



# TIGHTENING THE NET

Net zero climate targets – implications for land and food equity

Executive summary

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Many governments and companies are adopting net zero climate targets as they recognize the urgency of the climate crisis. Without clear definition, however, these targets risk being reliant on using vast swathes of land in low-income countries to capture carbon emissions, allowing the biggest emitters to avoid making significant cuts in their own emissions. 'Net zero' could end up being a dangerous distraction that could delay the rapid reductions in emissions that high-emitting countries and companies need to make if we are to avoid catastrophic climate breakdown. It could also lead to an explosion in demand for land which, if not subject to careful safeguards, might risk increasing hunger and fuelling land inequality. Net zero should be a pathway to real and transformative climate action and not greenwash. Carbon emissions need to be reduced now, and land-based climate solutions must centre 'food-first' approaches that help achieve both zero emissions and zero hunger.

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Cover photo: Soubo village, Ouahigouya commune, Burkina Faso. Aguiratou Ouedraogo is a farmer. She is 39 years old and a mother of seven children. She fetches water from a well to water her market garden crops, with the help of a female farmer with whom she shares the agricultural plot.

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# SUMMARY

Lucy Njeri lives in the Rift Valley in Kenya. In late May her seeds began to germinate when the rains arrived. But instead of remaining for the long rainy season as they should, the rains stopped after a week. Since then, each day she scans the horizon looking for rain. The bean crop is already ruined. She has some faint hopes for the maize, but only if the rains come soon. If not they will not be able to plant again until next year, and there will be widespread hunger.

*'Climate change for us is real. It is already here. It is causing great hunger.'*

– Lucy Njeri

Every week a new country or corporation announces a target to achieve 'net zero' carbon emissions as their contribution to stopping climate breakdown. While these sound good and are often reported uncritically in the media, without clear definition, they risk being dangerous distractions that gamble with the planet's future.

The UK government was the first among the G7 to make such a commitment, in 2019, and it is using its presidency of COP26 in Glasgow to leverage similar commitments from others. Currently more than 120 countries, including those in the EU, the USA, China and Japan, have pledged to reach net zero by mid-century.<sup>1</sup> There has also been a wave of corporate net zero climate commitments from a range of companies and investors, including British Airways, Mars, Unilever, Citigroup, BlackRock, Shell and BP.

While in theory achieving net zero emissions is a worthy North Star and limiting warming to below 1.5°C will require a combination of emission reductions and removals, it is striking how much that one small word 'net' can obscure. 'Net zero emissions' and 'zero emissions' do *not* mean the same thing. Instead, in many cases, net zero targets are a greenwashing exercise that enable business as usual.

Net zero targets have proliferated because they give government and corporate leaders what they are desperate for: a convenient way to look like they are taking dramatic action to stop climate catastrophe while largely failing to do so.

What is needed is an immediate, dramatic and irreversible reduction in the billions of tonnes of carbon these countries and corporations are pumping into the atmosphere on a daily basis.

To meet the Paris targets, the world collectively should be on track to have cut carbon emissions by almost half by 2030, with the sharpest cuts being made by the biggest emitters. On current plans, we are on track to only have reduced emissions by 1% compared to 2010 levels%.<sup>2</sup>

Later this year, governments will come together in Glasgow, Scotland, for the follow-up climate summit to the 2015 Paris meeting. If we are to save our planet, and prevent millions of lives being lost, it is critical that governments and corporations are not permitted to get away with vague net

zero targets. They must be asked continuously and relentlessly what their plans are to concretely cut their own carbon emissions. What they are going to do now, and in the next year? What deep and profound cuts in their carbon emissions will we see by 2025 and by 2030? How and when will they shift away from fossil fuels?

Net zero targets are also risky because instead of focusing primarily on the hard work of cutting carbon emissions, for example by rapidly ending the use of coal, oil and gas for electricity and oil for cars, they rely instead on using other methods to remove carbon from the atmosphere. This can allow countries and corporations to continue to pollute, as the millions of tonnes of carbon emissions their factories and powerplants produce will somehow then be removed from the atmosphere, cancelling out their pollution and supposedly achieving 'net' zero.

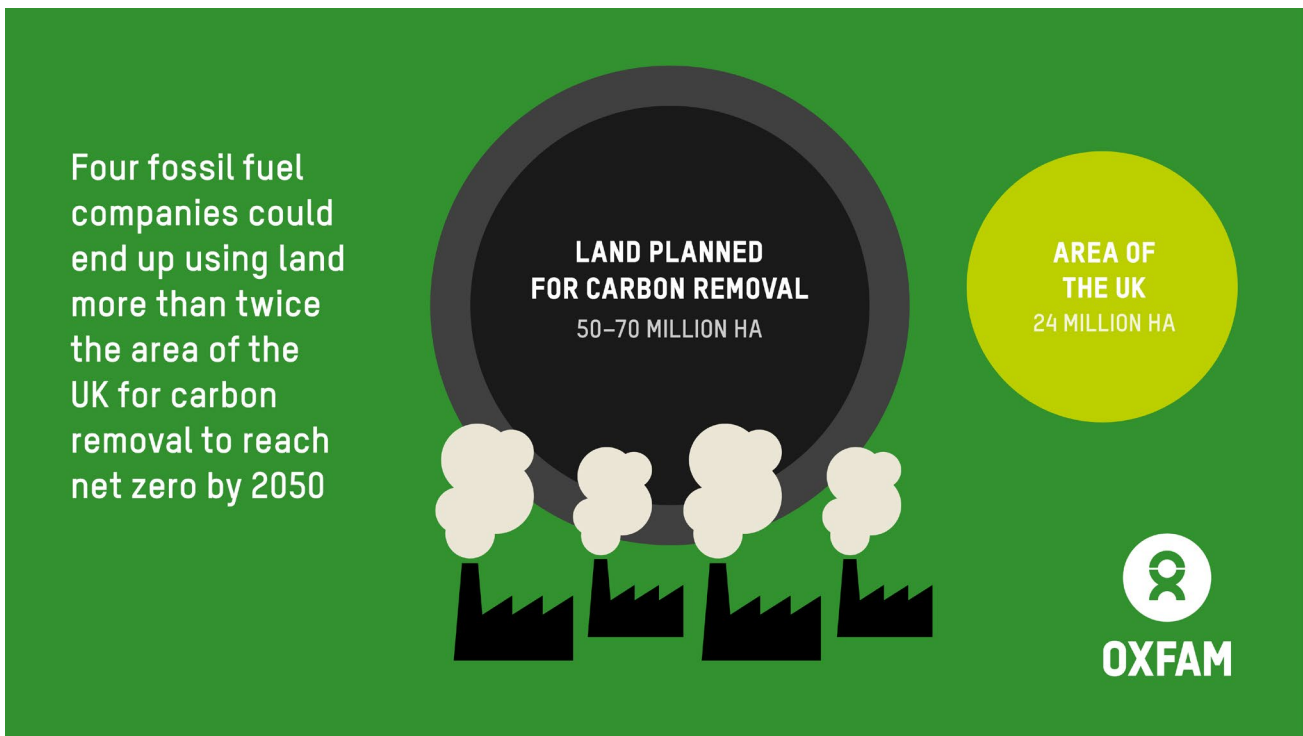
The problem is this removal of carbon either relies on virtually unproven new technologies, or on a level of land use that is completely impossible and would lead to mass hunger and displacement of people across the world.

Despite the buzz devoted to new technologies that will somehow rescue us from the need to stop belching CO<sub>2</sub> into the atmosphere, none have yet proven possible to use at scale.<sup>3</sup> The only proven way to remove carbon from the atmosphere is to use land to do so by growing billions of trees and storing carbon in trees and soil.

While stopping deforestation and sustainably restoring and managing lands wherever possible is of course a good thing to do and brings enormous environmental and social benefits, it is mathematically impossible to plant enough trees to meet the combined net zero targets announced by governments and corporations, as there is simply not enough land to do this.

Land is a finite resource that is a vital lifeline for growing food. It is central to the lives and livelihoods of millions of small farmers and local communities around the world.

- Oxfam has calculated that the total amount of land required for planned carbon removal could potentially be five times the size of India, or the equivalent of all the farmland on the planet.<sup>4</sup>
- Oxfam's analysis shows that several countries and companies are banking on land and natural sinks to meet net zero targets. The EU's plans rely on forests and nature to remove 225 Mt CO<sub>2</sub>e of emissions, which could require a maximum of 90m ha of land if EU countries were to rely solely on afforestation to meet this target.<sup>5</sup>
- Oxfam has analysed the net zero targets of just four of the big oil and gas producers (Shell, BP, TotalEnergies and ENI).<sup>6</sup> Their plans alone could require an area of land twice the size of the UK. If the oil and gas sector as a whole adopted similar net zero targets, it could end up requiring land that is nearly half the size of the United States, or one-third of the world's farmland.<sup>7</sup>



There is a very real risk that the explosion in net zero commitments will fuel a new surge in demand for land, particularly in low- and middle-income countries, which would lead to mass displacement and hunger.

In India, for example, as part of an afforestation drive, traditional lands have been fenced off, and communities who have rights to use this land have been forcibly evicted and left homeless. These conflicts are impacting nearly half a million tribal and forest-dwelling people.<sup>8</sup>

Instead of using land as a carbon farm that helps big emitters sound good while sidestepping the actual hard work required to cut emissions, we need to manage land in ways that tackle climate change and hunger together and strengthen the rights and resilience of communities. The success of agroecological approaches such as agroforestry in the Sahel show us it is possible to get to zero emissions *and* zero hunger.<sup>9</sup>

It is clear to us all that climate change has already begun, and unless drastic action is taken now a future of terrible hunger, extreme temperatures, floods, storms and droughts is a certainty.<sup>10</sup>

Yet we can still stop this. At the Glasgow Climate Summit, real, transparent, concrete and timebound cuts to carbon can be agreed for 2030. A forest of flimsy net zero commitments for 2050 and beyond risks letting governments and corporations off the hook, substituting the illusion of action for the hard work that must be done immediately if we are to avert climate disaster.

Oxfam is demanding:

- **A much stronger focus on cutting carbon emissions in the near term (by 2030).** Unless the biggest emitters of carbon dioxide take urgent action to cut emissions by about half by the end of the decade, runaway climate breakdown will become inevitable.

- That the **G20 prioritizes ambitious climate action** in the run-up to COP26 in Glasgow to ensure that global heating is kept below 1.5°C.
- **That companies cut emissions in their own operations and supply chains first and foremost.** Ambitious action to cut emissions by 2030 requires **phasing out support for new fossil fuel production.** The fossil fuel industry cannot use net zero as a prop for continuing business as usual.
- **Transparent targets** that distinguish between reducing and removing carbon, instead of blurring the boundaries with short-term (2030), medium- (2040) and long-term targets.
- **That land use must ensure zero hunger.** Land and nature are important parts of the climate solution, but where we do use land for climate mitigation, it must prioritize food security and build the resilience of small-scale farmers who rely on land. Nature-based solutions must strengthen the rights and livelihoods of local communities and protect ecosystems, and be subject to strong social and environmental safeguards that ensure that local communities, Indigenous people and frontline defenders have a seat at the table.

# NOTES

- 1 Energy & Climate Intelligence Unit (ECIU) and Oxford Net Zero. (2021). *Taking Stock: A global assessment of net zero targets*. [https://ca1-eci.edcdn.com/reports/ECIU-Oxford\\_Taking\\_Stock.pdf?mtime=20210323005817&focal=none](https://ca1-eci.edcdn.com/reports/ECIU-Oxford_Taking_Stock.pdf?mtime=20210323005817&focal=none)
- 2 This is based on the UN NDC synthesis report published in February 2021: <https://unfccc.int/news/greater-climate-ambition-urged-as-initial-ndc-synthesis-report-is-published>
- 3 Friends of the Earth Scotland, Global Witness and Tyndall Centre. (2021). *A Review of the Role of Fossil Fuel Based Carbon Capture and Storage in the Energy System*. Research summary briefing. <https://foe.scot/wp-content/uploads/2021/01/CCS-Research-Summary-Briefing.pdf>
- 4 Land used exclusively for carbon removal that could compete with food production could range up to 1.62bn ha, which is more than the total existing cropland. The size of India is 328.7m ha.
- 5 Factors for calculation: temperate forest has the capacity to remove between 2.5 and 7.5 tonnes of CO<sub>2</sub> per hectare.
- 6 Shell, TotalEnergies, Eni and BP will need an estimated 50,362,000 to 69,400,000 ha of land for carbon removal. This is twice the size of the UK (24m ha).
- 7 We estimate the oil and gas sector as a whole will likely require around 500m ha of land – half the size of the US (983m ha), or one-third of the world's farmland (1.62 bn ha).
- 8 T. Worsdell and K. Sambhav. (2020). *Locating the Breach: Mapping the nature of land conflicts in India*. Land Conflict Watch, Rights and Resources Initiative, and Oxfam India. <https://www.oxfamindia.org/knowledgehub/workingpaper/locating-breach-mapping-nature-land-conflicts-india>
- 9 J. Magrath. (2020). *Regreening the Sahel: A quiet agroecology revolution*. Oxfam GB. <https://policy-practice.oxfam.org/resources/regreening-the-sahel-a-quiet-agroecological-evolution-621091/>
- 10 IPCC. (2018). *Special Report on Global Warming of 1.5°C*. <https://www.ipcc.ch/sr15/>

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