch national emissions. If the full Dutch carbon footprint was accounted for, reductions would need to be even stronger.

The Netherlands has the wealth and capacity to be at the forefront of changes

As acknowledged in the UNFCCC under the principle of Common but differentiated responsibilities and respective capabilities, the most developed countries must take the lead in combating climate change and its effects.

The Netherlands is able to be at the forefront of changes, because it is a wealthy country with a highly educated population, high research capabilities, and companies that are already experienced in renewable energy installation or retrofitting of buildings. All those resources could be used for responding to the climate and ecological emergency.

Do you have any questions?

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