Bank of evidence on false climate solutions

Relating the impacts on people and planet

mobilise resist transform
**Friends of the Earth International** is the world’s largest grassroots environmental federation, with 73 national member groups and millions of members and supporters around the world.

Our vision is of a peaceful and sustainable world based on societies living in harmony with nature. We envision a society of interdependent people living in dignity, wholeness and fulfilment in which equity, and human and peoples’ rights, are realised. This will be a society built upon peoples’ sovereignty and participation. It will be founded on social, economic, gender and environmental justice and be free from all forms of domination and exploitation, such as neoliberalism, corporate globalisation, neo-colonialism and militarism.

We believe that our children’s future will be better because of what we do.
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Introduction

This bank of evidence is a collection of articles, investigations and reports which document the impacts of false climate solutions on communities and ecosystems across the world. Friends of the Earth International has gathered this evidence to serve as a tool for campaigning, advocacy and communications efforts to resist the advance of false climate solutions, and show their failure to truly address the climate crisis.
Please note that not all of the resources and reports included here reflect Friends of the Earth International’s positions, but were included nevertheless because they contain useful information and evidence of the negative impacts of false climate solutions.

A second part of this bank of evidence will be published in 2024, covering Geoengineering, Hydrogen, and Industry.
So called ‘nature-based solutions’ (NBS), or land-based offsets, have been touted as a climate solution by big polluting corporations and countries in recent years, to distract from their complete failure to address the climate crisis.
In reality, NBS is a concept that enables them to keep on profiting at the expense of people and the planet. It provides cover for Big Polluters to continue emitting whilst appropriating vast amounts of land, often disregarding Indigenous and Human rights. NBS poses a significant threat to our climate as well as food sovereignty, agroecology, and land rights across the world.

For Friends of the Earth International’s position on NBS, see: Nature based solutions: a wolf in sheep’s clothing (2021).
Tree planting and REDD/+  

The idea of REDD/+, introduced under the United Nations Framework Convention on Climate Change (UNFCCC) in 2013, is to reduce emissions via result-based payments to avoid deforestation and forest degradation. Some of these activities have now been rebranded as ‘nature-based solutions’ but the idea remains the same: planting trees or preserving forests in exchange for carbon credits, to offset the emissions of Big Polluters. As the stories below show, these projects have not only failed to reduce emissions, they have also been linked to negative impacts on local and Indigenous communities, land grabs, and other social impacts.
Africa

Emirati company
Blue Carbon in Liberia

Sources:
- Liberia set to concede 10% of its territory to Emirati company for carbon credit production, Le Monde, August 2023
- Liberia to concede territory to UAE firm in carbon offset deal, Middle East Eye, August 2023

These articles reveal that a deal between Emirati company Blue Carbon and Liberia would see the country grant exclusive rights to over one million hectares of forest for carbon credits from projects supposed to achieve conservation or reforestation benefits. The deal, yet to be signed, was concluded in March 2023 and would concede about 10% of Liberia’s territory to Blue Carbon for the next 30 years.

One article finds that the memorandum of understanding would “violate a number of Liberian laws, including the 2019 land rights law, a legislation that asserts communities’ right to ‘customary land’ and provisions that ‘oblige developers to undertake Free, Prior and Informed Consent (FPIC) negotiations with communities on customary land.’ The deal only puts Blue Carbon under the obligation to “apply best efforts” to conduct FPIC in the project areas and within a mere three months of signing the agreement.

At stake is not only one of the most densely forested areas in Africa, but also Liberia’s ability to reach its own climate commitments, as the country would not be able to use this land to meet its Nationally Determined Contribution (NDC) under the Paris Agreement. A number of local NGOs also state that they were not provided any information about the deal until sources were leaked, after which the government rushed to schedule consultations with local stakeholders.

The articles also bring into question benefits to local communities and profits, as the draft contract outlines that Blue Carbon would reap 70% of profits, and the Liberian government 30% - of which around half will be paid to communities. The deal further outlines that decisions regarding allocation of money would be made by a five-person committee, of which two would be representatives from Blue Carbon and one would be a government official.

In terms of methodology applied to the carbon credits, Blue Carbon stated it adheres to the standards of REDD+, but no further details on how the emission reductions would be calculated were provided in the draft agreement whilst questions are being brought by the article regarding the additionality of the emission reductions. The contract also doesn’t specify whether the credits will be sold in voluntary markets or via bilateral deals with governments.

Kariba Forest Preservation
REDD+ project in Zimbabwe

Sources:
- “Showcase project by the world’s biggest carbon trader actually resulted in more emissions”, Follow the Money, January 2023
- “Renowned carbon credits project in Zimbabwe has more holes than Swiss cheese”, Follow the Money, June 2023

This investigation into Swiss-based climate consultant South Pole finds that the carbon credits it has sold to big companies such as Greenchoice, Gucci and Volkswagen - making tens of millions along the way - “exist only on paper”. The Kariba forest preservation in Zimbabwe - a REDD+ project owned by project developer Steve Wentzel via its enterprise Carbon Green Investment - is at the core of the scandal. South Pole claims to control a fifth of the world’s voluntary trade in carbon emissions. Of these, the Kariba project generates a tenth of their revenue: about 232 million euros.

Between 2011 and 2021, South Pole claimed to have saved roughly 36 million tonnes of CO₂ with the project. In 2022, the credits’ accuracy was called into question as it became clear that South Pole inflated the numbers. Among other things, the company hugely overestimated the avoided deforestation to generate larger profits. In terms of numbers, the baseline inflation amounts to roughly 27 million tons of CO₂ that were sold as carbon credits and do not exist (almost two thirds of the total project).

The investigation finds that management knew about the overestimation from June 2022, yet continued to sell credits from the project, with 2022 being the most lucrative year for the project. Only certain clients were informed of the overestimation at the end of 2022. The overestimation also went unnoticed by certification agencies, including Verra. It also uncovers that South
Nature-based solutions

Pole kept more than 40% of the revenue from the project - not the publicly claimed 25%, with other revenues being given back to local communities in Zimbabwe. In addition, money that was claimed as returned to communities via partner CGI may not have reached them. CGI seems unable to provide evidence of this, and South Pole consistently avoids answering these questions.

A follow up field visit in June 2023 revealed further concerns about promised benefits from the project to local communities. The story shows that project developer Steve Wentzel acquired an area spanning more than 780 thousand hectares, claiming risks to local wildlife and ecosystems, and the need for forest protection. To scale up the project, Wentzel then partnered with South Pole. According to the agreement, South Pole was to keep 25% of total revenues, the remaining would be shared between project developer Steve Wentzel (30%) and local communities (70%). Of the 100 million euros yielded, South Pole kept well over 43% whilst the remaining 57 million went to Wentzel via his company Carbon Green Africa, supposed to, in turn, redistribute 40 million to local communities. Local community members interviewed as part of the field visit said the money never reached them. Investigation and research by the reporters brought more concerns about whether benefits to local communities claimed by CGA and South Pole materialised.

Note that CGA and South Pole are partnering in a new REDD+ project in the region: the Charisa project.

REDD+ project in Gabon

Source:
- Page 34 in Credits where they are not due: a critical analysis of the major REDD+ schemes, Rainforest Foundation UK, June 2023

This case study looks into Gabon and its proposed forest reference emission level (FREL), submitted to the UNFCCC in February 2021, with a revised proposal in October 2021.

It finds that rather than just considering the emissions levels from deforestation, Gabon presented what was in effect an estimate of the carbon stocks of its entire forest estate - 23.7 million hectares - over both the reference and claim period. It claimed that net removals of carbon from the atmosphere - into trees in the either newly protected areas or those subject to no further logging or ‘reduced impact logging’ - amounted to a total of 90.6 million tons of carbon savings. This was established because in the calculation of its baseline emissions level, Gabon introduced two 10% ‘adjustments’, meaning that, instead of having a net carbon removals balance of minus 16.5 million tonnes (i.e. it had net emissions), it had a positive balance of 90.6 million tonnes of net removals. The UN technical analysis, although taking note of these methodological anomalies, still considered the data and information provided by Gabon to be ‘mostly consistent’ and ‘mostly accurate’.

In addition to these inflated baselines, the study finds that credits were said to result from decreased emissions measured nationally via avoidance of internal leakage - i.e. logging not pushed from one region to another within the country. However, this failed to consider leakage outside the country and analysis of data indeed showed that log imports increased, for example from neighbouring Cameroon, as a result of the policies. It further highlights that these policy decisions were also put into place before the REDD+ framework was set into the UNFCCC. They were taken for economic purposes rather than for climate mitigation. It therefore concludes that this approach of crediting runs contrary to the principles of additionality.

REDD+ project in Republic of Congo

Source:
- Page 38 in Credits where they are not due: a critical analysis of the major REDD+ schemes, Rainforest Foundation UK, June 2023

This case study looks into the programme covering Congo’s two northernmost, heavily forested, departments of Likouala and Sangha, together about 12.1 million hectares. An agreement to purchase 8.3 million tonnes of claimed emissions reductions for the period 2019-2023, was approved by the World Bank in 2021.

Here, the baseline of the programme was found to be largely inflated. The article shows that it was created by adding 72% of ‘upward adjustment’ to the historical rate of deforestation and forest loss, meaning that almost three quarters of those claimed emission reductions would be generated by simply doing nothing. In addition, the chosen reference period included some of Congo’s worst years in terms of deforestation, further inflating the baseline.

The actual impact of the programme in terms of emission reductions as well as their additionality are
Tree planting in Uganda
Source:
• “NFA land giveaway bonanza turns Luweero farmers into destitute”. Witness Radio, October 2022

This story finds that in Uganda, the government and its agencies, especially the National Forest Authority (NFA), have been facilitating violent land grabs of millions of Indigenous communities and small farmers for carbon credit schemes by local and foreign investors.

Over 2,900 acreages belonging to residents in the Luweero district were donated to investors to grow eucalyptus and pine trees, while part of the land is occupied by a goat farm. The article further reveals that on 18 May 2019 in Luweero, Yandwe village woke up under the invasion of armed soldiers and police who burnt houses and razed down their gardens claiming they were illegally occupying Mbale Central Forest Reserve land. In consequence, former land owners now work for extremely low wages on the plantations. The story highlights that everywhere in the region these evictions have stripped communities of their lands and livelihoods, children are working rather than going to school, and all this happened without proper consultation or compensation.

Tree planting in Republic of Congo
Sources:
• “Total’s Congo offsetting project ‘snatched our land’”, Source Material, December 2022

• “Congolese farmers barred from own land for tree planting project by French oil giant Total Energies”, Sky News, December 2022

This case study looks into Forest Neutral Congo (FNC) and Total’s joint project of planting 40,000 hectares of acacia trees, saying it will capture 10 million tonnes of carbon dioxide in 20 years (around 2% of Total’s annual emissions). Each year the project will generate $4 million of carbon credits – projected to be verified by sector leader Verra, whose offsets were revealed mostly worthless by an investigation in 2023. The story uncovers that small farmers whose livelihoods depend on cultivating the land have been chased away from their own land. The investigation also shows that consultation to get consent from local communities wasn’t carried out properly and land was bought off for very low financial compensation. Those who refused to sell their land for a mere ‘symbolic compensation’ were ignored and their land taken anyway. It further reveals that the project benefits from support from the government who facilitated the land transfers. Congo’s land laws since independence passed a lot of land to government ownership, despite it being passed down through generations within families for centuries.

Shell and ENI in Africa
Sources:
• “Climate Criminals: ENI and Shell, keep the fossils in the ground! We don’t want your false forests!”, Friends of the Earth Mozambique/JA!, May 2019

• “Oil company Eni plans 8.1 million hectare land grab in Africa for carbon offset plantations”, REDD monitor, March 2019

This article covers ENI’s announced plans to plant 8.1 million hectares of trees in Mozambique, South Africa, Ghana, and Zimbabwe to compensate for its own emissions as part of its ‘net zero by 2030’ plan. This announcement follows the company’s 2017 ‘decarbonization’ plan that involved buying 680,000 forestry credits to offset 1.6% of the company’s own emissions. (The credits purchased were generated by projects in the Democratic Republic of Congo, Indonesia, Mexico and Ghana, and development for two REDD projects was started in Ecuador and Ghana.) In 2019 ENI decided to go from buying credits to generating them itself with planning for plantations covering 8.1 million hectares across Africa, with the company’s Chief Executive also brought into question. Firstly, because the reduced logging claimed to result in emission reductions covers areas where logging was already winding down. Secondly, because the promotion of shade-grown cocoa production and reduced impacts of subsistence farming, also claimed to result in emission reductions, are already partly happening too. The remaining source of supposed emission reductions, regarding the establishment of ‘conservation zones’ within palm oil plantations, is also questioned as no clearance of forest for palm oil plantation has been recorded so far in the area.

In addition, the article shows that of the $41.8 million to be paid by the Forest Carbon Partnership Facility (FCPF) for the supposed emissions reductions, up to 70% could go to logging and palm oil companies for doing little or nothing, likely resulting in no additional emissions reductions whatsoever.
mentioning a final target of potentially more than 20 million tons per year of CO₂ sequestration by 2030.

The story also covers Shell’s plans, including reforestation of false forests, with the company offering carbon credits to its customers so that they may offset their emissions, including through controversial REDD+/+ schemes with governments.

**Nhambita Community Carbon REDD+ project in Mozambique**

*Source:*
- “Mozambique : Carbon Trading and REDD+: farmers ‘grow’ carbon for the benefit of polluters”, La Via Campesina, June 2012

This article recounts the impacts of the Nhambita Community Carbon REDD+ project on 1400 farmers in the Púngue administrative region in Sofala, Mozambique, who have been contracted to plant and care for trees on their land. The project is run by Envirotrade who then sells carbon credits to European and US companies and countries, claiming to achieve sustainable development and biodiversity conservation, as well as to alleviate poverty in the region. As per the terms of the seven-year contract between Envirotrade and the farmers, the latter are required to plant and care for the trees during and beyond the period of the contract from 50 to 100 years, meaning the obligations will be automatically passed on from one generation to the next. The story brings into question the claims of poverty alleviation, as the remuneration system for farmers is based on the area of land contracted, and several costs are incurred by implementing the project. Envirotrade’s Carbon Manager himself stated: “This is not going to make communities wealthy.” A high number of “contracted” farmers have also seen their earnings reduced for not achieving the 85% survival rates set out in the contract, or have had delays in their payments due to financial difficulties. Social conflicts within the community also rose up between those who financially benefit from the project and those who don’t.

The article also highlights concerns regarding food sovereignty and security, as the project led many farmers to abandon farming in favour of activities related to REDD+. In addition, it raises concerns about the claimed risks to forests in the area, from intensive logging and unchecked land clearing by fire, that the project is based on. According to community leaders and the Committee for Natural Resources management for Púngue, the forests were never at risk in the first place.

Further, the article highlights the lack of comprehensive information surrounding Envirotrade’s carbon business involving community resources, calling into question the transparency of the process and whether it is in line with the right to Free, Prior and Informed Consent (FPIC). At the time of the story, the European Commission had cut its funding for the project, including because of irregularities observed in the proposed method for measuring carbon, and Envirotrade had stopped issuing new contracts because of financial difficulties.

For further examples of impacts of REDD projects in Africa, see also:
- **Worst REDD projects in Africa**, No REDD in Africa network, June 2018 (please bear in mind some of these case studies date back a few years and therefore may not be up to date)
- **Luangwa Community Forests REDD+ Project (LCFP), Zambia**, Environmental Justice Atlas, June 2023 (available in several languages)
- “Kenya banks on carbon credits - but at what cost to communities?”, Reuters, March 2023
- “‘That’s a scam’: Indian firm’s REDD+ carbon deal in the DRC raises concern”, Mongabay, June 2022

**Asia Pacific**

**Avoided deforestation in Borneo**

*Source:*
- “In Sabah, natural capital agreement surfaces again, despite critics”, Mongabay, August 2023

In October 2021, an agreement signed without public knowledge by members of the Sabah state government, a Singaporean firm and an Australian consultancy committed two million hectares of land in the Bornean state to a 100-year carbon deal. The project then stalled in the face of strong criticisms but this article recounts that efforts have publicly resumed to bring the agreement into force.
Offset projects in Australia

Sources:
- “In Australia’s Outback, a controversial cash crop is booming: Carbon”, The Washington Post, February 2023
- “Forest regeneration that earned multimillion-dollar carbon credits resulted in fewer trees, analysis finds”, The Guardian, November 2022

These articles look into the proliferation of offset projects in Australia, including in the ‘mulga belt’ region where 150 properties collectively made at least $300 million from carbon credits in less than a decade, according to government records. Australian Carbon Credit Units (ACCUs) have come under fire for their overestimations of benefits and claimed carbon savings, including following an academic study highlighting these overestimations. The analysis of 169 projects, together representing 24 million credits between 2015 and 2021, was presented as part of a review commissioned by Australia’s climate change minister. It found that projects using the ‘human-induced regeneration’ (HIR) method overwhelmingly led to an overestimation of credits. In some cases, credits were claimed for protecting vegetation that was never intended to be cut down in the first place, and in others activities claimed to achieve carbon savings - most often reduced grazing activities - in fact did not achieve better results, with rainfall being a much more important driver of vegetation growth. The stories also bring to light concerns over conflict of interest, as the Australian government finds itself both accrediting the projects and being the primary buyer of said projects to offset its emissions in view of meeting its international commitments.

Avoided deforestation in New Zealand

Source:
- “Southland carbon offset project may have overestimated the effect of logging”, Stuff, May 2023

The article looks into a carbon offset project in Southland, New Zealand, which is being questioned for overestimating claimed carbon savings from avoided deforestation. The project, run by environmental company Ekos, protected a regenerating forest from felling. The article reveals that information from the Ministry for Primary Industries challenges Ekos’ claim that, without the project, commercial logging would have brought “the process of natural succession” to a complete stop, preventing the forest from growing. It shows that only a limited amount of the forest can be harvested to allow it to regenerate. The Ekos Project Manager denies the claims backed by the Ministry for Primary Industries and by the Indigenous forestry manager interviewed as part of the article, and Plan Vivo who certified the project also claims best practices were applied.

The natural capital agreement (NCA) faced public backlash, but now its proponents are looking into starting a pilot project in Sabah, arguing that the state was losing the equivalent of $1.75 million per day that the project was stalled. Criticisms regarding the deal include the lack of information and transparency around it, as details about its area of implementation, the impacts on forest-reliant communities, and how profits are to be spent, still remain unknown. Civil society groups have initiated a judicial review to verify whether the agreement is compliant with relevant laws and procedures. The deal was also found non-binding and “legally important” by the state’s Attorney General in 2022. The lack of clarity on the project area is specifically brought into question in this article, as it raises concerns about whether proponents of the deal did secure Free, Prior, and Informed Consent (FPIC) from local and Indigenous communities that could be affected by the project. In addition, this lack of clarity on the project area brings into question whether the project would achieve carbon savings or benefits, and therefore whether it complies with requirements regarding the additionality of its carbon savings - i.e. that the project protects forests that would otherwise be at risk. Finally, the article highlights that transparency is needed regarding who profits from the project so that there can be clarity on whether there are any conflicts of interest.

Note that an independent review into Australia’s carbon market in 2023 recommended increasing transparency, removing some of the regulator’s responsibilities to reduce conflicts of interest, phasing out avoided deforestation projects and boosting Indigenous involvement.
Nature-based solutions

Tumring REDD+ project in Cambodia

Sources:
- “Large-Scale Deforestation at Korea Forest Service’s REDD+ Site in Cambodia”, Friends of the Earth Asia Pacific, August 2021

To achieve its ‘net zero by 2050’ goal, Korea is looking at carbon offsetting through both projects at home and implementation of REDD+/ projects overseas. This article looks specifically into Cambodia’s Tumring REDD+ Pilot Project that enabled the Korea Forest Service (KFS) to secure carbon credits. The investigation uncovered that in the first six years of the project more than 37% of the forest in the project area was damaged or lost, and that the rate of deforestation reached 8.76% in 2020. The deforested areas are then turned into plantations for export, whilst the timber from the logging process is also exported to other regions. The Sochet community also reports land grabbing in the project area, including attempts to forge local and Indigenous communities to acquire land titles. The article further relates that remuneration for activities supposedly supporting local communities in the project area - for example forest patrolling - was not adequate, leading to insufficient patrolling and higher risks of illegal logging activities. Although KFS denied the claims made by the investigation, they have not provided any evidence to counteract these claims.

Kalimantan Forest and Climate Partnership REDD project in Indonesia

Sources:
- In the redd: Australia’s carbon offset project in central kalimantan, Friends of the Earth International, December 2011
- “Katigan peatland conservation and REDD project excluding traditional owners, Kalimantan, Indonesia”, Environmental Justice Atlas, March 2023

This report looks into the Kalimantan Forests and Climate Partnership (KFCP) - the world’s first large scale REDD pilot project, agreed between the Governments of Indonesia and Australia in 2007 and funded by the Australian government. The aim was to produce carbon offsets by reducing emissions from deforestation and land degradation, supposedly re-foresting and re-flooding approximately 100,000 hectares of degraded peatland swamp forest in Central Kalimantan. It covers a small section of the previous Mega Rice Project, a failed attempt at converting peat swamp forests into rice paddies that resulted in significant negative impacts on ecosystems. The project is shown to disregard local knowledge from communities who have been implementing successful community forest management practices on the ex Mega Rice Project. This led to community tensions, including around local communities’ access to land and resources, and the lack of respect for the principle of Free, Prior and Informed Consent. The story highlights that the disregard for local knowledge also meant that the impact of the project in itself in terms of conservation and reforestation was minimal. A World Rainforest Movement report then brought to light that village governments in the area were bribed to overturn their previous decision to reject the project following fears of losing access to land. A majority of villagers eventually signed a cooperation agreement with PT Rimba Makmur Utama (RMU) to access financial rewards. It shows that land that was owned by villages following traditional land tenure for decades has now been repossessed with local communities losing access to it, and marginalised rice farmers seeing their practices and autonomy impacted. In addition, the story highlights that the project has led to impacts on ecosystems in the area as plantations are contributing to draining of peat, increasing the risk of wildfires. It also reveals that Shell is one of the companies involved in the project.

You can find an additional story (behind paywall) here: “How New Zealand’s climate fight is threatening its iconic farmland”, The New York Times, August 2022

Europe

Forest and peatland restoration in Scotland

Sources:
- “Revealed: The developers behind Scotland’s carbon credit ‘green rush’”. The Ferret, August 2022
- “Revealed: The big firms snapping up Scottish carbon credits”, The Ferret, August 2022
- “Corporate tree-planting drive in Scotland ‘risks widening rural inequality’”, The Guardian, March 2022
This investigation looks into forest and peatland restoration carbon offset projects in Scotland, covering in total an area of 63,453 hectares of land and representing 14 million tonnes of estimated carbon dioxide saving. Among the developers listed in the article is a BP subsidiary, after the company was found to pour thousands into social media greenwashing targeted at the Scottish population. It looks specifically into the environmental, social, and economic impacts of the projects, as Scottish land values reportedly rose by 61% in 2021 alone due to demand from forestry investors. According to the investigation, developers also include landowners associations and aristocratic figures, bringing into further question the involvement of and benefit to local communities. Further analysis in the second part of the investigation uncovers that “weapons manufacturers, the oil giant Shell, and financial institutions which poured billions of pounds into fossil fuels are among firms buying [these] carbon credits”. These include the bank Barclays and weapons manufacturers Thales and Babcock, the former being accused of financing Israel’s military. It also reveals that the Scottish Government has been encouraging such developments across rural Scotland. This second part of the investigation also explores further the impacts on land price in Scotland, finding that the average price of the type of estate brought for these projects rose by 87% last year, further accentuating wealth inequalities in the country. At the time of the investigation, nearly 560,000 of these credits had been sold. An earlier set of investigations by The Guardian looks into the forest offsets part of these projects, and further reveals analysis of the social impacts. It shows that investment in the forest projects was subsidised by exemptions from inheritance tax, business property tax relief, and income and corporation tax on profits for commercial woodland, as well as non-domestic rates exemptions. This has driven the acquisition of large areas of Scottish land for offsetting projects. In 2019, the Scottish Land Commission said that just 87 owners controlled 1.7m hectares of rural Scotland, a trend that could be furthered by the multiplication of offset projects. One of the investigations looks into more details at the case of beer company BrewDog acquiring £8.8 million worth of Scottish land for carbon offset projects.

**Land Life’s tree planting in Spain**

Source:  
“Corporate Carbon Offset Company Accidentally Starts Devastating Wildfire”, Vice, July 2022

This article relates the events of Dutch reforestation company Land Life accidently starting a wildfire on land being prepared for tree planting to generate carbon offsets in Spain. The fire is estimated to have destroyed 14,000 hectares of forest, and is the second one resulting from Land Life’s activities that year. It also led to the evacuation of around 2,000 people in neighbouring towns and led local authorities to demand the government of autonomous community Aragon where the fire happened to put a stop to Land Life’s activities.

**Tree planting in Wales**

Source:  
“Tree-planting: Why are large investment firms buying Welsh farms?”, BBC, August 2021

This story looks into the increasing number of farms and land being brought across Wales to make way for afforestation projects in view of producing carbon offsets, and the related impacts on local rural communities. It relates the worry of local farmers and residents at watching an increasing number of farms locally owned for generations being sold off to companies outside of Wales for afforestation projects, with locals finding themselves outpriced in the area. The affected communities speak of the impacts that taking fertile land out of food production and into forestry has on local agriculture, culture and language. The article also brings into question the Welsh Government’s policies that may be facilitating the buying of Welsh land by large companies.

**Latin America**

**Cordillera Azul National Park REDD+ project in Peru**

Source:  
Page 31 in Credits where they are not due: a critical analysis of the major REDD+ schemes, Rainforest Foundation UK, June 2023
This study looks into the Cordillera Azul National Park project, which was initiated in 2008, though only validated by the certification company SCS in 2013. The carbon credits were issued from July 2015 and projected until 2028 according to Verra. Covering a forest area of 1.3 million hectares, the project claims to avoid deforestation resulting in 25.2 million tonnes of supposed carbon savings. It is found by this investigation to have rested on highly inflated baselines, as the future scenario of deforestation in the absence of the carbon project it was based on rested on huge projected increases in population. Actual deforestation, even before carbon funding started, was very much lower than the project had claimed it would be. The story also shows that the project failed to properly account for ‘leakage’ - i.e. the risk of migration of farmers seeking land from clearing abundantly available forests elsewhere. Methodological manipulations enabled the recordable leakage to amount to zero in the first four monitoring reports, when in fact it could be close to 100%. In addition, it reveals the project failed to properly consult and obtain the consent of local Indigenous communities, blocking communities’ land title claims to several thousand hectares of the park. In July 2020, the community started a court case against the Peruvian Government and the park, challenging their “refusal to title their traditional lands, the imposition of exclusionary conservation and profit-making from carbon credits sold without their consent”.

This later article relates that the Puerto Franco community of Kichwa won a major victory in April 2023, as a ruling declared their rights had been violated by creation of the park and ordered authorities to begin granting them land titles, to ensure that they benefit from conservation activities in the park and participate in its management. The appeals court however overturned the ruling months later, citing “the presence of insurmountable defects both in due process and in the motivation of the judicial decision.” Testimonies from lawyers as part of the story brought into question the decision to overturn the whole ruling for procedural matters that shouldn’t have impacted on the substance. The government further argues that the statute of limitations has now expired for the Kichwa to make a claim, and further argued that the Kichwa territory had never been legally defined so it was impossible for the project to overlap with it.

Another related story reveals that Shell, TotalEnergies and others are offsetting their emissions through the Peruvian project. It also uncovers that satellite analysis shows that tree loss has more than doubled under the project, mostly in areas that are easier to reach and illegally log. The data indicates that deforestation has gone from an average of 262 hectares per year in the five years before the project launched to an average of 572 hectares per year from 2009 to 2021.

**ART-TREES in Guyana**

Source:

- Page 43 in *Credits where they are not due: a critical analysis of the major REDD+ schemes*, Rainforest Foundation UK, June 2023

This case study covers the example of ART–TREES implementation in Guyana. ART is the Architecture for REDD+ Transactions, which uses “The REDD+ Environmental Excellence Standard”, known as TREES, to measure, monitor, report and verify emission reductions and removals from the forest sector.

In 2009, a report published by the office of President Jagdeo (but actually prepared by the consultancy McKinsey) claimed that the country’s forests could disappear entirely within 25 years, at a rate of more than 4% per year – although the actual rate of deforestation was around 0.2% per year (and by some estimates, much less), and most of the country’s soils are entirely unsuitable for agriculture. The document set out what was called a ‘Low Carbon Development Strategy’ (LCDS) to avoid this fictional disaster, which became the purpose of a bilateral REDD+ funding agreement with the Government of Norway. The agreement allowed for ‘avoided deforestation’ payments if forest loss remained below 0.45%, even though this was much more than the prevailing actual rate.

In 2020, a new version of the Low Carbon Development Strategy was developed whilst the Norway-backed Architecture for REDD+ Transactions (ART) scheme accepted a proposal from Guyana, which in 2023 became the first country to be issued with credits for ‘avoided deforestation’ payments by ART – to be used to finance implementation of the new LCDS.

The claim for credits applies to the country’s entire forest area of 18 million hectares, amounting to 33.5 million claimed carbon savings from 2016 to 2020. However analysis showed that those claimed emission reductions might be largely fictitious. ART provisions allow for the occurrence of entirely artificial ‘adjustments’ for countries that qualify as having a lot...
of forest and not much deforestation - which is Guyana’s case. Note that the exact methodology behind how these adjustments were made in Guyana’s case is unclear, but analysis seems to indicate that over 80% of the credits were created purely through accounting manipulations allowed under TREES, rather than any real emissions reductions.

In addition, whilst Guyana’s deforestation decreased during the crediting period according to the Guyana Forest Commission, it is shown to have increased during that same period according to analysis by the independent Global Forest Watch portal.

The story also highlights that the programme is also disregarding Indigenous rights, with the Amerindian Peoples Association (APA) submitting a formal complaint to ART-TREES because of the government’s failure to receive consent from communities. The APA also affirmed that Akawio and Arecuna peoples could stake a claim to some of the credits according to their rights to their ancestral lands - which was rebutted by ART.

Note that Exxon has reportedly indicated that it might follow suit in buying ART credits after the Hess Corporation - which has a 30% stake in an Exxon-led consortium exploiting oil in Guyana - announced its intention to buy some 37.5 million credits through ART. This would mean that Guyana’s LCDS would be effectively funded by the oil industry. The Guyanese government has also authorised its ART credits to be used for the CORSIA offsetting scheme for airlines. A second claim for credits - for just 2021 - was already submitted to ART by the Guyana Forestry Commission in October 2022, and is still being verified.

Jari Pará REDD+ Project in Brazil

Source:

- “In Brazil’s Amazon, carbon credit project halted over land dispute”, Context, March 2023

This investigation looks into the Verra-certified Jari Pará REDD+ Project in northern Brazil that covers about 497,000 hectares of Amazon rainforest. It finds that the project is unlawful as it sold carbon credits based on an invalid claim to a 386,000-hectare land parcel registered as public property in 2018. Registration documents with Verra described Jari Celulose, one of the companies managing the wider Jari Valley of which the Jari Pará project is part, as the ‘legitimate owner’ of the land. In response to the investigation, Jari Celulose referred to a 2021 court ruling declaring that the company had ‘possession’ of the land in question - which, the investigation highlights, does not equate ownership. The 2021 ruling has been appealed to revoke the decision on the company’s possession of the land, and is still pending a decision at the time of the investigation. The investigation uncovers that in a related case, Jari Celulose’s ownership certificates for another Jari Pará REDD+ project parcel of 120,000 hectares were blocked by a court order in November 2022, and that other ownership certificates included in the project had also been blocked or cancelled. Note that at the time of the investigation, Verra launched a review of the Jari Pará REDD+ Project and suspended the issuance of new carbon credits from the project.

This leads the investigation to address broader concerns over the increasing number of cases in Brazil’s Amazon of financial assets being created and sold internationally based on land whose ownership is contested. In other words, the case speaks of the issue of continued land grabbing in Brazil’s Amazon, with large areas of the rainforest that have never been legally designated as private property or publicly protected areas since colonisation, rendering them vulnerable to land-grabbing, including for carbon offset projects.

Alto Mayo carbon offset project in the Peruvian Amazon

Source:

- “Nowhere else to go: forest communities of Alto Mayo, Peru, at centre of offsetting row”, The Guardian, January 2023

This investigation looks into the Alto Mayo carbon offset project in the Peruvian Amazon, a project that reached results in stopping about 3,329 hectares of forest from disappearing until 2020 - although significantly less than claimed through carbon certifier Verra’s system - but has been linked to impacts on local communities. The project, a flagship from Disney and Conservation International, started in 2009 and generated around $45 million in carbon credits at the time of the investigation. It aimed at addressing deforestation in the area, driven by illegal logging and expanding agricultural demands in the lowlands.

The investigation finds that the project, which has been branded as a success story by proponents of carbon
markets, has been linked to a series of clearances between January and May 2021. It tells of the 50 homes destroyed by park guards and the police in the increasingly militarised area. This includes the example of Abel Carrasco, a local coffee farmer who was evicted from his home with his family, their house razed to the ground, or that of Ángela Carrasco and her disabled son traumatised by the demolition of their home by masked men armed with guns and axes.

Villagers in the area are mostly ronderos, members of autonomous peasant groups recognised by law. Many Alto Malto residents don’t have a formal right to live in the area despite having done so for decades.

First voluntary carbon market legal case in Colombia

Sources:

• “The Yurupari Jaguars’ territory divided by carbon credit project”, La Silla Vacilla, October 2022
• “Colombia: Constitutional Court will examine for the first time a conflict over carbon credits”, Mongabay, May 2023

These articles follow the unprecedented lawsuit filed by the Indigenous Council of Pirá Paraná, the first voluntary carbon market case that will be examined by the country’s highest court. The judicial appeal filed in 2022 and dismissed in first and second instances concerned the violation of fundamental rights to cultural integrity, self-determination, self-government and territory, by the proponents of the Baka Rokarire REDD+ project and the national authorities. The Indigenous Council argues that Masbosques, the NGO leading the project, did not seek to consult them, despite the Council being the highest authority of Pirá Paraná, and that the person who signed the contract on behalf of the Indigenous territories did not have the authority to do so following a change of leadership. The contract signed in 2021 for an initial period of 10 years by the previous leader of the Council has created divisions and tensions within the Indigenous communities of the area. As the story says, some have been convinced by the project due to the influx of resources it could bring to the community. The investigation tells of broader concerns about the impacts of such projects weakening ethnic governance of crucial ecosystems.

The project aims to achieve carbon savings amounting to 15.7 million tons of greenhouse gases in 30 years. It was certified by Cercabono and received credits for 1.3 million tons of greenhouse gases between 2018 and 2020. The legal challenge also brings into question flaws in the certification process including regarding its methodology and concerns of several conflicts of interest. The investigation reveals that the auditor for the project didn’t visit the communities in person, instead carrying out a remote meeting with eight leaders brought from the territory and flights over the project area. National authorities were also sued as part of the legal challenge for their failure to supervise the project. Finally, the investigation reveals conflicts of interest as the company that bought and possibly resold the first crop of bonds shares the same founding partners with the certifier Cercarbono.

In addition, the company that appears as a consultant in the formulation of the project design document (PDD) was also the financier of the project - allowing it to receive up to 40% of the resources generated by the sale of bonds, minus operating costs. The investigation shows that Delta Airlines ended up withdrawing 1.3 million credits, despite the project being developed by a non-profit environmental corporation to bring resources to Indigenous People.

REDD+ in Acre state, Brazil

Source:

• “Brazil: The Injustice of Carbon Markets”, We Belong to the Land, 2022

This story covers the REDD+ programme in the Brazilian state of Acre, which was introduced in 2012 by state authorities, donors, and big conservation groups, funded by the German development bank KfW, with the promise of combining better protection of forests with reduced greenhouse gas emissions, as well as income and other benefits for rural communities. The article shows however, that the programme has led to more land grabs, deforestation and extraction while destroying communities’ traditional livelihoods, farming and food systems, with Indigenous and rural women severely impacted.

It reveals that the project failed to guarantee the legal protection for communities’ tenure rights and systems, and that the promised financial benefits did not reach these communities and instead benefited external agents. Not only were the local communities not
involved in the design and management of the project, they were negatively impacted by it, seeing their livelihoods, self-determination and food sovereignty undermined and restricted. The loss of traditional ways of living and loss of forests particularly impacted women whose livelihoods are so intrinsically linked to the local ecosystems. The story stresses that the destruction of communities’ social fabric and their traditional ways of life has also led to distress migration to cities, bearing further disastrous impacts on women first and foremost.

A related earlier investigation found that four years after credits for the project began selling, deforestation significantly increased in the project area. It reveals that where 88% of the project area was covered in forest in 2008, only 46% of forests remained in 2017. One of the protected areas, Angdoung Bor, started out as 90% forest and is now 0% forest. At the time of the investigation Verra hadn’t received any update from the project it certified and said that the credits had already been used to ‘offset pollution’.

You can find more case studies here:

- “The Indigenous Reservation That Sold Carbon Credits Without the Knowledge of Its Inhabitants”, Pulitzer Center, June 2023
- “Two indigenous communities excluded from a carbon project in their territory”, Centro latinoamericano de investigación periodistica, March 2023
- “Major Brazil palm oil exporter accused of fraud, land-grabbing over Quilombola cemeteries”, Mongabay, December 2022
- “Offshore oil bonanza poses existential threat for coastal communities, Suriname”, Environmental Justice Atlas, December 2022
- “What the carbon credit contracts that divide the indigenous communities of Vaupés say”, Mongabay, August 2022

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North America

**Green Diamond offset project in Oregon, USA**

**Source:**

- “A giant Oregon wildfire shows the limits of carbon offsets in fighting climate change”, Oregon Public Radio, August 2023

This article looks into the Green Diamond carbon offset project in South Oregon, worth millions invested by companies such as Microsoft. It shows how wildfires, themselves a consequence of climate change, put into question the validity of carbon offsets as a tool to combat climate change. The story recounts the events of July 2021, when the Bootleg fire devastated over 400,000 acres, including across nearly 20% of the Green Diamond’s Klamath project lands. Analysis shows that because of the fire, 3.3 million metric tons of carbon dioxide were lost in the project area, either directly released into the atmosphere or now stored in dead trees that will eventually release it too. At the time of the investigation, Green Diamond had filed documents with a California state regulatory board to terminate the project, one of several carbon offset projects developed by the company.

**Michigan state’s Pigeon River County State Forest carbon offset project, USA**

**Source:**

- “Michigan carbon offsets: Success or scam?”, Great Lakes Echo, October 2022

This story looks into Michigan State-owned 100,000 acre Pigeon River County State Forest project, a carbon offset project, and brings into question its ‘additionality’ - ie. whether the claimed climate benefits would have happened with or without the project. It explains that Michigan’s Department of Natural Resources has assured that the project wouldn’t adversely affect forest management and timber harvest levels, and that no changes have so far incurred in these practices, raising questions about what additional carbon savings the project would claim to achieve. It further reveals that the carbon credits are being used to offset the emissions of Detroit-based DTE Energy who have paid nearly $18 million for all the credits generated in the first decade of the 40-year project.
California’s forest carbon offsets programme, USA

Source:

- “The Climate Solution Actually Adding Millions of Tons of CO₂ Into the Atmosphere”, ProPublica, April 2021

This article unpacks and relays the findings of a study from Carbon Plan, carrying out an evaluation of California’s forest carbon offsets programme. The study finds the over $2 billion worth programme is riddled with crediting errors, leading over 29% of the offsets analysed to be over-credited, totaling 30 million tonnes of CO₂ equivalent worth approximately $410 million. It points at the responsibility of the Air Resources Board, California’s top climate regulator who has since denied the claims of the study. To calculate the carbon savings by the projects it accepts, the Air Resources Board applies the following: after establishing the average amount of carbon per acre stored in a few forest types spanning large regions of the United States, it considers whether a given project or land contains more carbon that this regional average, based on a survey of the trees on the given site. If it does, and if the project commits to maintaining the forest’s high carbon storage for the next 100 years, then it is awarded carbon credits. The article brings into question the established baseline of these regional averages, as they cover such large areas that they can differ dramatically from the carbon stored on lands selected for projects. This leads to an overestimation of the carbon savings and therefore an over-crediting of the projects. It means that up to 39 million credits were awarded without any additionality, i.e. without real additional carbon savings achieved.

See the following related stories:

- “Burned trees and billions in cash: How a California climate programme lets companies keep polluting”, Los Angeles Times, September 2021

Using the findings of the aforementioned study, this article looks at the case of Eddie Ranch, a large property that had applied to California’s carbon offset programme when it got devastated by wildfires in the summer of 2018. It reveals that months after the fire rendered the credits from Eddie Ranch useless, the state of California nevertheless allowed for the selling of these credits, on the basis of the state of the ranch before the fire. At the time of the story, California had to backfill the worthless offsets by making a large withdrawal from a state carbon credit insurance fund called the ‘buffer pool’. This raises economic risks posed by this ‘buffer pool’, as the fund could find itself in a state of insolvency as climate change worsens and impacts such as wildfires are bound to increase and damage land and forests covered by carbon offset projects. The story also recounts the impacts on communities from polluting activities of refineries who are dodging mitigation measures by buying offsets through the programme. As highlighted, pollution from such activities impacting local communities isn’t addressed by the hundreds of millions these companies spent on offsets.

- “A nonprofit promised to preserve wildlife. Then it made millions claiming it could cut down trees”, MIT Technology Review, May 2021

This article brings into question the ‘additionality’ of a $6 million-worth carbon offsetting project by the non-profit Massachusetts Audubon Society. In 2015, Mass Audubon applied to California’s forest offset programme, declaring it could heavily log 9,700 acres of forests in west Massachusetts it had until now preserved. The Air Resources Board accepted the project and granted it 600,000 credits. The article brings into question whether Mass Audubon had ever any intention of logging the forests it had long preserved. It brings into question the Air Resources Board’s methodology, the core of the aforementioned study’s findings of overcrediting.
Soil carbon and farming offsets

Across the world soil has been left depleted by decades of extractive industrial farming, with carbon emissions soaring as a result. For the industry, this has opened the door to more profits by trading ‘soil carbon farming’ offsets. Far from achieving the promised climate benefits, these projects have enabled agribusinesses to reinforce their market dominance and control, taking us further away from the people-centred food sovereignty and agroecological solutions we desperately need.

For more details, see Friends of the Earth International’s factsheet: Nature Based Solutions: The risks of soil carbon markets (2023).
This research puts into question the credibility of the Northern Kenya Grassland Carbon Project (NKCP), owned by the Northern Rangelands Trust (NRT), and its impacts on the Indigenous Samburu, Maasai, Borana, and Rendille pastoralist people, upon whose land the project is set. The project, which covers half of the four million hectares now included within NRT’s grouping of ‘Conservancies’, is claimed to be “the world’s largest soil carbon removal project to date and the first project generating carbon credits reliant on modified livestock grazing practices”.

The project, which started in January 2013, replaces traditional grazing patterns set by Indigenous elders according to rainfall and other criteria, with ‘planned rotational grazing’ claimed to allow vegetation in the area to (re)grow more prolifically. That way, the project allegedly generates around 41 million net tonnes of carbon credits for sale over a 30-year project period (value around US$300–500 million at least). The project is also certified by Verra, selling carbon credits to giants like Netflix and Meta, and is described by the European Commission as the model on which it intends to base a forthcoming large funding programme for conservation projects in Africa ‘NaturAfrica’.

The report by Survival international highlights several findings:

The project relies on major changes to Indigenous people’s traditional livelihoods in the area, turning their ancestral grazing patterns into centrally-controlled systems more akin to commercial ranching, therefore endangering their livelihoods and food security.

The carbon credits are generated based on the assumption that these Indigenous grazing patterns were causing degradation of soils that the project remedies - an assumption not supported by any empirical evidence. It is neither proven that the traditional grazing methods were actually degrading the soils (the baseline supporting the project), that the proposed ‘planned rotational grazing’ would be more beneficial for soil carbon accumulation, or that it is actually occurring in most of the areas of the project. In fact, the findings of the report seem to indicate that the project’s method might be depleting the soils more, as vegetation has declined since it started. There is unconvincing evidence of proper consultations being carried out by NRT that would have resulted in anything close to Free, Prior, and Informed Consent from the local Indigenous communities, as well as an absence of grievance mechanisms. There are also major issues with carbon ‘leakage’ from the project, particularly in the form of livestock moving off-project.

Overall, the project is fundamentally unable to monitor key aspects of the purported implementation of ‘planned rotational grazing’. Some of the calculations used to estimate the project’s claimed additional storage of carbon are based on monitoring information that is entirely unfit for the purpose, and includes large margins for error and inaccuracy.

The permanence of the project is in itself called into question, as the data points to long-term climate-related changes in weather patterns that will result in declines in vegetation and soil carbon storage. The very legal basis of the project is also questioned as there is no evidence that NRT has complied with various legal requirements to implement the project. There are also important concerns regarding the distribution of benefits.

This follow up article states that the project is now under quality control and review by Verra and therefore has suspended its issue of credits. Waso Paralegal Network, an Indigenous community rights organisation, has also now undertaken legal action against the establishment of conservancies by NRT, claiming that the community wasn’t involved through seeking free, fair and informed consent as per Kenyan law. The article shows there is division among the local communities, with some supporting the project and claiming they have in turn been supported by it, whilst others continue to oppose it.
Asia Pacific

Shell’s rice farming offset projects in China

Source:

• “Revealed: How Shell cashed in on dubious carbon offsets from Chinese rice paddies”, Climate Home News, March 2023

This investigation looks into Shell’s rice farming offset projects in China, acting as a ‘carbon credits broker’ in at least nine projects – meaning the company can either claim the credits against its own emissions or transfer them to other companies, potentially profiting from their sale.

Under the Clean Development Mechanism (CDM), rules were introduced to encourage small scale farmers to adopt more sustainable practices in farming rice – including intermittent flooding of the paddies to reduce methane emissions. The rules were made easier for small-scale farmers (any project which cuts less than 60 kilo tonnes of carbon dioxide equivalent every year) to encourage them to adopt these practices. What this story uncovers is that the Shell projects seem to have applied methodology in a way that would enable them to be counted as small-scale, and therefore benefit from the easier regulations. It explains that Shell’s projects were all submitted at the same time, and very narrowly qualify as ‘small-scale’. Further, the projects are geographically extremely close together, and if merged into one, would stretch for over 200 kilometres and sum emissions reductions of over 500 kilo tonnes of CO₂ per year, rendering them ineligible to be registered as carbon offsets. According to this article, these facts could indicate that “the projects’ proponent may have artificially divided up fields across several projects to obtain the ‘small-scale’ status.”

A key element of the qualification as small-scale or not is that projects that qualify as such under the CDM are allowed more flexibility in meeting the ‘additionality’ criteria, a crucial element of the credibility of such offsets. The additionality is further brought into question in the investigation as it shows that around 41% of rice paddies in China were already being irrigated using an alternative wetting and drying method when the offsetting projects first started, with national plans to further such techniques.

African Agriculture Inc. in Niger

Source:

• Purchasing land in Niger for carbon credits: the new form of greenwashing sweeping Africa, GRAIN, November 2022

This investigation looks into the purchase of land and implementation of related carbon projects in Niger. It says that at the end of 2022, US-based company African Agriculture Inc. signed a series of agreements granting it access to over two million hectares of land in Niger for the production and sale of carbon credits in the form of carbon farming projects.

At the end of 2021, African Agriculture Inc. signed agreements with two municipalities in the Agadez region, granting the company a 50-year lease with access rights to groundwater and exclusive rights to a total of two million hectares for the production of carbon credits (by planting Aleppo pine trees). In May 2022, at the COP15 of the UN Convention to Combat Desertification (UNCCD), the General Directorate of Water and Forests of the Ministry of the Environment of Niger signed an agreement to make 624,568 hectares of land available to the same company for the same purpose: reforestation for the production and sale of carbon credits.

A collective of civil society organisations in Agadez has expressed its firm opposition to this land grab and called for this project to be fully scrapped.
At the time of the investigation, more than 450,000 credits issued by Shell’s rice farming projects had been purchased (including by state-owned PetroChina, and possibly amounting to $2.7 million of profits for Shell) and used to compensate for emissions between June 2022 and January 2023, according to carbon certifier Verra’s registry. Verra had also initiated a review of the projects after identifying a series of concerns with how rules were applied, and put those on hold under the review completed.

**Yara’s Boomitra programme in India**

Source:
- Double Jeopardy - The rising threat to food sovereignty and agroecology from false climate solutions, Friends of the Earth International, November 2022

This report highlights the example of fertiliser company Yara, who in May 2021 launched the Agoro Carbon Alliance (ACA) as a way to generate carbon credits through creating what it calls a “Farm Carbon Credit value chain”. Yara, together with a subsidiary of Chevron, has invested US$4 million in the Boomitra programme, enrolling farmers in India in soil carbon farming. This cedes control over their practices from the farmers to the company for 10 years, with farmers having to follow practices set up by Yara, including planting cover crops, doing less or no-tillage, or adjustments in nitrogen fertiliser use. The report also highlights that Yara relies on remote verification technology only to calculate soil carbon uptake from the project and subsequently the volume of credits, but omitting to account for methane emissions.

**Microsoft in Australia**

Source:
- “US scheme used by Australian farmers reveals the dangers of trading soil carbon to tackle climate change”, The Conversation, June 2021

This article looks into a soil carbon deal struck between an Australian farm and Microsoft. It finds that the methodology used - from US-based carbon offset platform Regen Network who sold the credits - led to an overly optimistic calculation of increases in soil carbon from the project. Among the concerns surrounding the methodology, the article raises the absence of field sampling and reliance on equations and satellite imagery for assessing bulk density in the soil or vegetation cover. It also raises questions around the estimated carbon sequestration from changes in grazing and pasture management the project is based upon, considering the estimations largely inflated.

**Europe**

See story developed in the previous section on Scottish peatland restoration offset projects.

Because the Initiative first struggled to meet the demand for such credits, the government then decided to lower standards for carbon credits, including dropping the obligation on carbon farming projects to ensure a permanence period from 100 years to 25 years. In the last few years, with the price of carbon credits rising, new legislation had to be introduced to address land grabs across Australia as companies rushed to buy farmland for carbon farming projects. The story also highlights concerns regarding the large amounts of carbon credits generated from such carbon offset projects that cannot guarantee permanence.
North America

Bayer, Cargill and Corteva’s soil carbon farming programmes

Source:
• *Agricultural Carbon Markets, Payments, and Data: Big Ag’s Latest Power Grab*, Friends of the Earth US, March 2023

This report looks into soil carbon farming programmes launched by big agricultural corporations. These programmes allow agribusinesses to collect more detailed agronomic data and drive new users to their digital agriculture platforms and products, as well as locking farmers into set practices that enable the corporations to define climate-smart farming and favour their products in the process. This then leads to increased use of chemicals tied to biodiversity collapse and human health concerns, and may also come at the cost of building healthy soils that can sequester carbon and provide a number of other ecosystem benefits in the long term. The report also highlights that the isolated practices promoted by such programmes are far less beneficial to the climate than agroecological management and agroforestry, and further marginalise smaller, more diversified, and more sustainable farms.

Bayer’s Carbon Programme (page 9)

Source:
• See also “Following $10 billion Roundup settlement, Bayer uses climate programme as front to lock in control of farmer data and sell more Roundup”, Friends of the Earth US, August 2020 (behind paywall)

Bayer is a strong proponent of implementing no-till agriculture and using cover crops. These two practices form the foundation of its Carbon Initiative. Perhaps most concerning about this model from an environmental perspective is the heavy use of glyphosate, the main ingredient in Roundup™, to make these practices work for industrial monocultures, which harms fungi, earthworms, and other invertebrates that are essential to a healthy soil ecosystem.

In 2020, Bayer launched a carbon market programme through digital agriculture platform Climate FieldView, now called ForGround. The programme, available in 17 states, offers financial rewards to farmers for every acre on which they adopt carbon sequestering practices. Under the programme, farmers are bound to a set of practices defined by Bayer for 10 years with an additional 10-year retention period after the contract ends. The story also relates that Bayer hasn’t been able to provide clarity on where the money to pay for its carbon programme will come from, with the possibility that Bayer may hold on to the credits generated by farmers to make bigger profits which would raise concerns about the fairness of what the farmers receive.

Cargill’s Carbon Programme (page 10)

Cargill’s carbon programme “RegenConnect”, which is available in 15 states, operates through a partnership with Regrow, a data analytics and soil modelling company. Under the programme, farmers are bound to practices prescribed by Regrow, including cover cropping, reducing fertiliser use, or no-till. Farm-level data are then uploaded throughout the programme and supplemented by data collected through a satellite system. From this, Regrow calculates carbon sequestration via an algorithm that simulates soil microbial processes. The data that is collected by the platform also includes personal data on the farmers, including directly through third parties, which it can then retain and use irrevocably.

Corteva’s Carbon Initiative with Indigo Ag (page 11)

In 2021, Corteva entered a partnership with Indigo, a corporation that runs one of the top platforms for measuring agricultural carbon sequestration and marketing carbon offsets to corporate buyers. The data collected from farmers by Corteva is shared with Indigo, who then quantifies the carbon sequestrations to sell credits to their buyers network that includes companies like The North Face, Barclays, Shopify and Fat Tire Brewing. The programme is available in 28 states and farmers who enrol sign a five-year contract and share three to five years of historical farm data.
Improved cookstove offsets

Improved cookstove offset projects have also been proliferating, claiming benefits to the climate by preserving forests. The assumption is that improved cookstoves should be more efficient and consume less fuel, leading to smaller rates of firewood harvesting in project areas. However, the calculations they are often based on lead to inflated baselines and over-crediting, as well as failing to achieve the claimed benefits to local communities.
most cookstove offset projects follow the rules of the Clean Development Mechanism (CDM), and the study estimates that they generate on average eight times more credits than they should. It has since invested heavily in improved cookstove projects, setting up a manufacturing plant with the aim of producing up to five million credits every year, and giving a new lease of life to thousands of junk credits from old improved cookstove projects. The story says that, despite strong criticisms of such projects based on flawed accounting, since 2021 Enking has helped transfer such projects onto the Verra registry, leading to nearly 1.2 million credits finding their way onto the market to be bought off by big polluters (eg. Shell bought over 98,000 of these credits in a single day).

The story reveals that credits generated through these projects by Enking applied the controversial CDM methodology and claimed abnormally high levels of deforestation caused by firewood harvesting as well as unrealistic rates of usage. This would lead the credits to be calculated from inflated baselines, and therefore more credits than due to be generated. In the case of cookstove credits, the calculations rely heavily on modelling based on several different parameters, which are subject to uncertainty and at risk of manipulation. The fraction of non-renewable biomass (fNRB) - which is the percentage of wood assumed to be lost for good when trees are cut down for fuel - can especially lead to such inflated baselines. The story explains that one of the Enking projects declared a fNRB value of 87.9% - meaning it projected that most of the harvested wood would not grow back - when in fact this number is most likely to be roughly 24.2%. In addition, it relates additional concerns about the credibility of the projects regarding lack of robust monitoring and possible survey inflation by the project developer.

The article explores the example of cookstove offsets in Machutar, a village in India where communities - like many others across the world - were given so-called improved cookstoves under a carbon offset project generating carbon credits along the way. It reveals the findings of a study that lax rules, overinflated estimates and poor monitoring have likely created a flood of poor quality offsets linked to the cooking devices, and analyses projects from Indian firm Enking, a leader in the sector.
Friends of the Earth groups around the world

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