DECADE ZERO

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CLIMATE JUSTICE
& ENERGY

OCTOBER | 2016

DEMANDING RAPID AND BOLD ACTION
To address the root causes of climate change

mobilise resist transform

DECADE ZERO

friends of the earth international
OCTOBER | 2016

FRIENDS OF THE EARTH INTERNATIONAL IS THE WORLD'S LARGEST GRASSROOTS ENVIRONMENTAL NETWORK WITH 75 MEMBER GROUPS AND OVER TWO MILLION 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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Design: www.onehemisphere.se **Cover image:** Friends of the Earth International joins other civil society and movements to participate in the Occupy Speakers Corner in Durban, opposite the venue for of the UN climate talks, in December 2011. **© Luka Tomac.**

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Mobilize resist transform

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Friends of the Earth International

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Above: Jatropha farmer Bittal Tarak of Sunderkera village, Raipur district, India.
© Alok Shukla

Left: A natural gas well burns off gas before capping the well for production, Texas, USA.
© S. Drawe / Dreamstime

EXECUTIVE SUMMARY

Humanity has entered 'Decade Zero' – the last few years in which we can still tackle dangerous climate change if we take the necessary drastic action now. The climate science is unequivocal and truly terrifying. Climate impacts are already devastating lives and livelihoods, as average global temperatures rise above one degree Celsius. For the sake of the planet and its people, greenhouse gas emissions must plummet in terrifyingly tiny timescales, but we must not lose sight of the need for equity and justice. It is tempting to dispense with or overlook fairness when the urgency is so compelling. But we must resist – many millions of people live without sufficient energy, while others have been enriched by using far more than their fair share of energy and the global carbon budget. Those who have contributed the most to the problem must act first and cut their emissions the fastest and most radically.

In this paper, Friends of the Earth International outlines the current climate science and the need for equity, fairness and justice in how we take action. We highlight how people are impacted by climate change, by dirty energy and by so-called false solutions which pretend to address the climate crisis. We identify key problems with the dirty energy system, with corporate power, and with false solutions such as carbon markets, Reducing Emissions from Deforestation and forest Degradation (REDD), industrial agriculture and new spectres such as 'negative emissions' that will only wreak more havoc.

But we believe there is hope. We must continue to build a movement of people who will fight dirty energy, climate change and false solutions. As we come together and mobilise we can overcome corporate power and truly start to change the underlying economic system.

We can address the climate challenge: but only if we take rapid and bold action to address the root causes of climate change, including by transforming current unsustainable and unjust approaches to production and consumption, and undemocratic decision making structures.

Feasible and equitable solutions already exist. They include:

- Universal access to clean, democratically controlled and community owned energy.
- A just and climate friendly food system that's based on the principles of agroecology.
- Community management of our natural systems and forests and an end to deforestation.
- Sustainable societies where everyone has access to the resources they need to live a life of dignity, and where wealth and resources are not concentrated in the hands of few.
- An end to neoliberalism, replacing unsustainable overconsumption by corporations and global elites with an economic system that is equitable and accountable to people, not corporations.

Above: Deforestation, a leading cause of climate change in the Peruvian Amazon.
© Tano Pasino, pandetano@yahoo.com

Left:Solar kitchen demonstration, India.
© Kailash Mittal

CLIMATE SCIENCE, THE GLOBAL CARBON BUDGET AND FAIRSHARES

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Members of Rural Women's Farmers Association of Ghana (RUWFAG) preparing a field for sowing - Near Lawra, Ghana. **© Global Justice Now / flickr**

The 2014 IPCC AR5 Synthesis Report explains current scientific knowledge about climate change clearly and comprehensively. Since then numerous other studies have supported the IPCC's report, reinforcing the need urgent for immediate, effective and far-reaching action if we are to have any chance of stopping irreversible global warming.

According to the National Oceanic and Atmospheric Administration (NOAA) carbon dioxide (CO_2) levels will not drop below the symbolic 400 parts per million (ppm) mark in our lifetimes—so we are facing the highest concentration of CO_2 since the Pliocene era three million years ago.[1] According to former senior NASA Scientist James Hansen, in 2016 average global temperature rise is likely to be 1.25°C above preindustrial levels.[2] Global temperatures have already reached more than 1°C warmer than pre-industrial levels,[3] and millions of people and many ecosystems are already experiencing devastating impacts.[4]

Exceeding a global average increase of 1.5°C is critical because we risk crossing irreversible tipping points if we do so, with unacceptable impacts for billions of people. This is especially the case in regions such as Africa, for example an average global increase of 2°C is expected to translate into a devastating local increase of up to 4°C in South Africa.[5]

We need to take action immediately if we are to protect our planet and environment, and ensure the right of all citizens to a safe and dignified life. The next five to ten years will be critical in preventing the most dangerous effects of climate change.[6] Some scientists have coined this 'Decade Zero'—because decisions made in this decade will shape the future of our planet and humanity.

FOOTNOTES:

1 http://www.noaa.gov/stories/carbon-dioxide-levels-race-past-troubling-milestone
2 https://www.theguardian.com/environment/2016/oct/03/global-temperature-climate-change-highest-115000-years
3 http://www.climatecodered.org/2015/08/as-2015-smashes-temperature-records-its.html
Annual state of the Climate Report for 2015 now published.
http://www.metoffice.gov.uk/research/news/2016/state-of-the-climate-2015
4 For more detail see: Blunden, J. and D. S. Arndt, Eds., 2016: State of the Climate in 2015. Bull. Amer. Meteor. Soc., 97 (8), S1–S275, DOI:10.1175/2016BAMSStateoftheClimate.1, http://ametsoc.net/sotc/Chapter_00.pdf
5 DEA (2015). South Africa's Intended Nationally Determined Contribution, Discussion document, Department of Environmental Affairs, 1 August 2015, https://www.environment.gov.za/sites/default/files/docs/sanational_determinedcontribution.pdf

CLIMATE SCIENCE, THE GLOBAL CARBON BUDGET AND FAIRSHARES CONTINUED

Friends of the Earth International continues to demand that governments ensure that global average temperatures stay well below 1.5°C warming, since anything above this will be catastrophic. At the same time, we understand that no temperature rise is safe or justifiable, since lives are already being affected and lost due to climate change. We also recognise that seeking to keep below a temperature goal is fraught with uncertainties: we may strive for a particular target, but the climate system is complex and may not behave as predicted. Governments' immediate focus must be on drastic emissions reductions.

Even if temperature increases are limited to the safest levels possible there will still be considerable adaptation and survival costs, as well as costs associated with loss and damage. These costs need to be met with in accordance with the climate debt principle: the rich industrialised countries that are responsible for these climate debts need to provide financial and other support to developing countries, to compensate for damage already done, and to help them adapt to the coming challenges and to work towards a life of dignity for their people.

However, even though governments now acknowledge that climate change is a real and present danger, proposals for effective collective action remain elusive. The current pledges contained in the 2015 Paris Agreement (*if* actually implemented) will lead to a warming of at least 3.4°C.[7] In addition the inclusion of 'net zero' language looks set to legitimise decades more fossil fuel extraction and resource grabbing from southern communities.

If we wish to try and keep overall increases beneath 1.5°C or even 2°C—which is absolutely crucial for humanity—then we can only emit a finite amount of greenhouse gases from here on in— an amount known as the remaining 'global carbon budget'. Recent calculations updating IPCC estimates indicate that for a two-in-three (66%) chance of coming in under 1.5˚C, the global emissions budget from 2016 is tiny - around 205Gt of carbon dioxide ($GtCO_2$). For a 50% chance of staying below 1.5˚C, the carbon budget rises to $354GtCO_2$ from 2016. For a 50% chance of staying below 2°C, the remaining carbon budget from 2015 is 1,104Gt.[8]

The science indicates that there is effectively almost no budget left to divide, hence the need for drastic emissions reductions is very urgent.

A commitment to keep at least within this limited carbon budget, and to share the effort of doing so equitably and fairly, is at the heart of what Friends of the Earth International has been demanding in the international debate around climate change.

The remaining carbon budget should be divided according to each country's 'Fairshare'. Climate Fairshares are calculated based on the principles of:

- **Responsibility.** Countries who have put the greatest pressure on the climate system historically must make the biggest and binding commitments to address their historical and current carbon pollution, cutting their own emissions and meeting their climate debts.
- **Capacity.** Countries with greater financial, technological and institutional capacity must take on a greater level of binding commitments to ensure that the climate crisis is addressed effectively.
- **Right to sustainable societies.** The needs and interests of the poorest and most vulnerable, and of future generations must be taken into account.

The world's richest, developed countries are most responsible for climate change. Just 10% of the world's population are responsible for 50% emissions, whilst the poorest 50% are responsible for only 10%.[9] The rich 10% have taken up much more than their fair share of atmospheric space, meaning that they must urgently make the deepest emissions cuts and completely transform their economies and societies. They bear the legal, moral and political obligations to do this first. In addition, developed countries have an already agreed responsibility to provide financial and technological resources and capacity-building to developing countries, which will enable those countries to move away from dirty and harmful energy towards peoples' real solutions.

Because of their historical responsibility for climate change, they must also provide finance for adaptation and loss and damage. This must be done without using carbon markets or offsetting emissions reductions, which are time-wasting and dangerous false solutions. Furthermore, developed countries must not impose patents or intellectual property rights on developing countries that prevent their access to needed technologies.

However, southern governments have an obligation to strive for a life of dignity for their own people. They cannot wait on northern payment of the climate debt to start acting themselves. Not acting consigns millions to death, starting with the poorest. Already, pollution from fossil fuel extraction and dirty energy harms millions of people, making them more vulnerable to climate change. In addition, people's capacity to adapt is being compromised by the destruction of local environments and the pollution of water catchments. Southern countries need to avoid the dirty energy development pathway, to protect their people now and in the future.

FOOTNOTES:

6 Carbon brief suggest 5 years for high chance of 1.5c and 10 years for average chance

7 https://www.climateinteractive.org/project-news/press-release-offers-for-paris-climate-talks-would-reduce-warming-by-1c/ and https://www.climateinteractive.org/wp-content/uploads/2013/12/INDC-Scoreboard-28Sept-2015.pdf

8 This is based on calculations by Carbon Brief from May 2016: 'The IPCC's synthesis report presented the total carbon budget from the beginning of the industrial revolution and said what was remaining, as of the beginning of 2011. Using data from the Global Carbon Project, Carbon Brief has brought these budgets up to date... As of the beginning of 2011, the carbon budget for a 66% chance of staying below 1.5C was 400bn tonnes. Emissions between 2011 and 2015 mean this has almost halved to 205bn tonnes. The result is that, as of the beginning of 2016, five years and two months of current CO_2 emissions would use up the 1.5C budget.' From Carbon Brief, 'Analysis: Only five years left before 1.5C carbon budget is blown', May 19 2016, http://www.carbonbrief.org/analysis-only-five-years-left-before-one-point-five-c-budget-is-blown (accessed 20 June 2016). Note that the IPCC's earlier carbon budget from 2011 is higher; for a 50% chance of staying below 1.5˚C, the global emissions budget is about 600 billion tonnes of carbon dioxide (Gt CO_2) from 2011 onwards. The same budget gives a two-in-three (66%) chance of coming in under 2˚C. Figures from: International Panel on Climate Change, Fifth Assessment Report, Working Group 3, (IPCC AR5, WG3), Summary for policy makers, Table SPM1, p.13.

9 https://www.theguardian.com/environment/2015/dec/02/worlds-richest-10-produce-half-of-global-carbon-emissions-says-oxfam; https://www.oxfam.org/en/research/extreme-carbon-inequality

JUSTICE FOR IMPACTED PEOPLES

02

Flooding in Kolkata, India.
© Partha Pal

CLIMATE IMPACTS

We are facing a planetary emergency. Climate change is already happening—floods, storms, droughts, failing agriculture and rising seas are wreaking devastation on communities and ecosystems globally. Peoples around the world are paying the cost of our governments' continued inaction with their livelihoods and lives. Climate change hits the poorest and most vulnerable people (especially women and children) the hardest, even though they didn't create this crisis in the first place.

The risk of irreversible climate change draws ever closer, with impacts that would dramatically overshadow anything we see today. Exceeding climate 'tipping points' (the point of no return, when some climatic changes themselves lead to further climate change for example when ocean heating leads to ice melt which increases the heat absorption leading to more and more ice melt)[10] will mean greater hunger, drought, floods, and weather extremes, as well as mass extinctions and the forced migration of millions of people. In some places adaptation to climate change is now impossible including islands such as Kiribati[11] and Tuvalu[12] which are being overwhelmed by rising seas, and there is a need to compensate people for the irreparable loss and damage they have suffered.

The International Organisation on Migration predicts that the number of people that will be displaced by climate change globally could reach 250 million by 2050.[13] Most of these will migrate within their country or to neighbouring poor countries, but others will be seeking refuge elsewhere. Rich countries are already closing their borders to those in need. It is essential that these countries acknowledge their responsibility for this coming mass migration, taking immediate measures to mitigate climate change and ensuring that impacted peoples receive protection and support for adaptation, both now and in the future.

FOOTNOTES:

10 http://climate.ncsu.edu/edu/k12/.albedo
11 http://www.climatechangenews.com/2016/02/18/kiribati-president-climate-induced-migration-is-5-years-away/
12 https://germanwatch.org/download/klak/fb-tuv-e.pdf
13 International Organisation for Migration (2009)

JUSTICE FOR IMPACTED PEOPLES CONTINUED

DIRTY ENERGY IMPACTS

It is not just the impacts of climate change that are destroying lives and livelihoods—the dirty energy system that underpins climate change is itself causing immense harm to people and their local environments. From air and water pollution causing serious health impacts, through to massive land grabbing for new dirty energy mines, plants and infrastructure, it generates vast and negative consequences for people around the world. Yet when local communities and environmental defenders oppose dirty energy infrastructure they often face repression and violence.[14]

FALSE SOLUTIONS IMPACTS

False solutions that claim to address the climate crisis, such as carbon capture and storage (CCS), 'Reducing Emissions from Deforestation and forest Degradation' (REDD), genetically modified organisms, carbon trading and offsetting can have terrible impacts on local communities. In addition to failing to address the climate crisis and delaying the implementation of real solutions,[15] the use of these false solutions frequently leads to Human Rights and environmental rights violations. For instance, land grabs associated with offsetting projects tied to REDD, plantations and agrofuels are linked to such violations in many countries.[16] This particularly impacts Indigenous Peoples, and often disproportionately affects women.

Friends of the Earth International is seeking to prevent impacts from climate change, dirty energy and false solutions, and to ensure redress for violations where impacts are already occurring.

Above: The people of the Carteret Islands of the South Pacific will soon be evacuated due to rising sea levels.
© Pip Starr

Left: Palm oil nursery in the illegal Golden Youth Plantation in Ketapang district, West Kalimantan, Indonesia.
© FoE / Anouk van Baalen

FOOTNOTES:

14 http://gebe.foei.org/good-energy-bad-energy/destructive-energy-sources/ and http://www.foei.org/wp-content/uploads/2014/06/We-defend-the-environment-we-defend-human-rights.pdf
15 http://www.foeeurope.org/2030-false-solutions
16 For example, see https://www.theguardian.com/environment/earth-insight/2014/jul/03/world-bank-un-redd-genocide-land-carbon-grab-sengwer-kenya

TACKLING THE PROBLEM

03

Suncor Millennium mine north of Fort McMurray, Alberta, Canada. The Alberta Tar Sands are the largest deposits of their kind in the world and their production is the single largest contributor to Canada's greenhouse gas emissions.
© Jiri Rezac / WWF UK

FIGHTING DIRTY ENERGY

We cannot shy away from the scale of the problems that need to be addressed. A 1.5°C threshold literally demands a transformation of planetary proportions. But that transformation is not beyond us. In fact there are solutions waiting to be implemented. In addition, tackling the issue head on presents us with an extraordinary opportunity to address global inequality, deliver energy access and change our unfair economic system, with many additional benefits for people and our environment.

Our current energy system – the way we produce, distribute and consume energy – is unsustainable, unjust and is harming communities, workers, the environment and the climate. We live in a world of unacceptable and growing inequality where nearly 1.2 billion people – or a fifth of the world's population – lack access to electricity and all the development benefits that energy access brings. And over 2 billion people lack access to clean cooking fuels.[17] This is fundamentally an issue of power: of corporate and elite power and interests outweighing the power of ordinary citizens and communities.

Friends of the Earth International takes a holistic approach to fighting dirty energy—we include coal, oil, gas, nuclear power, industrial agrofuels and biomass, mega hydroelectric dams, and waste-to-energy incineration in our definition of dirty energy. These destructive energy sources are driving climate change and many social and environmental problems and conflicts, including: land grabbing, deforestation and the destruction of ecosystems; human rights abuses; pollution, health problems and premature deaths; unsafe, insecure jobs; and the rupture and collapse of local economies.

We need to stop new destructive energy projects before they are built, and to phase out existing destructive energy sources. This will entail tackling the trade and investment rules that have prioritised corporations' needs over those of people and the environment, promoting and locking in dirty energy sector interests. A just transition is essential: these crucial changes will also need to happen in a way that ensures that the rights of affected communities and workers are respected and that their needs are provided for.

We will fight to stop specific dirty energy projects from going ahead, and to end existing dirty energy projects, as important steps along the path to fundamentally challenging and transforming our current broken energy system.

FOOTNOTE:

17 *World Energy Outlook 2014* (2014), International Energy Agency, www.worldenergyoutlook.org/publications/weo-2014

TACKLING THE PROBLEM CONTINUED

FIGHTING CORPORATE POWER

The root cause of the climate and energy crisis, and of rampant inequality, is our broken economic system that allows corporations to wield excessive power, in pursuit of infinite profit.

Transforming our energy systems means looking at the root causes that allow corporate polluters to dominate energy production, distribution and consumption patterns. The current neoliberal economic globalisation is failing people and the planet, working against the system change that we seek to achieve. Neoliberal economic policies have been increasing inequalities over the last decades, while greatly depleting the environment of natural resources, promoting a dangerous extractive approach that has led to the climate emergency we face.

Friends of the Earth International believes that true climate justice is closely linked to challenging the current neoliberal economic model through which corporations hold excessive influence over policy-making. This influence happens at local through to global level and impacts policies affecting our environment, the management of common goods, and how decisions that matter to the lives of every individual are taken. Across the board, corporations take advantage of a lack of regulation on many levels to keep maximising their profits while extracting more and more fossil fuels, strip-mining minerals, clearing forests, or promoting ever more mega infrastructure projects such as dams - all of which are unsustainable and bringing us ever closer to reaching ecological limits.

Excessive corporate influence happens in numerous ways: from unregulated lobbying to privileged access to decision-makers and sometimes the capture of processes through conflicts of interest, revolving doors or public-private partnerships used for greenwashing purposes. In many areas, this has allowed powerful companies and corporate lobby groups to block effective solutions for global problems related to climate change, food production, poverty, water or deforestation – and in particular the emergence of binding regulations on those areas at the international level.[18]

At the international level, so far there have been virtually no obligations placed on companies and investors in relation to the respect of the environment they operate in and essential rights of the surrounding communities - from Human Rights to political, cultural and economic rights. Companies such as Shell,[19] BP,[20] or Vale[21] to mention just a few, which have been pursued through the courts or found guilty of environmental crimes or Human Rights violations as a result of their operations still escape accountability.[22] The September 2016 announcement that the International Criminal Court intends to widen its focus to crimes linked to environmental destruction, the illegal exploitation of natural resources and unlawful dispossession of land is a step in the right direction.[23] However more needs to be done to keep companies guilty of environmental crimes and human rights violations fully accountable and give victims access to justice.

To date, communities and individual victims of their abuses have nowhere to turn to in order to seek justice, as there are no international binding rules on businesses' conduct in their operations abroad in relation to their impacts on the environment and Human Rights - a long-time demand from Friends of the Earth International. This has allowed a company like Shell to escape clearing up the pollution that their operations have caused in the Niger Delta for decades through gas flaring or oil spills, or a company like Vale to displace communities of farmers in Mozambique and Brazil to operate dangerous mining projects in all impunity.

Meanwhile businesses continue to benefit from the total imbalance in the international legal order, whereby trade and investment rules allow them to put pressure on governments that are keen on regulating in the public interest and defend essential rights for communities and the environment. Foreign investors in the energy sector have been keen users of the investor-state dispute settlement (ISDS) mechanism to scare host governments away from democratically agreed regulation in the public interest, when these run against their profits. Famous examples include Swedish energy company Vattenfall demanding over 4.7 billion euros from Germany in a private tribunal following the democratically agreed phase-out of dangerous nuclear power.[24]

A people-centred energy revolution is an essential part of the struggle against the corporate economic system which exploits people and planet for profit. It is also key to solving the climate change crisis: without fighting the economic system as a whole the energy revolution will be impossible.

Pumping machines in an oil field.
© G. Blomberg / Dreamstime

FOOTNOTES:

18 For more information see: https://corporateeurope.org/
19 https://www.theguardian.com/global-development/2015/dec/18/dutch-appeals-court-shell-oil-spills-nigeria
20 https://www.ft.com/content/33780c30-6b7a-11e5-aca9-d87542bf8673
21 http://saladeimprensa.vale.com/en/Paginas/Articles.aspx?r=Vale_informs_about_public_civil_action&s=Mining&rID=959&sID=6)
22 http://www.foei.org/wp-content/uploads/2016/10/UN-Treaty-TNCs-submission-English.pdf
23 https://www.theguardian.com/global/2016/sep/15/hague-court-widens-remit-to-include-environ mental-destruction-cases; https://www.icc-cpi.int/itemsDocuments/20160915_OTP-Policy_Case-Selection_Eng.pdf (EN)
24 For more information about Vattenfall AB and others v. Federal Republic of Germany (ICSID Case No. ARB/12/12), see http://isds.bilaterals.org/?vattenfall-ab-and-others-v-federal&lang=en

03

FALSE SOLUTIONS

Governments, backed by corporations, have been constantly sprouting a range of false solutions to climate change. The intention is to be seen to be managing the climate crisis whilst not compromising profits, power structures, or the economic system that got us here in the first place—even if that risks exacerbating the problem in reality. These false solutions aim to engage the private sector in the climate change debate by creating profitable business opportunities, rather than regulating and providing public finance to address the real drivers of climate change.

Friends of the Earth International rejects all false solutions to climate change including carbon capture and storage (CCS), 'Reducing Emissions from Deforestation and forest Degradation' (REDD), genetically modified organisms, carbon trading and offsetting. These distract from the real societal change and drastic emissions reductions that are needed, and are making it more difficult for present and future generations to achieve this change. They are time-wasting approaches that need to be abandoned in favour of effective people's solutions if we are to have any chance of staying within the global carbon budget needed to avoid irreversible climate change.

Even more worryingly, the false solutions bandwagon is currently gathering speed. Even as systems crises intensify, investors are seeking new profit-generating opportunities that could make them worse. Nature is the latest casualty, with 'ecosystem services' and 'biodiversity offsetting' generating new financial markets.

We believe that attempts to save biodiversity by redefining nature as a collection of ecosystem services will only deepen existing ecological crises.[25] At the same time, traditional land use practices are being declared inefficient or destructive, and indigenous peoples and traditional communities are losing access and control over the nature, forests, rivers, and lands that sustain their lives, because their valuable resources are being turned into tradable commodities by the markets.

Carbon markets

Carbon markets are a false solution, flawed both in terms of the theory underpinning them and in practice.

Carbon markets are based on a combination of 'cap and trade' and offsetting. 'Cap and trade' involves governments handing out permits to companies that allow them to pollute in a given country or region up to a legal limit. Companies can pollute beyond this limit, but must then buy extra permits from others with a surplus. 'Cap and trade' is extremely susceptible to corporate lobbying, as companies in the dirtiest sectors have staunchly resisted attempts to force them to cap or pay for their excess emissions. Thus governments are failing to fulfil their responsibilities with respect to climate change; and frontline communities located next to these polluting industries continue to suffer.[26]

The 'offsetting' aspect is even more problematic. Companies can also use this to 'compensate' for a failure to reduce emissions by providing finance to supposedly reduce or 'remove' emissions somewhere else. It is intended to reduce the cost of compliance with environmental regulations for corporations because offsets provide a cheaper option than moving away from destructive business models.

The problem is that in many cases offsetting effectively grants corporations a social license to continue their destructive practices. This in turn undermines local resistance to such destruction. For example, a European energy company might say that there is no problem with its energy generating activities since carbon offsetting means that emissions will be reduced by planting trees somewhere else instead. But this is of little help to either the frontline communities living next to the energy company, or the local resource-dependent communities living where the tree plantation is planned, who stand to lose their access to their land, forests and/or rivers in the name of climate change.

Carbon markets have been in use for some time now and it is clear that these methods have not solved the climate crisis: developed countries have continued to emit with little restraint,[27] and carbon finance has become a new source of finance for many corporations, including for projects that would have happened anyway.[28] Thus carbon markets provide an escape hatch for countries and companies who might otherwise be making urgently needed emissions reductions. They help to keep both rich and poor countries locked into dirty, high carbon economic models, with continued reliance on fossil fuels and other destructive energy sources. This is undermining our chances of avoiding catastrophic climate change, by delaying the much needed transformation of our economies away from destructive energy.

REDD

Reducing Emissions from Deforestation and forest Degradation—otherwise known as REDD—is based on the superficially attractive idea that the owners of tropical forests should be paid compensation for maintaining their forests rather than cutting them down. It is sold as a scheme that can reduce emissions and save forests. In reality however, REDD has been shown to do neither and is riddled with problems, again both in theory and in practice.

Crucially, REDD linked to carbon offsets cannot deliver permanent emissions reductions. It is absolutely critical that a distinction is made between the long-term geological carbon cycle, in which undisturbed fossil fuels are locked away underground for millennia, and the temporary above-ground carbon cycle, which involves carbon being stored in trees, other plants and soils, for relatively short periods of time. If REDD project credits are used as carbon offsets, allowing continued emissions based on fossil fuels elsewhere, this distinction is lost. (This is because the carbon in the above-ground cycle, in trees, is being used to compensate for underground carbon being unlocked. Overall this mechanism allows the total amount of carbon circulating above ground to be increased.)

FOOTNOTES:

25 http://www.foei.org/resources/publications/publications-by-subject/forests-and-biodiversity-publications/financialization-of-nature
26 http://prospect.org/article/environmental-justice-v-cap-and-trade
27 https://www.theguardian.com/environment/blog/2012/nov/26/kyoto-protocol-carbon-emissions
28 https://www.ft.com/content/dcdefef6-f350-11db-9845-000b5df10621

TACKLING THE PROBLEM CONTINUED

There are other methodological problems with REDD, meaning that it is a risky option anyway. It also fails to address the need to reduce demand for and overconsumption of food, timber and mining products grown in place of or extracted from forests, meaning that deforestation is likely to continue in areas where REDD is not in operation.[29]

There are yet more problems. REDD exacerbates weak law enforcement, corruption and land tenure disputes. It fails to distinguish between biodiverse forests and monoculture plantations. Worst of all, REDD leads to forests and resources being grabbed from communities who depend on them. For example, in forest areas where REDD projects are established, it is common for community members to be prohibited from cutting down a tree to build a canoe or a house, and they may also be prohibited from hunting and fishing. Sometimes they are even prohibited from gathering things from the forest, such as medicinal plants, fruit and other foods. There are many stringent requirements impacting on communities in REDD contracts (which may last for many decades),[30] and anyone who dares to do any of these things faces persecution by the police or by private security guards working for the REDD project.[31] REDD is undoubtedly a false solution to the climate crisis.

Sustainable Intensification & Climate Smart Agriculture

'Sustainable intensification' is being promoted as a way of increasing food production while reducing greenhouse gas emissions. Part of the rationale for sustainable intensification is that increasing crop yields on existing agricultural land will protect the world's remaining natural habitats and forests by stopping further agricultural expansion. However, it is being used to promote business-as-usual industrial methods—such as GMOs, and intelligent use of fertilizers and chemicals.[32] Thus sustainable intensification is still resource intensive and polluting: It will still drive climate change and environmental destruction through dependency on fossil fuels and chemicals, and it will still lead to the clearing of forests and the destruction of soils. If sustainable intensification continues to be promoted it is likely that industrial agriculture will continue to displace small-scale food producers and their methods of food production.

Climate Smart Agriculture (CSA) is a similar concept increasingly used by governments, international institutions and corporations to refer to agriculture that has, in theory, less impact on climate change. But this deceptively named concept deliberately overlooks the fact that the industrial agrifood system is one of the key drivers of climate change, and fails to challenge it. It does not ask whether we actually need to increase food production, or change our model of food production.

At the same time CSA has been deliberately loosely defined, so that companies can use it as a marketing tool to re-brand and validate industrial agriculture. It fails to exclude damaging and inequitable agricultural and food production processes such as genetic modification and the use of synthetic fertilisers.[33] And even though industrial livestock farming is one of the biggest contributors to climate emissions, food insecurity, loss of biodiversity and pollution globally, Climate Smart Agriculture promotes the sustainable intensification of livestock farming—that is, further increasing yields and intensity of livestock systems to reduce emissions per unit of meat produced.

In fact CSA is shaping up as a new promotional space for the planet's worst social and environmental offenders in agriculture. Companies such as Syngenta (GM seeds), Kellogg's, McDonald's, Walmart and Yara (the world's largest fertiliser manufacturer), are all at the 'climate-smart' table. So too are the International Fertilizer Industry Association (IFA) and the Global Biotechnology Transfer Foundation.[34]

Moreover, carbon offset schemes are considered to be an acceptable means of financing Climate Smart Agriculture, even though they rely on carbon being absorbed by soils (a process which is only temporary) and would increase land grabbing from smallholder farmers, particularly in the global South. Friends of the Earth International regards Climate Smart Agriculture as a false solution.

FOOTNOTES:

29 http://www.foei.org/resources/publications/publications-by-subject/forests-and-biodiversity-publications/the-great-redd-gamble-2
30 http://www.foei.org/wp-content/uploads/2014/10/Traps-and-Dangers-of-REDD-and-other-Forest-Conservation-Projects.pdf
31 WRM, 10 things communities should know about REDD booklet http://wrm.org.uy/wp-content/uploads/2013/01/10AlertsREDD-eng_intro.pdf
32 http://www.foei.org/wp-content/uploads/2013/12/Wolf-in-Sheeps-Clothing-for-web.pdf
33 For more information see: http://www.foei.org/wp-content/uploads/2015/11/Agroecology-and-climate-justice-EN.pdf
34 http://www.foei.org/wp-content/uploads/2015/11/Agroecology-and-climate-justice-EN.pdf

03

'NET ZERO'

The terms 'net zero' and 'negative emissions' are deceptively attractive in a world where urgent action on climate change is the highest priority. Unfortunately they are cannot deliver on what they appear to promise and will have huge detrimental environmental and social consequences. Additionally, they could prove a massive distraction from the crucial job of reducing fossil fuel emissions at source.

Negative emissions - removing Greenhouse Gases (GHGs) from the atmosphere - are supposedly achieved through:

- sequestering carbon in terrestrial sinks through forest restoration and reforestation that in practice means is likely to mean more environmentally and socially damaging practices such as monoculture tree plantations, or;
- geo-engineering techniques such as 'Bioenergy with Carbon Capture and Storage' (BECCS), a risky and unproven method involving burning biomass to generate electricity, and then capturing the carbon and pumping it into underground geological reservoirs. This will fuel massive land-grabbing in order to provide the biomass required.[35]

The Paris Agreement potentially opens the door to negative emissions technologies by seeking to 'achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century'.

The focus on net emissions is an existential threat to our work to end dirty energy, as it legitimizes continued fossil fuel expansion and the notion that a transition from coal to gas is helpful. In addition it will lead to a global land grab rush that would dwarf the existing environmental and social impacts of agrofuels. Some estimates suggest that land use changes would need to deliver 4 times the current land used for global food production to stabilise temperatures.[36] And the cost estimates of greenhouse gas removals are staggering - from $104 trillion to $570 trillion.[37]

Above: Chimney at an oil refinery facility.
© S. Che'lah / Dreamstime

Left: Gas flaring in the Niger Delta.
© E. Gilligan / FoE EWNI

FOOTNOTES:

35 http://www.biofuelwatch.org.uk/2015/beccs-report/
36 1.5 billion hectares used for crop production globally. Many scenarios in the IPCC AR5 report assume massive amounts of BECCS for negative emissions. While most estimates stay under 2 billion hectares, one is at over 3bn, and the most extreme (outlier) estimate goes for 6bn, which would be 4x the amount of land used for crops. http://www.actionaid.org/sites/files/actionaid/caught_in_the_net_actionaid.pdf IPCC (2014) Fifth Assessment Report, Working Group III, Chapter 6, pg 446 http://www.ipcc.ch/pdf/assessment-report/ar5/wg3/ipcc_wg3_ar5_chapter6.pdf
37 https://app.box.com/s/t050csk2z20iqk9u14vnllz3i15dh5i0; https://www.theguardian.com/environment/2016/oct/03/global-temperature-climate-change-highest-115000-years

SOLUTIONS AND RECOMMENDATIONS

04

Wind Farm looking over the ocean at Cape Jervis, South Australia.
© B. Goode / Dreamstime

The problems may seem to be intractable, especially given their scale, but they are not. In fact many proven solutions already exist. The dilemma is rather how to transition away from old models, which are kept in place by those currently operating and benefiting from them. We need a transformation in political outlook, a new political will that matches people's demands for transformation, and is focused on introducing genuine and effective solutions at the speed and scale required.

We need to build movements of people who can challenge the dominant economic system and push for transformation.

A process to develop well-conceived alternatives to the current economic system underpins all of Friends of the Earth International's efforts to build a comprehensive programme of action focused on real transformation and system change.

A NEW VISION OF GOOD ENERGY

We have a vision of a just, sustainable and climate-safe energy system based on the principle of energy sovereignty—providing energy access for all as a basic human right.

We need energy—for fuel and electricity to cook our food, to have habitable homes and workplaces in both hot and cold places, to ensure everyone has access to basics like health and education, to communicate, travel. Friends of the Earth International believes that it is possible to build a climate-safe, socially-owned, just and sustainable energy system which ensures the basic right to energy for everyone and respects the rights and different ways of life of communities around the world. To get there we need to challenge corporate power and exert real democratic control over the energy decisions of our governments. We need an energy revolution.

This will entail investment in locally-appropriate, climate-safe, affordable and low impact energy for all. We need to reduce energy dependence and energy waste, specifically ending overconsumption of energy in developed countries, whilst ensuring energy sufficiency for everybody to meet their needs for a dignified life.

We also need to ensure a just energy transition, which benefits everyone, and includes compensation and support for affected workers and their families, as well as a safe and just working environment for those in the renewable energy supply chain. In

addition we need to enable the sharing, transfer, development and local adaptation of low-impact energy technologies.

Our vision is guided by an idea called 'energy sovereignty'. This is the right of people to have access to energy, and to choose sustainable energy sources and sustainable consumption patterns that will lead them towards sustainable societies.

The following principles define what we consider to be good energy systems. They should:

- provide energy access for all as a basic human right;
- be under direct democratic control and governed in the public interest based on locally-appropriate technologies;
- ensure the rights of energy sector workers, and their influence over how their workplaces are run;
- be as small-scale and decentralised as possible and appropriate;
- reduce energy consumption and waste;
- prioritise energy efficiency where appropriate;
- ensure communities' rights to free, prior and informed consent, avoiding further Human Rights violations such as land grabbing.[38]

AGROECOLOGY

The majority of the world is fed by small-scale agroecological farming which is truly climate-friendly. Agroecology puts the control of seeds, biodiversity, land and territories, waters, knowledge, culture and the commons back in the hands of the people who feed the world.

Protecting, investing in and expanding small-scale agroecological farming and food sovereignty is essential if we are to reduce emissions from agriculture whilst ensuring a safe, culturally appropriate, nutritious and sustainable food supply for the world's population.

Agroecology is a powerful combination of science and traditional knowledge, dynamic agricultural practices, an alternative socio-economic system and a political movement, which combines traditional farming practices and ecological principles, and provides numerous rich alternatives to destructive industrial agriculture.

Agroecology is already protecting soils, seeds, and territories, eliminating farmers' reliance on emissions heavy inputs (such as fossil fuels and fertilisers), and building resilience to climate change. The promotion of agroecology for small-scale producers would provide a real solution to the challenges of climate change, improving rural livelihoods and stopping hunger. For example research analysing 286 agroecological projects in 57 developing countries found that such interventions increased land productivity on 12.6 million farms, with an average increase in crop yield of 79%, while improving the supply of critical environmental functions (water use efficiency gains, carbon sequestration and a significant decline in pesticide use).[39]

Stopping industrial livestock production and an associated reduction of industrial meat in peoples' diets especially in the western world in line with health recommendations would also make a significant contribution to stopping climate change.

COMMUNITY FOREST MANAGEMENT

Communities have a vast wealth of knowledge about their local forests and forest resources, and Community Forest Management (CFM) offers a real solution to protecting the world's forests. It is a win-win alternative because it also benefits communities, providing them with the resources they need for their lives and livelihoods.

CFM allows people and communities to benefit from forests and land without depleting natural resources or damaging the climate. The term Community Forest Management encompasses many different communal resource management practices used by forest-dependent Indigenous Peoples and local communities around the world. CFM offers an alternative to the industrial forest practices that have devastated forests and driven severe social injustices.

It offers a win-win solution to biodiversity loss and climate change, which also has the potential to benefit nearly 1.6 billion people who rely on forest resources for their livelihoods.[40] As well as regulating local weather patterns and climate, and helping to mitigate climate change by sequestering carbon dioxide, forests provide Indigenous Peoples and local communities with almost all of the resources they need, including timber, fuel, shelter, biodiversity, seeds, honey, fruits, medicines and water. They also fulfil cultural and spiritual needs.[41]

CFM is also a critical tool in the drive to reach the internationally agreed target of stopping deforestation by 2020.[42] However, communities only manage around 8% of the world's forests at present.[43] More of the world's forests need to be formally in the care of communities and Indigenous Peoples in order to achieve the 2020 target.

FOOTNOTES:

38 http://gebe.foei.org/good-energy-bad-energy/vision-for-a-just-sustainable-climate-safe-energy-system/
39 https://www.researchgate.net/publication/7206194_Resource-Conserving_Agriculture_Increases_Yields_in_Developing_Countries
40 Food and Agriculture Organization of the United Nations, 2015. http://www.fao.org/forestry/livelihoods/en/
41 Baltodano, J., Paz L., Wormworth, J. 2007. Community-based forest governance: from resistance to proposals for sustainable use, Friends of the Earth International. http://www.foei.org/wpcontent/uploads/2014/07/community-based-forest-governance.pdf
42 SDKP (2015). Target 15.2, Sustainable Development Knowledge Platform, https://sustainabledevelopment.un.org/topics
43 Porter-Bolland, L., Ellis, E., Guariguata, M., Ruiz-Mallén, I., Negrete-Yankelevich, S., Reyes-García, V 2012. 'Community managed forests and forest protected areas: An assessment of their conservation effectiveness across the tropics', Forest ecology and management. Vol:6-17. www.cifor.org/publications/pdf_files/articles/AGuariguata1101.pdf

SOLUTIONS AND RECOMMENDATIONS CONTINUED

ECONOMIC JUSTICE

We need to change the international economic order if we are to effect genuine system change that puts planet and people first. This includes changing trade and investment rules that are standing in the way of our transition to a just, sustainable and climate-safe energy system. We need new economic goals that prioritise the equitable and sustainable use of limited resources, strengthen local and regional economies, and increase people's control over local resources.

Governments must be free to control exports, imports and investment flows in order to reduce carbon emissions and promote low carbon economies and technologies.

Addressing the climate challenge and moving towards sustainable economies will also involve:

- A new and alternative framework on intellectual property rules that fosters the development and sharing of low-impact, renewable energy technologies, and local green technologies and knowledge.
- Support for equitable South-South trading partnerships between southern countries ('South-South trade'), which will contribute to sustainable regional integration.
- The promotion of direct links between producers and consumers in order to prioritise local and regional trade.
- Supporting the development of sustainable local markets.

As Friends of the Earth International, we believe that an economically just system involves accountability for all businesses. That is why we have, for many years, been a keen promoter of an international binding treaty—which is currently being discussed within the UN Human Rights Council—to hold Transnational Corporations (TNCs) accountable for Human Rights and environmental violations no matter where in the world they operate. Binding Human Rights and environmental regulations should eventually apply to all businesses at all levels, from local to national and international.

After decades of struggle and resistance—by Friends of the Earth International, our allies and impacted communities around the world—the idea of corporations being held legally responsible for their crimes, no matter where they occur, is finally becoming a reality. The prospect of a new Human Rights treaty regulating transnational corporations (TNCs) and other businesses is now supported by hundreds of organisations, the UN Human Rights Council (UNHRC), and diverse governments.

FINANCING THE TRANSFORMATION

It is essential that developing countries receive adequate climate finance if they are to adapt to the impacts of climate change whilst also tackling urgent development needs. It is also crucial that money is made available to compensate for loss and damage caused by climate change that cannot now be avoided. Developing countries must also receive finance, technology transfer and capacity building for mitigation. This finance is the repayment of the climate debt of the rich developed world, which has done the most to cause the problem of climate change and has far greater resources available to tackle the problem.

The provision of climate finance should be mandatory, sourced from stable and predictable public sources in developed countries. It must be new and additional to existing Overseas Development Assistance (ODA). It must be sufficient in scale to repay the climate debt and meet the mitigation, technology, adaptation and loss and damage needs of the global South; but it should not be raised through border tax adjustments on goods imported from the global South, or violate existing agreements under the UNFCCC. Domestic tax revenues and policies designed to raise climate finance in debtor countries must not burden poorer households unfairly. Possible sources include redirected military spending or an international Financial Transaction Tax (FTT).

Climate finance should not be channelled through or support any offsetting mechanisms or institutions and private entities that finance and/or profit from the promotion of false solutions. These include the World Bank, regional financial institutions, and other public and private agencies with poor environmental and social track records and undemocratic governance structures.

Friends of the Earth International believes that climate finance should not be used to support the private acquisition of intellectual property rights for climate technologies and know-how; any provisions in free trade and investment agreements that interfere with the establishment of adequate governance structures, or support corporations engaged in false solutions, should also be dismantled.

Friends of the Earth International believes that finance delivered through the Green Climate Fund (or any other public climate finance) must not be used for dirty energy or false solutions.

CONCLUSION: WE NEED SYSTEM CHANGE

05

People. Power. Action.
D12 protests in Paris.
© Ronnie Hall / Critical Information Collective

The climate crisis is a huge problem in itself; and a symptom that there is something completely flawed in the current dominant economic system.

We can address the climate challenge: but only if we take rapid and bold action to address the root causes of climate change, including by transforming current unsustainable and unjust approaches to production and consumption, and undemocratic decision making structures.

Feasible and equitable solutions already exist. They include:

- Universal access to clean, democratically controlled and community owned energy.
- A just and climate friendly food system that's based on the principles of agroecology.
- Community management of our natural systems and forests and an end to deforestation.
- Sustainable societies where everyone has access to the resources they need to live a life of dignity, and where wealth and resources are not concentrated in the hands of few.
- An end to neoliberalism, replacing unsustainable overconsumption by corporations and global elites with an economic system that is equitable and accountable to people, not corporations.

Friends of the Earth International demands a system change approach to dealing with the climate crisis. The severity of the climate crisis and the need to address it in a fair and equitable way demonstrate that we need a revolution not only in our energy and food systems, but also in our economic and financial systems, including all sectors of our economy.

We must continue to build a movement of people who will challenge dirty energy, climate change and false solutions by fighting for system change. We must mobilise together to overcome corporate power and to transform the underlying economic system.

Above: Rising sea waters cause frequent flooding in low-lying Bangladesh.
© G. M. B. Akash

Right: Open coal mine Garzweiler II, Germany.
© Bert Kaufmann / Critical Information Collective

Above Left: Woman carrying firewood on desertified land in India. The destruction of forests leads to desertification, increases climate change, and adds to the heavy workloads of women in many countries.
© Prakash Hatvalne, prakashhatvalne@yahoo.com

Above: REDD protestor.
© Orin Langelle / CIC

Left: Clearing of land and digging drainage canals through peatland in Bumitama plantage, Ladang Sawit Mas concession, Indonesia.
© Jason Taylor

Far Left: Vienna: System change not climate change!
© Mitja Kobal

Left: A Mapuche group Demonstration against fracking in front of a conventional well owned by Apache in Argentina.
© Observatorio Petrolero Sur

DECADE
ZERO

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FRIENDS OF THE EARTH GROUPS AROUND THE WORLD

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South Africa
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