PATHS BEYOND PARIS: MOVEMENTS, ACTION AND SOLIDARITY TOWARDS CLIMATE JUSTICE



PARTICIPATING RESEARCHERS AND ORGANIZATIONS (ALPHABETICAL):

PATRICK BOND UNIVERSITY KWA-ZULU NATAL, CENTRE FOR CIVIL SOCIETY, SOUTH AFRICA

SARAH BRACKING UNIVERSITY KWA-ZULU NATAL, SOUTH AFRICA AND UNIVERSITY OF MANCHESTER, UK

JOANNA CABELLO AND TAMRA GILBERTSON CARBON TRADE WATCH (EDS.)

MICHAEL K. DORSEY CLUB OF ROME
ALMUTH ERNSTING AND
RACHEL SMOLKER BIOFUELWATCH

ELENA GEREBIZZA RE:COMMON, ITALY

SOUMITRA GHOSH MAUSAM, INDIA

TOM GOLDTOOTH,
INDIGENOUS ENVIRONMENTAL NETWORK

CENSAT AGUA VIVA - FOE COLOMBIA

LARRY LOHMANN THE CORNER HOUSE, UK

DANIELA MEIRELLES FASE - ES, BRAZIL

WALLY MENNE TIMBERWATCH, SOUTH AFRICA

CAMILA MORENO BRAZIL

ANNE PETERMANN

GLOBAL JUSTICE ECOLOGY PROJECT, US

ISAAC ROJAS AND LUCIA ORTIZ COECOCEIBA - FOE, COSTA RICA

IVONNE YANEZ ACCIÓN ECOLÓGICA, ECUADOR WORLD RAINFOREST MOVEMENT URUGUAY

EDITORS: JOANNA CABELLO AND TAMRA GILBERTSON

TRANSLATION: ELENA DE MUNNO, RAQUEL NÚÑEZ MUTTER AND TAMRA GILBERTSON

DESIGN: RICARDO SANTOS

TABLE OF CONTENTS

INTRODUCTION CARBON TRADE WATCH	4
SECTION I	
1 INDIGENOUS KNOWLEDGES AGAINST THE COLONIZATION AND DESTRUCTION OF MOTHER EARTH TOM GOLDTOOTH	8
2 A CALL TO WOMEN WHO DO NOT WANT TO BURN DANIELA MEIRELLES	11
3 WINDS OF CHANGE: A NEW CLIMATE FOR THE STRUGGLE TO KEEP THE OIL IN THE SOIL IVONNE YANEZ	12
4 CONFRONTING CLIMATE CATASTROPHE: DIRECT ACTION IS THE ANTIDOTE FOR DESPAIR ANNE PETERMANN	14
5 THE INJUSTICES INSIDE CLIMATE SCIENCE LARRY LOHMANN	17
6 THE EMPEROR'S GREEN CLOTHES: THE GREEN ECONOMY, A NEW SOURCE OF PRIMITIVE ACCUMULATION CAMILA MORENO	19
7 WHAT IS AND WHAT ARE THE IMPACTS OF THE FINANCIALIZATION OF NATURE? ISAAC ROJAS AND LUCÍA ORTIZ	22
SECTION II	
8 CARBON TRADING REBORN IN NEW GENERATION MEGA POLLUTERS PATRICK BOND	25
9 "SHAPING THE AGE OF GAS": HOW THE EU LOCKS IN A DESTRUCTIVE PATH ELENA GEREBIZZA	29
	31
10 CLIMATE NEGOTIATIONS EMIT FALSE SOLUTIONS CENSAT COLOMBIA	١ ر
	33
SOLUTIONS CENSAT COLOMBIA 11 FORESTS AND THEIR PEOPLES: THE STRUGGLE AGAINST A DEFINITION THAT BENEFITS PROFIT WORLD RAINFOREST MOVEMENT 12 REDD PERVERSIONS WALLY MENNE	٠.
SOLUTIONS CENSAT COLOMBIA 11 FORESTS AND THEIR PEOPLES: THE STRUGGLE AGAINST A DEFINITION THAT BENEFITS PROFIT WORLD RAINFOREST MOVEMENT	33
SOLUTIONS CENSAT COLOMBIA 11 FORESTS AND THEIR PEOPLES: THE STRUGGLE AGAINST A DEFINITION THAT BENEFITS PROFIT WORLD RAINFOREST MOVEMENT 12 REDD PERVERSIONS WALLY MENNE 13 INDIA'S NATIONAL REDD+ POLICY:	33
SOLUTIONS CENSAT COLOMBIA 11 FORESTS AND THEIR PEOPLES: THE STRUGGLE AGAINST A DEFINITION THAT BENEFITS PROFIT WORLD RAINFOREST MOVEMENT 12 REDD PERVERSIONS WALLY MENNE 13 INDIA'S NATIONAL REDD+ POLICY: OLD LIES IN NEW GARB SOUMITRA GHOSH 14 GEOENGENEERING LIFE: THE ILLUSION	33 36 38

INTRODUCTION

by Carbon Trade Watch

Over twenty years have passed since governments within the United Nations Framework Convention on Climate Change (UNFCCC) began to discuss the impending climate crisis. Year after year, we witness the talks moving further away from identifying the root causes of climate change while the increasing impacts affect even more peoples and regions. Every meeting has given more space for corporate involvement and less to the voices of those directly affected by these climate policies. Despite the promoters' fancy "green" campaigns and videos, the main focus at the climate negotiations continues to be about saving the free-market economy for those who are holding the cards - the biggest transnational corporations and financial institutions. The same corporations that are largely behind the destruction of forests, rivers, diversity, territories - as well as the violation of human and collective rights and so on – are also the main polluters and plunderers of the Earth.

The climate crisis poses a real threat to the current economic model which is based on the continuous extraction and production of fossil fuels, hydrocarbons and "natural resources" such as land, minerals, wood and agriculture. If talks were to seriously address climate change, there would need to be a discussion on the many ways to support the hundreds of thousand of small-scale farmers, fishers, Indigenous Peoples, forest-dwelling communities and others whose territories and livelihoods are at risk from capital expansion, and how to transition to different economic systems where fossil fuels could be kept underground; where the consumption "mantra" would shift towards more local, diverse and collective discourses and practices. However, the hegemonic and colonial powers are once more violently closing doors, creating more "structural adjustments" and, ultimately, harming the people who are the least responsible for current and historical pollution levels suffering the most from the impacts.

The fallacy that we can continue with the same economic model is irremediably flawed, bankrolled by big polluters, and intrinsically linked to land and livelihoods grabbing, especially in the Global South. Nonetheless, mechanisms like carbon markets, which expand the extractivist and free-market logic, continue to be promoted as unilateral, programmatic "solutions" to mitigate climate change and address deforestation and biodiversity loss. From carbon trading to forests and biodiversity offsets, the climate crisis has been turned into a business opportunity, worsening the already felt impacts, especially for those who are the least responsible. Debates over molecules of carbon being accounted for and "moved" or "stored" from one location to the other detracts from the necessary debates on shifting away from extraction, unjust power structures and oppression. While being fully informed of the causes of climate change, international climate negotiations strive to ensure that the hegemonic economic model expands and rewards polluters.

The consequence is that "climate policies" (aka economic policies) finance the most destructive industries and polluters, often destroying genuinely effective actions that support community livelihoods and keep fossil fuels in the ground. Moreover, these policies further the "financialization of nature" process, which presupposes the separation and quantification of the Earth's cycles and functions - such as carbon, water and biodiversity - in order to turn them into "units" or "titles" that can be sold in financial and speculative markets. With governments establishing legal frameworks to set these markets in place, they also have provided the financial "infrastructure" for negotiating financial "instruments", by using derivatives, hedge funds and others. While financial markets have a growing influence over economic policies, the "financialization of nature" hands over the management to the financial markets, whose sole concern is to further accumulate capital.

FROM CARBON TRADING TO FINANCIALIZING THE EARTH

The assumption behind carbon trading is that if a price is put on "carbon dioxide" (aka pollution) then it would become (economically) valued and possible to control. All other "values" outside the hegemonic economy are dismissed. Carbon trading provides not only provides additional finance for polluting industries but creates a new discourse that allows themselves to brand their pollution as "green", "carbon neutral" or "sustainable".

From policy-makers looking after the interests of corporate lobbies, to conservationist NGOs and multilateral agencies like the World Bank, the expansion of a financialized free-market logic through the climate talks has generated windfall profits for heavy polluters and financial traders while proving to be inherently ineffective and unjust. Even with the obvious failures, the EU Emissions Trading Scheme (ETS), the biggest "functioning" carbon market, has been used as a model for other carbon trading systems around the world.¹ Since 2013 there have been new carbon markets introduced in California, Kazakhstan, Mexico, Quebec, Korea and China, and they continue to expand.

What is being valued is ultimately what can be turned into money and what is being discussed in the UN climate talks is more about how to placate big business and maintain unjust power relations than addressing the real causes of climate change. This imposes a colonial and neoliberal perspective on how to view the world. A world where each of the Earth's cycles can be separated from territories and quantified into homogenous "units" to be "re-created", "replaced", "moved" or "restored" according to economic and cost-related "values".

The climate talks at the end of 2015 are slated to sign an agreement that will expand the free-market logic into all cycles and functions of the Earth. This includes the further financialization of the Earth, following the narrative and metrics of a carbon commodity, into forests, soils, biodiversity, water and oceans. This process is advancing rapidly with banks, conservationists NGOs, the World Bank and corporations standing to gain even more.

So what can we do? We can start by recognizing that the climate negotiations are making things worse. We need to think beyond the UNFCCC and to stand in active solidarity with those who are at the frontlines of fighting the climate and

environmental criminals while defending their territories. Many communities and groups around the world have been resisting the fossil fuel, paper and pulp, infrastructure and other destructive industries for generations. We need to hear what they have been saying for a long time and in different ways. Building radical solidarity with social movements and communities in resistance may be a way forward. Resistance is happening and has happened for a long time. The question is not how to "build a movement", but rather how to strengthen political support; build and engage with resistance wherever we are; how to link, collaborate and cooperate with movements; how to learn from successes and failures, and how to stop and listen, really listen, and learn from these struggles!

AT THE EDGE

This booklet is not about the coming climate talks *per se*, but about years of struggle, passion and commitment for environmental, social and climate justice. It is about reflecting and carrying this into future generations. The writings found in the following pages are contributions from grounded and committed activists, researchers, scholars, feminists and thinkers. These experienced voices work within wide networks of dynamic peoples and groups. They continue to push the limits in the quest towards justice. This booklet attempts to help build an understanding of the root causes of climate change beyond the fallacy of the UNFCCC negotiations and contemporary media hype.

The first section begins with an important reflection from Tom Goldtooth on understanding the Indigenous political starting point, which is based on respecting Mother Earth. The piece outlines how this vision goes directly against the "financialization of nature" and the commodification of the Earth. Next, a Call to Women Who do not Want to Burn from Daniella Meirelles is a critical call to action and a message for all. Ivonne Yanez outlines a powerful history from the International Oilwatch network and following their call for leaving fossil fuels underground, she proposes creating a space where the voices of those who are concretely fighting the causes of climate change, mostly found within Indigenous and local communities are given

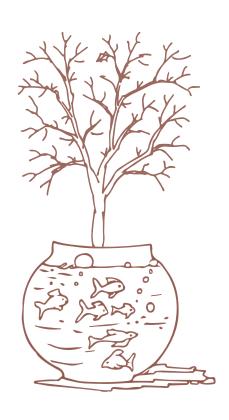
space and power in the international arena. Savvy reflections on COPs-gone-past are shared by Anne Petermann who is now forbidden from another COP and who calls for direct action as an antidote to despair. Larry Lohmann pushes the edge, once again, in asking how we relate to climate science while calling for other knowledges to be seen and heard. Camila Moreno reflects on how the discourses and practices around the "green economy" are de-politicizing debates, and reducing them to the "management" of carbon molecules. And finally, critical understandings of the "financialization of nature" are the focus of Isaac Rojas and Lucia Ortiz's article who round out the section with the important point that we are all Nature.

The next section outlines some of the mechanisms discussed and promoted in the UN climate negotiations and that will play a central role in the agreement for post-2020 slated for the Paris talks. Patrick Bond offers a salient critique of carbon trading, linking its complexity and history as obstacles to overcome. Elena Gerebizza explains how oil corporations are getting ready for a climate agreement through the example of 3,500 kilometres of pipelines between Azerbaijan and Italy cloaked in "energy-security"-speak. Following on, CENSAT Colombia denounces the territorial impacts of offset projects on the ground. The World Rainforest Movement team then explains how the definition of forests used by the UN, FAO and other multilateral agencies promotes the expansion of industrial monoculture tree plantations. A key related issue debated in the climate talks is REDD (Reducing Emissions from Deforestation and Forest Degradation), which aims to trade the carbon "stored" in trees. Some key problems with the REDD mechanism are outlined by Wally Menne from his experience with Timberwatch, South Africa, while Soumitra Ghosh describes REDD conflicts in India, problems with the governmental approach and how communities are resisting. Moving further, Rachel Smolker outlines the illusions of a "bioeconomy" and the dangers of an engineered future while Almuth Ernsting clearly lays out the problems with the promotion of the "biofuel" industry, particularly the one based on wood chips to feed coal-fired power plants in Europe. The booklet ends with Sarah Bracking and M. K. Dorsey completing the section with a critique of the inherent flaws in the Green Climate Fund.

Climate justice movements are diverse, but a fundamental principle lies at the heart: the recognition that the threats posed by climate change are a consequence of unequal, colonial, economic and social power relations. Every time we hear about a "climate solution", we need to ask ourselves the following questions: Who is benefiting and who is harmed? How does this affect the local environment, territories and communities? Where does climate justice play a role? We hope this booklet helps in reflections towards building stronger, more diverse and radical movements, not only fighting against the root causes of climate change, but also fighting against "solutions" being imposed from the top.

1 See for example the "Scrap the ETS" declaration which was endorsed by over 100 organizations, networks and movements worldwide, http://scrap-the-euets.makenoise.org/KV/declaration-scrap-ets-english/

SECTION I



1 INDIGENOUS KNOWLEDGES AGAINST THE COLONIZATION AND DESTRUCTION OF MOTHER EARTH

by Tom Goldtooth, Indigenous Environmental Network

All humans have two things in common and that is, we walk on two legs and on each hand we have five fingers that we use in common. We are taught from infancy to use these hands and fingers as gifts of the Creator. The Indigenous cosmovision teaches me, for each finger to work together in solidarity, and with the totality of the fingers and hands, we are to help each other, in respect of each other.

As two-legged creatures, we acknowledge the gift of the mind that has the ability to reason and figure things out for ourselves. This mind is a gift of the Creator that allows us to develop ways to live in common with each other and to live in a sustainable way on this planet, which I call – Mother Earth. We, the two-legged species – the humans – are not here alone. We share this Mother Earth with many life forms, animate and inanimate. From the waters of the great oceans, to the native trees, to the smallest rock, and from the smallest organism to the biggest animals - we are related to one another. This relationship to the sacredness of our Mother Earth and all her children, defines our spiritual, cultural, social, economic, and even, political relationship we have with each other and with all life.

What I have said to this point is considered the traditional knowledge of the Indigenous Peoples. This knowledge comes from my *Dine'* Navajo Peoples from the Southwest of my maternal grandmothers and from my *Hunka* family of the *Dakota* Sacred Lake Peoples of Minnesota, where I live. This traditional knowledge has allowed our Indigenous Peoples to develop certain life ways, values, and philosophies that have allowed us to live in balance and in a sustainable way for thousands of years.

I work with many Indigenous Peoples throughout the world, ranging from issues of environmental and climate justice affecting the rights of Indigenous Nations. Since 1998 our organization, the Indigenous Environmental Network, has participated in the United Nations Framework Convention on Climate Change (UNFCCC) bringing our local and national articulation of a changing climate and applying Indigenous knowledge towards real global solutions for climate mitigation and adaptation.

Indigenous Peoples are confronting many challenges: challenges such as extreme changes in the environment, a changing climate, extreme weather events, extreme energy development, and the links to the continued push of economic globalization and a continuation of western forms of development, despite the signs of financial collapse and depletion of natural resources around the world.

Fossil fuel development within Indigenous territories, land, water and seas is increasing. It is business as usual with oil, coal, natural gas and hydraulic fracturing of shale gas/oil expansions on and near Indigenous Peoples' lands and territories, despite climate science linking human activity, such as the combustion of fossil fuels causing more greenhouse gases to build up in the atmosphere.

According to the International Energy Agency (IEA) we must leave 80 percent, or more than two thirds, of oil, coal and gas reserves in the ground.1 Countries across the world are preparing to create a new international climate agreement by the conclusion of the UNFCCC Conference of the Parties (COP21) in Paris scheduled for December 2015. Countries have agreed to outline what post-2020 climate actions they intend to take under a new international agreement, known as Intended Nationally Determined Contributions (INDCs). The INDCs are supposed to determine whether the world is committed towards achieving an ambitious 2015 agreement and create a path towards a much needed fossil free future. However, on a global level, the current INDC's fall short of what is needed to avoid catastrophic climate change. What I observed are false solutions.

Both, the UNFCCC, with major industrialized counhuman survival is now passing into the same corpotries of the Global North, and the fossil fuel industry, want to legitimize their common agenda of perpetuating capitalism based on fossil fuels with the use of market-based mechanisms which include carbon trading, offsets and REDD (Reducing Emissions from Deforestation and forest Degradation), instead of implementing real solutions to the climate crisis.

Indigenous peoples participating in the UNFCCC climate negotiations and other UN meetings, such as the UN Convention on Biological Diversity, are in the frontlines of a power structure that minimizes the importance of Indigenous cosmologies, philosophies and world views. These power structures reside within the UN process, with inequalities found in industrialized countries, and in the more developed of the developing countries, with financing from the World Bank, other financial institutions and the private sector investments.

These entities operate from an economic system that objectifies, commodifies, privatizes and puts a monetary value on land, water, air, forests, plants and practically all life. This is contrary to Indigenous thought. The subordination of the Web of Life to the chains of the markets and growth of the corporate-led system erodes the primary means of existence on this planet, which is rooted in the diversity of life itself. Whenever we talk about these Indigenous ways, we are talking in front of a power structure that ridicules and minimizes the importance of Indigenous cosmologies, philosophies and world views. Within these colonial and economic systems, Indigenous Peoples are forced into the world market with nothing to negotiate with except the natural resources we depend on for survival.

From the eyes of many Indigenous Peoples globally, we have witnessed historical practices by the industrial world to commodify land, food, labor, forests, water, genes and ideas, such as privatization of our traditional knowledge. Carbon trading, offsets and other market-based systems follows in the footsteps of this history and turns the sacredness of our Mother Earth's carbon-cycling capacity into property to be bought or sold in a global market. Through this process of creating a new commodity - carbon -, Mother Earth's ability and capacity to support a climate that is conducive to all life and rate hands that are destroying the climate.

Carbon trading will not contribute to achieving protection of the Earth's climate. It is a false solution with many risks, including the dangers of entrenching and magnifying social inequalities and human rights abuses. From the Indigenous mindset, it is a violation of the sacred - plain and simple.

In 1992, at the United Nations Earth Summit in Rio de Janeiro, Brazil, world governments converged to rethink economic development and find ways to halt the destruction of irreplaceable natural resources and pollution of Mother Earth. This included "examining the relationship between human rights, population, social development, women and human settlements — and the need for environmentally sustainable development." It was in 1992 that science reported findings of global warming and climate change. At Rio de Janeiro in 1992, the Earth Summit sought the need for alternative sources of energy to replace the use of fossil fuels which, at that time, there were discussions linking the cause of global climate change to the combustion of fossil fuels. Twenty years later, back in Rio de Janeiro, at the UN Rio+20 Earth Summit, world leaders came back together to review progress towards saving the planet by achieving sustainable forms of development. However, what was observed by our global alliance of Indigenous Peoples and environmental and climate justice movements was the push for a "green economy" that was widely being promoted as the key to our planet's survival and the new buzz word for sustainable development.

The "green economy" is nothing more than capitalism of Nature. It is a more extreme attempt by corporations, extractive industries and governments of mainly the northern industrialized countries towards developing mechanisms for cashing in on Creation. This is achieved by privatizing, commodifying, and selling off all forms of life and the sky, including the air we breathe and the water we drink – all elements that are sacred. This privatization includes genes, plants, traditional seeds, trees, animals, fish, biological and cultural diversity, ecosystems and traditional knowledge that make life on Mother Earth possible and enjoyable.

This "green economy" regime places a monetary price on Nature and creates new derivative markets. In my analysis, this regime will only increase the destruction of Mother Earth. It has been said many times before, by many earth-conscious people, that we cannot put the future of Nature and humanity in the hands of financial speculative mechanisms. These mechanisms are exemplified through UN program initiatives funded by the World Bank such as REDD+ that uses the forests, conservation and agriculture as carbon offsets. There are also other market-based systems using conservation and biodiversity offsets and mechanisms for Payment for Environmental and ecological Services (PES).

In the US state of California, we have been organizing resistance to the implementation of California's climate cap-and-trade legislation with carbon and methane offset provisions allowing California to use forests in Mesoamerica, the Amazon, Africa, and other sub-national "partner jurisdictions" as "sponges" for the carbon pollution of polluting industries such as Chevron and Shell. This US domestic REDD initiative does not reduce climate causing emissions and toxic pollution at source, but results in an extreme form of green washing. Urban communities such as Richmond, California, where people-of-color and low income families live, are surrounded by oil refineries. This only furthers environmental justice issues for people living close to these polluting refineries who have to endure more pollution in their communities, causing long-term health problems such as asthma, birth defects, cancer and depression. This domestic REDD initiative prolongs these impacts by making offsets available to these polluting companies, allowing them to avoid reducing their emissions at source.

REDD-type and carbon offset projects are already the causing human rights violations, land grabs and environmental destruction. If REDD is implemented or worldwide, it may open the floodgates to the biggest land grab of the last 500 years. Just as historically the the Doctrine of Discovery was used to justify the first wave of colonialism by alleging that Indigenous Peoples did not have souls, and that our territories were "terra nullius," (land of nobody), now carbon trading and carbon offset regimes, such as REDD, are inventing similarly dishonest premises to justify this new wave of colonialization and privatization of nature.

Indigenous world view perceives all of creation as alive and imbued with all of the intelligence of the Creator. Although every atom and particle is individual, we are all part of an integrated whole. This assumes a caring and loving creation where all parts of creation care for all of the other parts. No part is higher. No part has "dominion" over any other part. We were not put here to be "stewards" of anything. Rather we were all created to live in a harmonious, awake, loving and intelligent relationship with all other aspects of creation. This is what *Mitakuye Owasin* "All My Relations" of the *Lakota*, *Nakota* and *Dakota* nations means. It is the power of the "Good Mind" in the cosmology of the *Iroquois* nations.

Mother Earth is the source of life which needs to be protected, not a resource to be exploited and commodified as a "natural capital." The COP 21 Paris Accord is the nail in the neocolonial coffin of capitalists treating Mother Earth as natural capital and as a business in liquidation.

We feel the pain of disharmony when we witness the dishonor of the natural order of Creation and the continued economic colonization and degradation of Mother Earth and all life upon her. This inseparable relationship between humans and the Earth, inherent to Indigenous Peoples, must be learnt, must be embraced and respected by all people, for the sake of all of our future generations and all of humanity. I urge all of you, all humanity, to join with us in transforming the social structures, institutions and power relations that underpin conditions of oppression and exploitation.

We need action for humanity not to be a carbon colonialist who sells the air we breathe and privatizes the Earth and Sky. To restore the Earth's balance, we need to shift from a philosophy of dominion over nature, to a relationship of understanding, respect of the Natural Laws and love for the beauty of the creative female energy of Mother Earth. Earth Jurisprudence recognizes the concept that we only have one Mother Earth. We must stand together, in solidarity, to protect her and the future generations.

1 International Energy Agency. World Energy Outlook 2012 – Executive Summary. November 2012. http://www. iea.org/publications/freepublications/publication/ english.pdf Relations deteriorate. If we hesitate any longer, human relations between men and women, between groups, Peoples and the Earth will be completely compromised.

The responsibility for this crisis is common, but different. In the case of climate change the countries located in the Global North are more responsible because they have imposed a pattern of toxic production and consumption, and targeted pollution.

In the case of human relations, sexism has generated inequality and raised an empire of white, western, urban, male hierarchy to rule over women. This exploitation model is the same domination model that affects Nature and women. Oppression is capitalist and patriarchal. It is violence against life.

Capitalism expands and the last frontiers are now cycles and elements of Nature, women and traditional Peoples. From Nature, this system created a condition of servitude, obligation, and then accumulation. The photosynthesis of trees, care of women and conservation by traditional people, for example, serve the capital and are transformed into commodities, and financialized. This is exactly the "solution" being presented in the United Nation Framework Convention on Climate Change!

In fact this is the largest international declaration that gives priority to capital over life. They make the essential causes of climate change secondary: Sexist machimo power and especially the continued burning of fossil fuels, such as oil and gas. Although the problem threatens all life on this planet, they seem to prefer this destruction rather than to jeopardize the capital machine created by man.

It is this energy that moves the global machine and that keeps the wheels of capitalism turning. But it is this fossil fuel based model that wanes human energy, wasting our potential and even undermining the essential energy sources from spiritual, cultural and food.

A CALL TO 2 WOMEN WHO DO NOT WANT TO BURN

by Daniela Meirelles, FASE-ES, Brazil

One can easily see the impacts from these largescale development projects on women in Espírito Santo, Brazil including: Territorial invasions from oil structures and eucalyptus plantations; the high incidence of violence due to the huge contingent of male workers at these projects; restriction and contamination of areas of crops and fishing compromising household food security; biodiversity loss; fragmentation of the family; community conflicts promoted by the companies; exposure to chemicals and pollutants that increase diseases; rare, precarious and low-paid work in the territories; decontextualized offset projects; housing difficulties in the cities: the industrial model of education and health; and all devaluation and invisibility of knowledge and creativity of women.

There is no coincidence that Espírito Santo is the second largest national oil producer and the world champion in paper pulp production (Aracruz / Fibria), and at the same time also ranks first in violence against women throughout all of Brazil.

We urgently need to stop the expansion of exploitation. How? By echoing the feminists of the 80s: "We have the right to say NO!" We need to build a plan towards degrowth and deceleration. And of course by practicing alternatives to the patriarchal capitalist machine.

Infinite growth is impossible on a finite planet. If the invented wheel is not turning in a good way, better to reinvent it. What we need is to be free to love, desire, choose, give opinions, attend, cultivate, worship, create, sow, produce, choose to give birth, experience, change, feed, care, plant, fish, exchange, share, market, express, communicate, educate, produce, and reproduce. We need to live well. All life on this planet depends on us.

3 WINDS OF CHANGE: A NEW CLIMATE FOR THE STRUGGLE TO KEEP THE OIL IN THE SOIL

by Ivonne Yanez

From the COP1 in Berlin in 1995 to the COP20 in Lima, 20 years have passed. Under the UN Framework Convention on Climate Change (UNFCCC), countless formal meetings have taken place. In addition to Conferences of the Parties (COPs), there have been meetings of various Committees, Working Groups, Expert Groups, Panels, Subsidiary Bodies, and so on. State delegates have taken close to 400 "decisions" and more than 25 "resolutions". They have signed Mandates, Ministerial Declarations, the Kyoto Protocol, Action Plans, Agreements, Accords, Frameworks, Roadmaps, Workplans, Gateways and Calls to Action, and have adopted guidelines, committed funds, designed forms and taken many other actions supposedly to tackle climate change.¹

Despite this impressive display of bureaucracy, time, and money, throughout these 20 years, greenhouse gas emissions have been steadily increasing. Thousands of delegates, with their hordes of consultants, have managed in a scandalous manner to divert attention away from real solutions. In practice, UNFCCC events have been business conventions licensing the continued burning of fossil fuels and opening avenues for profiting from the climate crisis. For these and other reasons, many of us assert that everything performed during the COPs and their satellite events has been illegitimate, unjust, a farce and above all a trick played on humankind.

In Kyoto in 1997, the Oilwatch Network released its first position paper calling for a moratorium on oil exploration as a concrete, firm step to confront global warming and at the same time to criticize the market-based solutions being plotted at the time. Then, in 2005 in Montreal, an international Eco-Call was launched to leave oil in the ground and to protect the peoples on whose lands and territories oil, gas and coal is extracted, in addition to confronting climate change.²

Today hundreds of organizations and institutions around the world have come to accept this proposal. The need is widely recognized to leave at least two-thirds of proven fossil fuels underground in order to avoid social and environmental disasters.

But not everything is as it seems. There are at least three questionable ways in which this campaign is being discussed that we need to understand strategically if we are to move towards a post-oil civilization.

For one thing, the campaign to leave 70% of fossil fuels untapped is possibly being used – or even partly driven – by a fraction of the oil sector, in order to achieve an increase in oil prices in international markets. It is also possible that many of those promoting the campaign to leave 2/3 of fossil fuels unexploited are linked to the carbon market and are merely seeking a stable and robust market price.

Another problem is the way in which the movement for a post-oil civilization is sometimes tied to the rhetoric of permissible degrees of temperature rise or permissible "parts per million of CO₂". Both government officials and independent organizations tend to focus on IPCC scenarios and their use of such metrics. This focus tends to serve the interests of mitigation plans linked to carbon markets, environmental services and other false solutions within the "green economy".

Third, there is still widespread hope that state and government representatives will someday take effective action, perhaps even at the COP21 in Paris. Some observers are even looking to people like Bill Gates to lead the way toward solutions.

These tendencies are distracting from the need to talk about the real causes of climate change and capitalism, the transformation of production and consumption fueled by oil addiction, social and environmental justice, democracy and the rights of nature. This is the context in which proposals to keep the oil in the soil and move to a post-petroleum civilization must be discussed.

The Yasuni-ITT initiative developed by social movements in Ecuador was a pioneering proposal intended to address these issues. But it was too bold to be accepted in the climate negotiations and was too radical for the Ecuadorian government. However, this proposal set the stage for the current situation. One can divide the history of climate change action into before-Yasuni and after-Yasuni eras, both nationally and internationally.

How can we seize this exciting moment around the positioning of "Keep the oil in the soil" without falling into traps created by the corporate and financial sector or those promoting green capitalism?

Oilwatch initiated the campaign to keep the oil in the soil globally, and it must remain a key actor.³ Its provocative proposal for Paris, for movements fighting against climate change, and for a change in the extractivist and overaccumulation and consumption models, is called "Annex 0".

The UNFCCC divided nations into at least two groups: Annex I and non-Annex I. Annex I countries were required to reduce emissions, while non-Annex I countries were seen as not principally responsible for historic emissions. But the Paris agreement is expected to commit all countries, North and South alike, to mitigation commitments.

One of the problems with both arrangements is that they fail to recognize other crucial actors who are able and willing to accelerate the changes needed to protect the global climate. What is needed now is an Annex 0 that includes, for example, indigenous nations, subnational spaces, and localities that are making concrete efforts to resolve the climate crisis. The UNFCCC should recognize these groups as Parties to, and not merely as observers of, its processes.

After all, it is at this "Annex 0" level that the most important concrete steps are being taken to tackle climate change, to prevent more oil, gas and coal from being extracted, and to provide examples of how life can be lived with little fossil fuel use.

As a part of our proposal for an Annex 0, we must stop talking about carbon emissions once and for all. Let's not talk about the 2800 GtC that exists underground or the 565 GtC that "we" supposedly "can" still emit. Who decides this budget? What is it to be used for, and by whom? If such questions cannot be democratically debated, it would be better simply to discard this dangerous "carbon budget" terminology. It would be better for the IPCC to talk about oil barrel equivalents rather than tons of CO₂, and at the same time to create two more scenarios, one assuming that 70% of underground fossil fuels will remain untapped and another assuming that 100% will remain untapped. Let us see the outcomes.

We know roughly how much fossil fuel reserves remain. We know that at least 70% should be left underground. To translate emissions into barrels of oil, cubic meters of gas or tons of coal would be to bring quantitative discussions more in line with reality. The challenge would be to decide which fossil fuels will be the first *not* to be exploited, and where. That is not going to be decided by the United Nations – it is already being decided by the peoples.

A global campaign to keep the oil in the soil should do more than remove the subsidies from the oil industry or invest in clean and sovereign energy. It must also protect those who join in a practical and concrete manner to build this initiative. The peoples of Annex 0 must be made visible and their contributions recognized. They must be rewarded for their commitment and not criminalized.

Ivonne Yánez ACCIÓN ECOLÓGICA Quito, June 2015

- 1 UNFCCC. A Brief Overview of Decisions. http:// unfccc.int/documentation/decisions/items/2964.php Fecha de consulta: 11 de junio de 2015
- 2 OILWATCH. Declarations. http://www.oilwatch sudamerica.org/documentos/26-declaraciones.html
- 3 http://www.amazoniaporlavida.org/es/La-propuesta/

4 CONFRONTING CLIMATE CATASTROPHE: DIRECT ACTION IS THE ANTIDOTE FOR DESPAIR OR WHY THE UN IS WORSE THAN USELESS

BY ANNE PETERMANN

I attended my first UN Climate Conference in 2004 in Buenos Aires, and my last in 2011 when I was permanently banned from the UN Climate Conferences following a direct action occupation at the Climate COP in Durban, South Africa.

But I actually got involved with the UN Climate Conferences through the work I spend most of my time on, which is stopping the dangerous genetic engineering of trees.

In 2003, the UN Climate Conference decided that GE trees could be used in carbon offset forestry plantations. Why? Because Norway tried to get them banned and Brazil and China blocked them, so GE trees got in the back door. This is one of the dysfunctions of the UN Climate Convention.

But it wasn't until 2007 that the UN and the World Bank announced the launch of the "Reducing eEmissions from Deforestation and forest Degradation" initiative, or REDD, with a press conference featuring then-World Bank President Robert Zoellick. Zoellick is one of the key figures in the "Project for a New American Century", which strategized to advance US global domination after the collapse of the Soviet Union, and orchestrated the Iraq War in 2003.

Yet there he was in Bali, Indonesia, at the UN Climate Conference, talking about the need to protect forests to help stop climate change. Why would he do that?

Because REDD is a scheme to enable business-as-usual under a green veneer. It lets corporations like Chevron buy forests in the Global South to "absorb" their pollution rather than cut their emissions at source.

In fact, REDD creates a framework that encourages the theft of the most ecologically diverse lands remaining on the planet from the people who have historically protected them – the Indigenous and forest-based peoples who depend on them for their existence. It was protested almost daily during the two week Conference.

By the end of Bali, organizations, social movements and Indigenous Peoples from around the world came together to form Climate Justice Now! (CJN!) to demand justice-based and ecologically appropriate approaches to the climate crisis.

Two years later, the Climate Conference in Copenhagen, Denmark, was scheduled to start on November 30, 2009, the 10th anniversary of the historic shutdown of the World Trade Organization in Seattle, US. The Seattle WTO shutdown was a watershed moment for the global movement against corporate globalization.

We planned to use that auspicious anniversary and the framing of the UN as the World Carbon Trade Organization, to build momentum for a mass action in Copenhagen.

We announced these plans at a press conference during the UN Climate Conference in Poznan, Poland, in 2008. The next day, the UN pushed back the start of the Copenhagen event back by one week.

At the press conference, Climate Justice Now! released a powerful statement denouncing the UN titled, "Radical New Agenda Needed to Achieve Climate Justice." We will not be able to stop climate change if we don't change the neo-liberal and corporate-based economy which stops us from achieving sustainable societies. Corporate globalisation must be stopped.

Solutions to the climate crisis will not come from industrialised countries and big business. Effective and enduring solutions will come from those who have protected the environment – Indigenous Peoples, women, peasant and family farmers, fisherfolk, forest dependent communities, youth and marginalised and affected communities in the global South and North.

We stand at the crossroads. We call for a radical change in direction to put climate justice and people's rights at the centre of these negotiations.

The following year in Copenhagen, Climate Justice Now! and Climate Justice Action, a network created to organizecoordinate direct actions around the Copenhagen Conference, organized the "Reclaim Power!" march out. Country delegations, organizers and others, led by Indigenous Peoples, marched out of the talks in protest of the lack of meaningful and just action, and the silencing of people's voices, while thousands were trying to break the police lines outside of the Conference centerre.

Meanwhile, inside the negotiations, the US was bribing and threatening other countries to go along with Obama's secretly negotiated and disastrous "Copenhagen accord." But Venezuela and Bolivia refused to capitulate and it was not adopted.

CJN! released a statement at the end of the Copenhagen Catastrophe which was titled Call for "system change not climate change" unites global movement:

Government and corporate elites here in Copenhagen made no attempt to satisfy the expectations of the world. False solutions and corporations completely co-opted the United Nations process. Virtually every proposal discussed in Copenhagen was based on a desire to create opportunities for profit rather than to reduce emissions. The only discussions of real solutions in Copenhagen took place in social movements.

Our demonstrations, organised together with Danish trade unions, movements and NGOs, mobilized more than 100,000 people in Denmark to press for climate justice, while social movements around the world mobilized hundreds of thousands more in local climate justice demonstrations.

While Copenhagen has been a disaster for just and equitable climate solutions, it has been an inspiring watershed moment in the battle for climate justice. The governments of the elite have no solutions to offer, but the climate justice movement has provided strong vision and clear alternatives.

At the next two Climate Conferences, in Cancun, Mexico and Durban, South Africa, the UN cracked down on dissent. Any demonstrations or protests had to be permitted or participants would be ejected from the conference. Even wearing a t-shirt with an unsanctioned message was enough to lose your credentials.

All of this led to the youth occupation of the hallway in Durban. And the permanent banning of my colleague and myself.

And the next year the UN Climate Conference went to Doha, Qatar, just like the WTO.

Is there hope that the UN will accomplish real, effective and just action on climate change in Paris this year? No.

Will they promote dangerous profit-driven false solutions that endanger people's lives and further destroy the planet's life support systems? Yes.

Are people standing up to corporate power, shutting down the polluters and building and defending their own solutions to climate change? Yes. Is it time for the rest to stand up in solidarity and do the same? Yes.

Is it possible to change this entrenched system? It has to be. We don't have any other choice.

We have seen the power people have when they refuse to obey, when they take on the power structure through creative and direct action, when they stand up for their rights.

People are putting their lives on the line to defend their communities and their lands against the ravages of climate change, the main drivers of the crisis and the false solutions like biofuels – for example, small farmersfarmers in Honduras and Indigenous Peoples in Indonesia rising up against oil palm plantations in the face of violent repression and murder and loss of territories and livelihoods. Farmers in Mexico fighting industrial wind farms, Innu people in Quebec organizing to stop massive

hydroelectric dams that would drown their ancestral lands. Tupinikim and Guarani peoples who cut down industrial eucalyptus plantations in Brazil to re-establish their ancestral villages, and when the government burned them down, they came back and rebuilt them again. In Kenya, rural women are teachingsharing with each other how to grow traditional foods to become less dependent on food aid, often in the form of GMOs, and more resilient to climate change.

And La Via Campesina is organizing small farmers around the world who are practicing traditional agriculture, and feeding people while cooling the planet.

There are thousands of such inspirational examples.

As those of us know who've been involved in the movement, who've spent time in jail, there is great power in taking action for your beliefs and not backing down. In putting your body on the line. In saying No.

Because direct action is the antidote for despair.

THE INJUSTICES INSIDE 5 CLIMATE SCIENCE

By ABBY OHMANN

Some pieces in this booklet describe the unjust distribution of the effects of climate change. Others analyze injustices committed in the name of climate change "mitigation" and "adaptation". This chapter is a bit different. It is about the injustices inherent in mainstream climate science, and in the ways that climate science shapes how we approach climate itself. It is also about how activists might reorient themselves with respect to this science in order to build better alliances.

Climate activists often hold up climate science as a justification for their actions. And with good reason. True, not everybody needs experts from the Intergovernmental Panel on Climate Change to tell them how serious global warming is. People in the Ganges Delta who have seen their houses dissolve into the sea already know what is at stake. Nor do small farmers who see the impacts on local animals and plants necessarily need laboratory instruments to tell them that something is wrong. But to convince middle-class intellectuals of the world scale of the issue, itis hard to avoid falling back on computer-driven general circulation models (GCMs) backed by diverse data-gathering techniques and networks that have taken over a century of painstaking climatological effort to build.1

Yet some of the very strengths of this science are also problems. Climate modelling divides a "nonhuman" nature (CO2 molecules, cloud albedo, methane clathrates) from a "nonnatural" society (surplus extraction, labor unions, energy policy). Climatologists study the antics of stripped-down greenhouse gas molecules as if they had no history or politics. Year by year, they build up an ever-heftier and more detailed account of actual and possible interactions among objects carefully isolated from the human world while turning their gaze away from the interactions that make climate change a complexly entangled socionatural process.

For example, the "climate change" process that GCMs portray is indifferent to distinctions between "subsistence CO₂" and "luxury CO₂" or between emissions from indigenous agriculture and emissions from fossil fuel combustion.2 Excluding oil company politics, the disciplining of workers, or the oppression of women, the way GCMs frame climate change continually relocates causation and responsibility either to the molecular level or to the level of an imaginary overseer who might "manage" the climate machine in the way a hobbyist stands over a miniature railway set. This manager is none other than a version of the simplified anthropos found in the phrase "anthropogenic climate change".

For climatologists, this bias is not a matter of individual choice. It derives not just from the capitalist drive to create and isolate "nonnatural" humans who can make commodities out of natures carefully construed as "nonhuman". It is also part of the specific genealogy of climate models themselves, which can be traced back through Cold War-era cybernetics, systems analysis and computer simulations of the nonlinear fluid dynamics of nuclear explosions; World War II-era artillery-control servomechanisms; and ultimately the mechanical feedback-control "governors" required by Industrial Revolution steam engines.3

What happens when this rigorously "non-social" climate becomes dangerously unstable and somebody has to do something about it? It must be reconnected to human politics. But how? The entire modelling exercise has depended on ignoring the millions of connections linking global warming with - for example - the hegemony of fossil capitalism and the struggle against commons.4 Merely to put the two little objects called "subsistence CO," and "luxury CO," back in the climate equation would mean opening up climatology to negotiations about what subsistence is and what

luxury is – negotiations that neither political leaders nor their scientific advisers tend to have much interest in conducting. It is as if a surgeon, after having hacked out a person's brain and spinal cord, were to try to put them back and reconnect them, neuron by neuron, to the rest of the body.

Far easier just to finesse the problem. Purify climate change into an exclusively "natural" phenomenon and you simultaneously purify humanity into a simplified "nonnatural" phenomenon unconstrained by its embeddedness in the nonhuman – something like the hobbyist with his model railway. Once the climate issue is reduced to molecules, then the obvious way to reconnect it to society is to link it to imaginary molecule controllers whose ultimate motivations can be expressed in numbers: 350 parts per million or a 1.5 C temperature increase.

Hence the phantasmic discourse of the United Nations and the "green economy", which puts in the foreground not hundreds of millions of workers and bosses uneasily entangled with fossil-fuelled machines, nor commoners and leaseholders doggedly fighting over extractivism, but rather supposedly all-powerful "world leaders", economists and bean-counting individual consumers "discovering" carbon prices that will somehow check the accumulation of CO₂ molecules without affecting the state of class struggle at all.

What does all this have to do with justice? Every migrant that arrives in Europe or North America because she has been displaced by plantations of supposedly "carbon-neutral" agrofuels is not only a climate refugee, but also a victim of the injustice that is woven into the very fabric of mainstream climate science, which tells us that when it comes to causing or preventing catastrophe, one CO, molecule is equal to another. Every forest people lumbered with the responsibility of using its territory to compensate for industrial emissions that it has had no hand in creating is being oppressed by the same climatology. Every scientific argument for new ways of instrumentalizing supposedly nonhuman natures - such as geoengineering the oceans for greater carbon absorption - is as much of an insult to Indigenous Peoples as the colonialist takeovers of the last millennium.

Does that mean rejecting climate science? No more than recognition of the injustices inherent in every nation's legal codes means ignoring the courts, refusing to hire lawyers, or burning law schools. A world that capital is constantly trying to bifurcate between a monolithic society and a monolithic nature - and partially succeeding - is one of the worlds we occupy. For that very reason it must be one of the targets of popular struggle. To call attention to the unjust biases in climate science is not to wish yet again for an unbiased science based on a purified "nature", but to demand a better-biased science that self-consciously recognizes its place in the evolution of more democratic socionatures. It is to understand that the political injustices inherent in climatology are scientific weaknesses. Climate activists should regard themselves not as unquestioning envoys of the latest climatology to "political leaders", but rather as people seeking political change within climate science as well as without.5

- 1 Paul Edwards, A Vast Machine: Computer Models, Climate Data, and the Politics of Global Warming, Cambridge, MA: MIT Press, 2013.
- 2 Anil Agarwal and Sunita Narain, Global Warming in an Unequal World, New Delhi: Centre for Science and Environment, 1991.
- 3 Fernando Elichirigoity, Planet Management: Limits to Growth, Computer Simulation, and the Emergence of Global Spaces, Evanston: Northwestern University Press, 1999; James R. Beniger, The Control Revolution: Technological and Economic Origins of the Information Society, Cambridge, MA: Harvard University Press, 1986.
- 4 Andreas Malm, Fossil Capital: The Rise of Steam-Power in the British Cotton Industry c. 1828-1840 and the Roots of Global Warming, Ph.D. dissertation, Lund University, 2014.
- 5 Larry Lohmann works with The Corner House, a solidarity and research organization based in the UK. His other writings on climate can be found at www. thecornerhouse.org.uk.

Over recent years, and especially since the financial crisis of 2008, the term Green Economy has become a hub around which the hegemonic discourse is reorganizing. The spread of the "Green Economy" as a slogan, has been very effective – politically and ideologically – to help forge a powerful unifying narrative, and at the same time to catalyze the sense of involvement necessary in the post-crisis financial period since 2008. The green economy has gained increasing visibility and has entered the mainstream political discourse, from the words of heads of state, to G20 finance ministers, in the press, and the so-called UN Environment Program for a Global Green New Deal.

However, there is no definition of the term to clarify whether it is something entirely different from the current economy. Even so, UN agencies, multilateral organizations, the World Bank, regional development banks, the European Parliament, international consultants, business coalitions and other actors have made proposals, listed priority sectors and industry agendas have been defined; They have established goals and targets, and recommended new financial instruments and investments for change towards a "greener" future.

The greening of the economy today set a process that is already heavily influencing the development of public policies in many countries; This includes legal reforms and ongoing regulatory adjustments, to pave the way for a "green transition", justified in the name of strengthening the institutional capacity of countries to trigger a new economic cycle, in which growth and development take account concerns of sustainability (climate, biodiversity, energy, social inclusion and poverty eradication, etc.). In fact, the establishment of a green economy is a process that is only possible with the active participation of states and governments, as its implementation depends on the centrality of a legal system that ensures the creation of new laws, reform or adjustments of existing policy parameters, and the consequent security and legal validity of contracts and investments.

THE EMPEROR'S 6 GREEN CLOTHES THE GREEN ECONOMY: A NEW SOURCE OF PRIMITIVE ACCUMULATION

by Camila Moreno

In the repertoire of the green economy public policies are supposedly used to combat climate change through trade in carbon emissions and mechanisms such as the Clean Development Mechanism (CDM) and financing for Reducing Emissions from Deforestation and Degradation (REDD+); in the same way, biodiversity policy, increasingly incorporated into the national schemes such as, payments for environmental services, biodiversity offsets, water (including water bonds), habitat banking of threatened species (species banking), and a wide range of new "environmental assets", including the creation of new international markets, such as carbon.

Decarbonization or Depoliticization?

A structural criticism that we are presented with is: a "strategy" of low carbon, for whom? Low carbon metrics reduces reality to a single narrative and makes invisible conflicts of interests, power plays, ideologies and provides contradictions of reality, and further subjects individuals and collectives to structural violence and injustice.

The depoliticization of this debate operates under the assumption that "managing" carbon and its technological components has to do with the way in which Larry Lohmann (2008) points out as, "all social and political problems stemming from climate change (which can privatize and possess the atmosphere, such as the carbon market, for example) have been overshadowed by the neoclassical economic language." To this is added the fetish in the belief of the supposedly "scientific", immune to the "ideological" which favors the presentation of "objective" data that generates visual and graphic impacts; a feature of the current political culture, to the detriment of the political and critical argument.

In addition, policy-making processes, laws, studies and strategies of low carbon become a "business plan" with banks and consulting firms that advise governments as if they were businesses.

Given that more or less "carbon" is, in plain language, the quantification and control of energy content and the relationship with that resource after the energy is generated (fossil or "renewable"), from a wide-angled perspective, the green economy gives us clues of what type of transition the oil civilization – and capitalism – have planned to ensure their reproduction.

A key discursive shift: from the "negative" climate policy to the "positive" green economy

Over recent years, the subject of climate change and the fight against global warming and "climate justice", has managed to take a central role in the international agenda and incorporated into the agendas, discourse and mobilizations global civil society. This process peaked at the Copenhagen Conference in December 2009 (COP 15 of the UNFCCC), where expectations of achieving a legally binding agreement to curb climate change failed. Since Copenhagen, the negotiations have not advanced substantially towards a new agreement. The latest development is a plan for a new global agreement by 2015, to come into force in 2020.

The type of change is symptomatic of this process. The term, until then widely used and disseminated, which related to the transition process towards a lo carbon economy, development of low carbon and even growth of low carbon, becomes permanently replaced, in the same contexts and by the same actors, with the term "green economy". A shift aparently discursive, but determined by a consolidated hegemony. Faced with the demobilization of public

opinion, the moment surpassed the international momentum in the fight to save the climate, and before the inescapable reality of the economic crisis, the scenarios of low carbon consumption and imperative challenge to decarbonise economies evoked the reduce, reuse, avoid, ideas unappitizing in times fighting against the stagnation of economic growth.

In fact, the priciple metamorphosis occured when the term "low-carbon" was replaced by a more effective term with the slogan "green economy" which seems to capture the environmental sensitivities of society and consumers more effectively. It is much more plausible when, in addition, the term "green growth" sounds much better and more convincing than the "growth of low-carbon" (which remains the terms used in the more "technical" language).

Green economy or how to correct a market failure

In an attempt to circumscribe "in its most basic form" what would be the green economy, the formulation incorporates the central metrics or "carbon measurement" used in climate policy: the reference to equivalent metric tons of carbon dioxide (1 tCO2e = 1 unit of certified emission reduction, or = 1 "carbon credit") with the "objective" to achieve (or not) the goal of lowering emissions in relation to the "brown" economy, and endorse the decarbonization as a structural dynamic of the "green" economy.

The environmental crisis from this perspective would be a matter of policy – inextricably dependent on the power relations that guarantee property regimes, access, use and management of resources and territorial authorities, but essentially a market failure; whereby a market failure must be corrected by a market solution including: incorporate and internalize the costs of the externalities, put a price on pollution, reverse perverse subsidies, investment leverage (and profit) to support private and public security policies, provide positive incentives (payments / tax exemptions), promotion of investments in appropriate technologies, etc.

The green economy is not presented as incompatible with its continuance or even accelerated growth based on current parameters. According to this "green" logic, the more the "brown" economy grows, the more funds would there would be (hypothetically) available for more "greening". This can also be argued in the opposite direction: the more environmental degradation and resource scarcity, the more valuable (and expensive on the market) the credits for forest offsets, biodiversity offsets, water permits, carbon credits, etc.

The concept of natural capital, which today is a central demand of finance capital and to a large extent, the precondition for reproducing invisible assets in the traditional economy, such as environmental services (where carbon, biodiversity, water, etc.) are suitable, measured and assessed for trading in the markets. At a time when the global economy is absolutely dependent on and controlled by financial capital, and with the same financial capital crisis, the development and introduction of new assets in the financial market through the expansion of financing is the main strategy to leverage the green economy.

Naturalizing natural capital as an economic reality – but also social, cultural and political entails a new moment of primitive accumulation, with the enclosure or isolation of these environmental assets by creating exclusion (separate indivisible components of biodiversity and ecosystems) and to ensure that what was once a common good, can be transformed into private property.

That is already happening, for example, with the "carbon rights" which are expressed in new forms of control (such as methodologies to measure/quantify, report and verify carbon stocks) and regulated through access management contracts in the territories where these "assets" exist for example, a forest, under a contract of PES or REDD+.

In conclusion

This new hegemonic "green" narrative has achieved great efficiency, to encourage and legitimize the road to build a new acumulation strategy, which rests primarily on the concept of natural capital and the ambitious plan to quantify, assess and incorporate in the markets – through buying and selling environmental services, including the existing carbon markets, biodiversity and, increasingly, water – this is a whole portfolio of environmental goods and services (including the intangible, cultural, etc.) as well as "natural infrastructure" (now referred to as rivers, soils, forests, etc.), which, until now, were "free" provisions from Nature.

The green economy does not present a contradiction to the continuity of the current extractive and energy intensive economy; the "green" mechanisms are designed to create value and to be complementary and interdependent on the current economy. Therefore, it functions as a form of an economic mirror: it is precisely based on the shortage of resources and pollution generated by today's economy, that which is generating value from environmental assets of the green economy. In the end, if water was abundant and clean, who would pay for it? If the air was clean and unpolluted, could one sell the services of forests as carbon producers?

Civil society has constructed a large body of critique and criticism over the last decade focused on confronting, resisting and creating alternatives to globalization, free trade, neoliberalism and the Washington Consensus, however we face a huge setback today against the crystallization of a new consensus, a "green" consensus. Resistance to financialization and natural capital is an imperative, urgent challenge on the horizon for mobilization and alliance building, just as the construction of an ecological and energy transition, central and inescapable, is as a challenge to overcoming capitalism.

7 WHAT IS AND WHAT ARE THE IMPACTS OF THE FINANCIALIZATION OF NATURE?

by COECOCEIBA – Friends of the Earth Costa Rica Isaac Rojas and Lúcia Ortis

June 2015

Nature is essential for our lives and is essential for how life can exist. Many communities – campesinas, traditional fishers and Indigenous Peoples for example – have depended on nature for their daily lives and thanks to this relationship, Naure has preserved, has bettered and has adapted to new conditions. These communities in the same way, are a part of this Nature and the link between them, cannot be separated.

We know that Nature is used as a base for development of many products that are used and bought today. We also know that Nature fulfills a number of functions that guarentee life. Diverse industries use Nature as primary material, depending on it. A part of this dependency and in order to ensure economic gains, industries like the pharmaceutical, agriculture and genetic engeneering create strong advocacy and lobbying with governmental bodies and some of them endorse the demands by making new legistlation that lead to or facilitate the privatization and corporate appropriation of Nature.

The emergence of national and international law on intellectual property, on seeds and other form of life, can be explained because of the need of the pharmaceutical and agribusiness sectors to privatize life.

Other types of companies, that include the financial sector, have promoted measures and policies in the last few years aimed at appropriation and privatization of the functions of Nature to generate new buisness.

One example of the involvement of these new businesses is the following: we know that forests, can capture carbon dioxide, they play an important role

in regulating the global climate. This function is more important today because of the climate crisis we are facing. In very simple terms there are two ways to combat the climate crisis. The first is to go to the causes and eliminate them. We could promote a model of public transport and make it less attractive to use a car. We could also eliminate free trade policies that make it cheaper to transport food across the world that we plant in our own countries.

A second way to deal with climate change is to fight against it, but the reality is that nothing is getting done. So instead of limiting polluting activities, polluting industries are being provided with various conditions and even rewarded. These rewards are done in this way: they say that if the forests are not given a price, they will not be protected - when we know that this is a lie. These types of payments have various functions related to how the forest absorbes carbon dioxide. After making various calculations, they establish that a particular forest is able to absorb a certain amount of carbon dioxide. Once this calculation is made, it is offered through financial mechanisms – as carbon credits – to trade the ability of that particular forests to absorb and "save" that carbon. These credits are bought and sold in financial markets, and through supply and demand, a price is created.

According to those who defend this way of dealing with climate change, emissions of greenhouse gases balance because there will be a certain number of carbon credits by issues of supply and demand. From experience we can see that this solution is more of a problem since it perpetuates the causes of climate change – increased greenhouse gas emissions - and does not require any change in production patterns. In addition, these types of false solutions create impacts from the principle of the privatization of forests through violating the rights of local communities and Indigenous Peoples. This happens because when the carbon credits are sold, the forests are intended to be preserved - from a conservation vision – and therefore communities cannot continue using elements of the forest for example to cure a disease, make artisanal goods or collect food.

With the climate crisis there has been a boom in these types of mechanisms that proponents claim are protecting the environment without causing impacts. That is, mechanisms that masquerade as solutions, various actions that rather reinforce polluting behaviors and activities. These mechanisms function because they say: "One who sins and then prays is even." So if I pollute and then buy carbon credits, I do well and I can keep doing the same. And if I do not make it, I buy more credits.

These mechanisms began to move from climate issues to others including biodiversity and water... covering diverse elements of Naure. All of these financial mechanisms, demonstrate that today, financing, the financial markets are messing with Nature with the aim to turn it into a financial asset. So forests stop being forests in order to be converted into a carbon credit. A bee stops being a bee in order to convert it into a credit that can be bought and sold in a market due to the function of pollinization that the bee performs.

The arrival of financial markets into environmental issues, is explained as: all the functions of Nature can be converted into financial assets that can be bought and sold in a market. Those who can buy them can use them and those who can use them can continue to pollute.

This new relationship between finance and Nature, is known as Financilization of Nature. It can be seen as a new step that deepens the conversion of Nature into a things that can be bought and sold. In addition to the idea "One who sins and then prays is even," in Financilization of Nature we encounter another concept that Nature is made up of elements that can be exchanged, one for another and even though they are different, and occur in very different geological areas.

One mining company for example, can continue their gold mining activities even after admitting they are exploiting and having a profound impact on a region in Indonesia. They maintain that the activities are safe as stated in the environmental impact assessment and that they are providing employment. With the Financialization of Nature, they can also say that they have lowered their pollution levels and decreased their environmental impact through buying a determined amount of carbon credits that is saving forests in Costa Rica. So the company can appear to be concerned with the environment but never has to stop its mining activites but can difuse critisism and their conscious by buying these types of credits. That is, they pay for business-as-usual. So, the company says they offset their impacgts. This hides an enormous deception because we know that Nature and its elements are not interchangeable.

Financialization of Nature has the following impacts:

- Privatization of the elements of Nature and its functions violates the rights of traditional local communities and Indigenous Peoples who have depended and are dependent to some extent to the Nature that is being privatized. Their right to enjoy Nature and use Nature in a sustainable way, the rigth to live in their territories, and their rights to traditional knowledge that they protect are some of the these violated rights.
- It creates an artificial division between Nature and community: it ignores the relationship that exists between them, it ceases to exists, because the relationship does not fit the logic of Financialization. Nevermind that an urban forest that provides a space for enjoyment and peace in a neighborhood can be destroyed if it is susbstituted by another in a rural area or if carbon credits are bought or invested in a financial fund that will give funding for environmental protection somewhere else. As a result, the relationships that people create and build with Nature cease to exist.
- Nature is seen and felt in this system as a series of objects that can be exchanged for one another thus losing the unique characters they possess. This system gives no importance if a forest is destroyed in Asia and "preserved" in Africa or Latin America, what is important is the power to say that money can be used for conservation to continue destroying and polluting. Even when accepting the money for conservation purposes, there is no guarantee this is true.
- Because of this artificial division and perception,
 Nature loses all of its values including cultural and spiritual values.

COECECEIBA – Friends of the Earth Costa Rica is an environmental organization founded in April 1999 and since that moment has build work together iwth campesinas, Indigenous Peoples and fishing communities. COECECEIBA has participated in diverse struggles on a national level and forms part of an alliance of spaces and builds social movement in Costa Rica. It is a member of Friends of the Earth International.

Isaac Rojas is a member of COECOCEIBA – Friends of the Earth Costa Rica and the coordinator of the Forest and Biodiversity Program of Friends of the Earth International. He has wored with campesinas, Indigenous Peoples, fishing communities and diverse organizations in popular movements.

Lúcia Ortis is a member of NAT - FoE Brazil and co-coordinator of the Economic Justice Resisting Neoliberalism at Friends of the Earth International.

SECTION II



Climate change, the biggest threat to the planet appears to be amplifying, as the "financialization of nature" through carbon markets resumes in earnest. The failure of the Kyoto Protocol's emissions trading strategy in Europe may soon be forgotten once the emerging markets ramp up their investments, especially if carbon markets remain a central feature of a Paris COP21 agreement. If so, several that have begun the process - China, Brazil, India and South Africa -, are likely to open the door to full-fledged markets, now that (since 2012) they no longer qualify for generating credits through UN's offset scheme, the Clean Development Mechanism (CDM). The Kyoto Protocol had made provision for low-income countries to receive CDM funds for emissions reductions in specific projects, but the system was subject to repeated abuse. China is already far advanced, with seven metropolitan markets covering the major cities' output, and a national market anticipated there in late 2016.

In Ufa, Russia, in July 2015, the Brazil-Russia-India-China-South Africa (BRICS) summit accomplished very little aside from codifying new financial institutions, especially a New Development

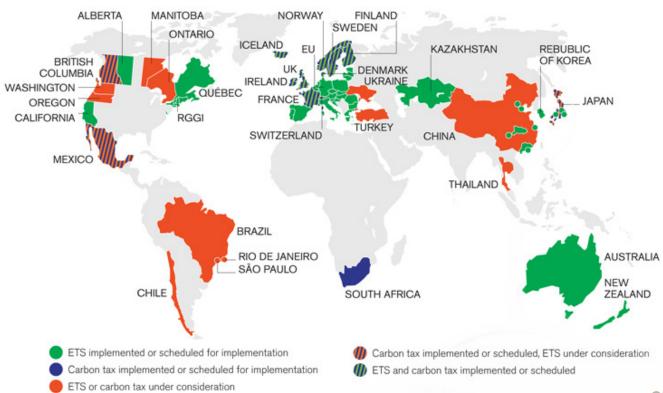
CARBON TRADING REBORN IN NEW-GENERATION MEGA-POLLUTERS

by Patrick Bond

Bank which is certain to amplify the BRICS' green-house gas emissions. On climate change, according to the final declaration, there were only stock arguments: "We express our readiness to address climate change in a global context and at the national level and to achieve a comprehensive, effective and equitable agreement under the United Nations Framework Convention on Climate Change."

The UNFCCC still strongly believes in carbon trading, and indeed its secretary Christiana Figueres came to the UN from the carbon markets. Assuming a degree of state subsidization and increasingly stringent caps on greenhouse gas emissions, the

The world's carbon markets



Kyoto Protocol posited that market-centric strategies such as emissions trading schemes and offsets can allocate costs and benefits appropriately so as to shift the burden of mitigation and carbon sequestration most efficiently. Current advocates of emissions trading still insist that this strategy will be effective once the largest new emitters in the BRICS bloc are integrated in world carbon markets.

Critics, including the Pope, argue instead that, as the June 2015 Encylical puts it, "The strategy of buying and selling carbon credits can lead to a new form of speculation which would not help reduce the emission of polluting gases worldwide. This system seems to provide a quick and easy solution under the guise of a certain commitment to the environment, but in no way does it allow for the radical change which present circumstances require. Rather it may simply be a ploy which permits maintaining the excessive consumption of some countries and sectors."

At the Paris summit of the UNFCCC, the COP21 is anticipated to remove the critical "Common but Differentiated Responsibility" clause that traditionally separated national units of analysis by per capita wealth. The COP21 appears to already have been forestalled in late 2014 by the climate agreement between Xi Jinping and Barack Obama, representing the two largest absolute GHG emitters: China and the US. That deal ensures world catastrophe, for in it China only begins to reduce emissions in 2030 and the US commitment (easily reversed by post-Obama presidents) is merely to reduce emissions by 15% from 1990 levels by 2025. Likewise in June 2015, the G7 leaders agreed to decarbonise their economies but only by 2100, raising the prospects of runaway climate change. The BRICS bloc's role in forging inadequate global climate policy of this sort dates to the 2009 Copenhagen Accord at the COP15 when a side-deal between Obama and four of the five BRICS' leaders derailed the much more ambitious UNFCCC.

The failure of the carbon markets to date, especially the 2008-14 price crash, which at one point reached 90% from peak to trough, does not prevent another major effort by states to subsidize the bankers' solution to climate crisis. The indicators of this

strategy's durability already include commodification of nearly everything that can be seen as a carbon sink, especially forests but also agricultural land and even the ocean's capacity to sequester carbon dioxide (CO₂) for photosynthesis via algae. The financialization of nature is proceeding rapidly, bringing with it all manner of contradictions.

Due to internecine competition-in-laxity between climate negotiators influenced by national fossil fuel industries, the UN summits appear unable to either cap or regulate GHG pollution at its source, or jump-start the emissions trade in which so much hope is placed. European and United Nations turnover plummeted from a peak of US\$140 billion in 2008 to US\$130 billion in 2011, US\$84 billion in 2012, and US\$53 billion in 2013 even as new carbon markets began popping up.1 But after dipping to below US\$50 billion in 2014, volume on the global market is predicted by industry experts to recover to US\$77 billion (worth 8 gigatonnes of CO, equivalents) in 2015 thanks to higher European prices and increased US coverage of emissions, extending to transport fuels and natural gas.2

However, geographically extreme uneven development characterizes the markets in part because of the different regulatory regimes. Since 2013 there have been new markets introduced in California, Kazakhstan, Mexico, Quebec, Korea and China, while Australia's 2012 scheme was discontinued in 2014 due to the conservative government's opposition. The price per tonne of carbon also differs markedly, with early 2015 rates still at best only a third of the 2006 European Union peak: California around US\$12, Korea around US\$9, Europe around US\$7.3, China at US\$3-7 in different cities, the US northeast Regional Greenhouse Gas Initiative's voluntary scheme at US\$5, New Zealand at US\$4 and Kazakhstan at US\$2. The market for CDMs collapsed nearly entirely to US\$0.20/tonne.

These low prices indicate several problems.

• First, extremely large system gluts continue: 2 billion tonnes in the EU, for example, in spite of a new "Market Stability Reserve" backstopping plan that aimed to draw out 800 million tonnes.

- Second, the new markets suffer from such unfamiliarity with trading in such an ethereal product, emissions, that volume has slowed to a tiny fraction of what had been anticipated (such as in China and Korea).
- Third, fraud continues to be identified in various carbon markets. This is, increasingly, a debilitating problem in the timber and forest-related schemes that were meant to sequester large volumes of carbon.
- Fourth, resistance continues to rise to carbon trading and offsets in Latin America, Africa and Asia, where movements against reducing emissions from deforestation and forest degradation (REDD) are linking up.

An overriding danger has arisen that may cancel the deterrents to carbon trading: the international financial system has overextended itself yet again, perhaps most spectacularly with derivatives and other speculative instruments. It needs new outlets for funds. The rise of non-bank lenders doing "shadow banking," for example, was by 2013 estimated to account for a quarter of assets in the world financial system, US\$71 trillion, a rise of three times from a decade earlier, with China's shadow assets increasing by 42% in 2012 alone. The Economist last year acknowledged that "potentially explosive" emerging-market shadow banking is huge, fast-growing in certain forms and little understood. As for the straight credit market, the main result of Quantitative Easing policies was renewed bubbling, with US\$57 trillion in debt added to the global aggregate from 2007-14, of which US\$25 trillion was state debt. By mid-2014 the total world debt of US\$200 trillion had reached 286 percent of global GDP, an increase from 269% in late 2007.

Global financial regulation appears impossible given the prevailing balance of forces, witnessed in failures at the 2002 Monterrey and 2015 Addis Ababa Financing for Development initiatives and various G20 summits after 2008. As a result, the BRICS are especially important sites to track ebbs and flows of financial capital in relation to climate-related investments. In reality, in relation to both world financial markets and climate policy,

the BRICS are not anti-imperialist but instead subimperialist.

The first-round routing of CDM funding went disproportionately to China, India, Brazil and South Africa from 2005 until 2012, but by then, the price of CDM credits had sunk so low there was little point in any case. Moreover, the other Kyoto offsetting mechanism, Joint Implementation, has over 90% of offsets issued by Russia and Ukraine with very limited transparency.

Similar problems of system integrity plague the carbon markets that have opened in China. At the Chinese Academy of Marxism, for example, Yu Bin's essay on 'Two forms of the New Imperialism,' argues that along with intellectual property, the commodification of emissions is vital to understanding the way capital has emerged under conditions of global crisis. The US\$4 trillion lost in the Chinese stock market speculative bubbling in June-July 2015 was one indication that there are no special protections offered by what is termed 'socialism with Chinese characteristics'. The country's financial opacity and favouritism present profound problems for carbon trading. As Reuters reported on July 1 2015,

China said last week it would need to invest 41 trillion yuan (\$6.6 trillion) to meet its U.N. pledges. Some of that investment will be raised through the national carbon market, expected to cover around 3 billion tonnes of carbon emissions – about 30 percent of the annual total – by 2020. But liquidity on China's seven pilots schemes has remained low, with just 28 million permits traded over two years, only about 2 percent of the permits handed out annually. Prices in five of the markets have fallen sharply, with the Shanghai market ending its compliance year on Tuesday at 15.5 yuan (US\$2.6), down 38 percent from its launch. Permits in the biggest pilot exchange in Guangdong have dropped 73 percent to 16 yuan.

Regardless of the reality of carbon trading contradictions, if policy continues to favour corporate strategies, an even greater speculative bubble in carbon

finance can be anticipated in the next few years, as more BRICS establish carbon markets and offsets as strategies to deal with their prolific emissions. In South Africa, neither the 2011 National Climate Change Response White Paper nor a 2013 Treasury carbon tax proposal endorsed carbon trading. In part because of the oligopoly purchasing conditions anticipated as a result of two vast emitters far ahead of the others: the state electricity company Eskom and the former parastatal Sasol which squeezes coal and natural gas to make liquid petroleum at the world's single largest emissions point source, at Secunda near Johannesburg. But by April 2014, carbon trading was back on the official policy agenda, thanks to the British High Commissioner whose consultants colluded with the Johannesburg Stock Exchange to issue celebratory statements about "market readiness."

With all of South Africa's carbon-intensive infrastructure under construction, the official Copenhagen voluntary promise by President Jacob Zuma – cutting GHG *emissions* to a "trajectory that peaks at 34% below a business as usual trajectory in 2020" – appear to be impossible to uphold, just four years after it was made. The state signalled its reluctance to impose limits on pollution in February 2015, when Environment Minister Edna Molewa gave Eskom, Sasol and other major polluters official permission to continue their current trajectories for another five years, ignoring Clean Air Act regulations on emissions of co-pollutants such as sulphur dioxide and nitrogen dioxide.

Other BRICS countries have similar power configurations, and in Russia's case it led to a formal withdrawal from the Kyoto Protocol's second commitment period (2012-2020) in spite of huge "hot air" benefits the country would have earned in carbon markets – for *not* emitting at 1990 levels – as a result of the industrial economy's deindustrialization due to its exposure to world capitalism during the early 1990s. That economic crash cut Russian emissions far below 1990 Soviet Union levels during the first (2005-2012) commitment period. But given the 2008-13 crash of carbon markets, Moscow's calculation shifted away from the Kyoto Protocol, so as to promote its own oil and gas industries without limitation.

The attraction of carbon trading in the new markets, no matter its failure in the old, is logical when seen within a triple context: a longer-term capitalist crisis which has raised financial sector power within an ever-more frenetic and geographically ambitious system; the financial markets' sophistication in establishing new routes for capital across space, through time, and into non-market spheres; and the mainstream ideological orientation to solving every market-related problem with a market solution, which even advocates of a Post-Washington Consensus and Keynesian economic policies share. Interestingly, even Paul Krugman had second thoughts, for after reading formerly pro-trading environmental economist William Nordhaus' Climate Casino, he remarked, "The message I took from this book was that direct action to regulate emissions from electricity generation would be a surprisingly good substitute for carbon pricing." This U-turn is the hard-nosed realism needed in understanding how financial markets continue to over-extend geographically as investment portfolios diversify into distant, risky areas and sectors. Global and national financial governance prove inadequate, leading to bloated and then busted asset values ranging from subprime housing mortgages to illegitimate emissions credits.

No better examples can be found of the irrationality of capitalism's spatio-temporal-ecological fix to climate crisis than a remark by Tory climate minister Greg Barker in 2010: "We want the City of London, with its unique expertise in innovative financial products, to lead the world and become the global hub for green growth finance. We need to put the sub-prime disaster behind us." As BRICS are already demonstrating, though, new disasters await, for both overaccumulated capitalism in general and for what will be, for the next few years at least, *under*-accumulating carbon markets.

- 1 Reuters, 2014, "Value of global CO2 market drops 38 percent in 2013," 2 January, http://uk.reuters.com/article/2014/01/02/co2-market-global-idUKL6N0KC1UY20140102
- 2 Ibid.

In early June 2015, the CEO of oil giant BP, Bob Dudley, gave a remarkable speech at the World Gas Conference in Paris. He presented a new role for oil multinationals like BP in "shaping the age of gas". His argument is to convince the world, starting from Europe, that gas is the cleanest fossil fuel, and it has a major role in the energy transition that would save the climate.

This is how oil corporations are getting ready for the climate discussions in Paris. And this is how they framed the argument – "gas is the transition fuel" – which has been pushed for years in policy documents and transition scenarios from major environmental organizations.

This unhappy convergence of visions shares the approach of looking at the planet as a connection of maps, numbers, resources and CO₂ molecules, rather than a place where humans, as a part of "nature", have been living for centuries. The same approach describes "nature" as something rather out there, that should be eventually "protected", and not as the environment in which we live through a complex set of relations rooted in many values that could be polarized around either exploitation or the commons.

In June when Bob Dudley was speaking, I was getting ready to leave to Azerbaijan, a small country on the Caspian Sea where BP has been operating since the mid-1990s, right after independence from the former Soviet Union. Due to BP's operations, Azerbaijan is described as a key energy partner for European "energy security". I was in the country one year before, and since then all the non-governmental organizations and independent media, with whom we have been in touch, were shut down by the government. Activists and journalists are mostly in jail under fabricated charges, or have escaped abroad.

Emin Huseynov, journalist and founder of the Institute for Journalists Freedom and Safety, was hiding at the Swiss embassy in Baku for 10 months before leaving the country under diplomatic protection of the Swiss government on June 12th, 2015.

"SHAPING THE AGE 9 OF GAS": HOW THE EU LOCKS IN A DESTRUCTIVE PATH

by Elena Gerebizza¹ Re:Common

Azerbaijan is a country with over 100 political prisoners, including very young activists whose crime was to call for freedom of expression on a Facebook page. The economy of the country is directly or indirectly controlled by the ruling family, the Aliyev, in power since independence in 1991. The people of Azerbaijan are looking for spaces and opportunities to raise their voices and keep calling on the EU to support their demands for respecting basic freedoms in the country. They denounce that every new economic deal with other countries is reinforcing the power of the ruling family, and the repression against every remaining free voice. They use words such as "corruption" and "rights", but not "infrastructure" or "climate change".

However, the EU and BP describe the mega gas pipeline that will connect Azerbaijan to Europe as a "project of common interest", strategic for EU "energy security". This is potentially the largest project ever built between Europe and a neighboring country: a price tag of 45 billion euro and more than 3,500 kilometres of pipes to be built between the western coast of the Caspian sea, in Azerbaijan, and the south-eastern coast of Italy, in one of the few remaining pristine marine areas in Apulia, passing through Georgia, Turkey, Greece and Albania.

Communities on the two ends of the pipeline are concerned for reasons that are more complex than only environmental issues. Their concerns are rather around democracy, whose principles have been torn apart to make space for the pipeline on its Italian end, and around basic freedoms and rights to speech

on the Caspian side. Since the intergovernmental agreements for the construction of the pipeline were signed in 2013, the government of Azerbaijan felt politically covered to arrest every non-embedded voice in the country, to close every independent media and every international organization in the attempt to cut connections between civil society in the country with the rest of the world.

In Italy, the consultation of the Environmental Impact Assessment was flawed. Various government offices gave different opinions on the project. All the local administrations - from the municipality level to the province and region - rejected it and asked for alternatives that were never provided. However, the Italian government used its power to impose governmental decrees, in order to make sure that the project got authorized in April 2015. "Europe is asking for this from us, this is a European priority" is the mantra that government officials repeated at every occasion. When the EU declares that projects of "common interest" cannot be stopped on environmental grounds, that is what happens, despite the environmental violations and the broader set of fundamental human rights abuses.

This picture is not unique; it is rather common, unfortunately. The new European Commission, in power since November 2014, promoted a massive investment plan on large infrastructure as a key tool for economic recovery in the EU. A plan worth 315 billion euro, most of it oriented to finance the Southern Gas Corridor and similar projects, some of them beyond EU borders. Gas storage facilities, LNG plants, highways, high-speed railways, and electricity interconnectors are the main investments, decided somewhere between capitals and Brussels, above the heads of people. Yet, thousands of people will see the construction of such projects happening in their houses, their fields, their mountains and their forests, their beaches and the seas where they live and depend on.

The "superior interest" from such an investment agenda is not serving the interests of the people. And it is not in line with any fight to address climate change. It is rather in the interest of investors and corporate players, themselves more and more dependent on financial markets and reorganized to

make money through further extraction of wealth - financial and physical - from territories and their local communities. The Southern Gas Corridor, and the many other projects of "common interest", will likely be a driver for expropriation in Europe and beyond, and for the reinforcement of financial and state power, which are also becoming actors of repression with the main task to make sure that all "strategic" infrastructure is built. The financial instruments that the president of the European Commission, Jean-Claude Juncker, and the European Investment Bank, is proposing - namely European project bonds – aim to allow BP and the other corporations involved in the construction of the Gas Corridor to leverage money directly on financial markets, using EU resources to improve the rating of the bonds that pension funds and investors will then buy. Through this system, a revenue stream is created, on which new financial assets are built, that will ultimately guarantee a rent to investors. That means, more money to those locking in a fossil fuel economy and a system of ever-growing accumulation.

This is part of what oil and gas corporations mean when they talk about "shaping the age of gas": how to make extra profits for them and investors from further exploitation of fossil fuels. This is also part of how Europe and other societies are being reshaped, to allow further extraction of wealth in every possible sphere of our lives and for the advantage of the few – what some call the financialization process of the economy and society at large. There is no space or will in the closed rooms of the UN climate conferences to discuss – not to say understand – the complex power relations that are reshaping our entire society. It is up to communities and movements to challenge this new paradigm before it is too late.

1 Elena Gerebizza is part of Re:Common (www.recommon.org), a collective investigating and campaigning against the concentration of power, corruption and devastation of territories. Re:Common moves with communities on struggle to research and practice new forms of society. Elena works with communities opposing large infrastructure across Italy and internationally, including in countries where oil and gas are being extracted.

Reducing emissions of greenhouse gases has been widely publicized as the formula for alleviating the global climate crisis. However, after 20 years of negotiations in the United Nations framework, the emission of pollutants continues to increase, the extraction of fossil fuels grows at a frenetic pace, mainly in the Global South, while energy consumption in the Global North is not questioned. What has been achieved with the climate negotiations is the promotion of false solutions.

Among the false solutions to "confront" the environmental crisis is biofuels, which are promoted globally under the arguments that they are a "sustainable" way to face the crisis and fuel shortages, permit the reduction of greenhouse gases and also an opportunity for development for rural communities around the world, mainly for tropical countries and the Global South. Further, as in the case of Colombia, the promotion of biofuels is complemented by the promotion of public policy instruments, regulations favorable to agribusiness subsidies and tax incentives, and a mandated blending of biofuels with hydrocarbons.²

The promotion of agrofuels in Colombia has been made through the expansion of monoculture palm and sugarcane, which in some regions have doubled in size in just a decade, making Colombia the second largest producer of biofuels in Latin America. In 2014 they exploded in Colombia with 230,000 hectares for sugarcane, of which 45,000 were allocated for ethanol with a daily production of 1,145 million liters. In addition, oil palm is planted in over 470,000 hectares with 290,000 in production, which is extracted, among other products, 1.5 million liters daily of agrodiesel.

In 2012, the ministries of Mines and Energy and Agriculture declared a goal for the next 10 years would be to cultivate energy crops on an area of 3 million hectares. One million of these are devoted to the cultivation of raw materials for ethanol and two million as farming inputs for agrodiesel. This agro-industrial model is expected to increase in the following years.

THE CLIMATE 10 NEGOTIATIONS EMIT FALSE SOLUTIONS!

by CENSAT Agua Viva, Colombia¹

Although Colombian law establishes limits on the purchase of land, supposedly to prevent concentration and to preserve their social function, the growth of agribusiness has been supported largely by land grabbing. Large companies like Pacific Rubiales, Manuelita, Riopaila-Castilla, Indupalma, Bioenergy-Ecopetrol, among others, have obtained about one million hectares in the region of the Altillanura (eastern plains) using illegal activities, bringing together buyers and sellers, encouraging large land titles and robbing/buying land from campesinos.³

"This is the company that is causing so much damage, it is called Bioenergy with are sugar cane plantations, and rubber as well. On this side, La Fazenda, and the other sectors include processing plants. There are no longer many cows, just large palm plantations and a small amount of rice. The rivers are already polluted by this 'progress'".4

In addition to land grabbing, these energy crops are causing serious ecological conflicts regarding the control of land and water. While the area has grown rapidly to accommodate energy crops, local agricultural practices have decreased – with it changes the land production profile and food sovereignty is lost. As a result, growing reliance on food from other areas increases the price of basic foods. In addition, there is a dispute over water control in the palm areas due to drought which impacts local communities.

If the projections of the International Energy Agency are correct, which estimates that the share of biofuels in the total energy market will be 4% in 2030, we will also witness the occupation of land intended for food production and a high amount of deforestation and biodiversity loss.⁵

Critical environmental analysis has demonstrated that the momentum and promotion of biomass production for fuel transport systems is a strategy for the North designed to encourage Southern agribusiness, where transnational corporations of seeds, inputs and pesticides play an important role. Obviously, this strategy is executed through transgressing agricultural and environmental boundaries, occupying territories and robbing communities and cultures, land grabbing and establishing monocultures using pesticides and polluting waters, disrupting ecological cycles and habitat of native species, changing land use and transforming landscapes. That is, multiplying the flows of matter and energy, with all manner of negative social and environmental consequences.

Therefore, in addition to generating serious territorial impacts, agrofuels emit greenhouse gases with deforestation and changes in land use. They are not fulfilling their objective in the climate negotiations to reduce emissions, and are not a solution to address the climate crisis.

False solutions are a way to turn away from real alternatives to the global environmental crisis. The true path passes through transforming a society of petro-adicts, curbs the rise in world consumption of cars, questions the energy-intensive Global North and its historical responsibilities for global

emissions. In order to propose real solutions, this requires questioning the capitalist development model and thereby talking about the impacts of extractivism on the global South.

Unfortunately, these reflections do not have a space in the climate change conference of the United Nations. The real solutions are found in other places and continue to be spoken through other voices: in communities, social movements, campesina organizations, environmentalists and students, that propose a local agriculture system, food and energy sovereignty, community and water management, forests to confront the environmental crisis and so that this can become another world that is more just and happier. These proposals will emerge and continue to complement the common good of humanity, regardless if the climate negotiations continue flaunting their false solutions.

- Censat Agua Viva- Amigos de la Tierra Colombia, es una organización ambientalista cuyas acciones están dirigidas a fortalecer la capacidad de acción ambiental y social de los actores históricamente empobrecidos. Buscamos con las comunidades la defensa de los bienes comunes basados en relaciones de justicia, equidad y dignidad.
- 2 Álvarez, J., Harman, F. & Cardona, H. 2013. Agrocombustibles en la Orinoquía. Censat Agua Viva. Bogotá. 83 p.
- 3 Ibid.
- 4 Líder del sector laboral de Puerto López, señalando en un mapa el sector afectado por la empresa Bioenergy. En: Álvarez, J., Harman, F. & Cardona, H. 2013. Agrocombustibles en la Orinoquía. Censat Agua Viva. Bogotá. 83 p.
- 5 International Energy Agency. 2014. World Energy Outlook - Resumen ejecutivo en Español. Francia. 12 p.

"The communities are closely connected to forests. It is impossible to imagine communities without forests because everything communities need is provided by the forests ... by preserve forests, families are preserving their own livelihoods."

Campesino de Acre, Brasil¹

The obvious importance of forests for life on the planet has produced for decades numerous campaigns, advertisements, projects and national and international policies that focus on the urgent need to "protect the forests." This vital importance for the provision of water, food, timber or medicines, as well as for the regulation of hydrological, biological and climatic cycles of the planet generates an almost universal consensus on the need for its protection. What is not explained, however, is to what is being explicitly referred to in these campaigns, politics and propaganda when they speak of "forests". This assumed obviousness of the concept prevents the question: "What are forests?" and "Who defines them?"

The peoples who live with forests for generations have tried to explain many times, and in diverse ways, the many meanings that the word "forest" has for them. The forest is what gives meaning to their lives, and in a close relationship based on respect and humility, guarantees their survival, not only physical but also cultural and spiritual. Forests involve life, color, sounds: 1500 animals may live in only one old tree. And where there is an immense variety of trees, forests also proliferate plants of different species, sizes and ages. Forests also develop and evolve in equilibrium with the living water cycle: they filter and purify thus preventing soil erosion, watershed feed and protect during winds and storms. At the same time, forests are crucial for global climate balance their ability to store carbon dioxide through photosynthesis and release oxygen. To adapt to different contexts - altitudes low and high, humid valleys, arid areas,

FORESTS AND 11 THEIR PEOPLES: THE STRUGGLE AGAINST A DEFINITION THAT BENEFITS PROFIT

by World Rainforest Movement

freshwater and brackish environments – many types of forests exist. These webs of life that sustain forests allow water, plants, animals, communities, air and soil to maintain close and interdependent relationships.²

However, there is a definition that is used and promoted by most multilateral and government agencies, large NGOs, and at conventions and agreements on climate change that carries an "official" status. This "universal" definition of forests, created by the agency of the United Nations Food and Agriculture Organization (FAO), is defined as "land spanning more than 0.5 hectares of trees equipped with a minimum height of 5m at maturity in situ and a crown cover (or equivalent stocking level) of more than 10 percent." In other words: forest = trees in a set of certain physical and spatial characteristics.

This definitions calls for attention for several reasons. First, this brings up the question: why are trees the only consideration and not the other living beings and organisms that live as an integral part of the forest – such as the animals, water cycles and peoples of the forests and their intangible universe that determines cultures and spiritualities?

Secondly, to define a forests based on tree height and density, as well as surface size, includes not only the forests of the Amazon, the Congo Basin o southeast Asia, but this also includes the millions of hectares of tree monocultures including eucalyptus, pine and other tree species. They are considered "forests" under this definition. In the official discourse there is no serious intention to raise awareness about the complexity of forests and this excludes discussions about land tenure, the real causes of forest destruction and their webs of life etc. That is, a forest according to FAO can be felled and still be a "forest".

As a consequence, millions of hectares of forests in the world, especially in the Global South, are being substituted by monocultures plantations under that slogan of "planted forests". These industrial tree plantations have quadrupled in Southern countries in the last two decades, so that today there are 60 billion hectares.3 This expansion is based on the logic of the permanent plunder of the forests and their peoples which results in: deforestation; and territorial destruction that is crucial for the survival of animals, plants and human being; depletion of water sources and soil nutrients; contamination by the use of excessive agrotoxics; dispossession of populations and the loss of their territories, cultures, autonomy and ways of life; violations of human rights; and criminalizing resistance.4 Despite the strong negative impacts, industrial plantations remain actively promoted to serve the pulp and paper industries and, in recent years, also as "carbon dioxide sinks" - and even the growing demand for electricity in Europe promotes the use of wood for energy.

So who benefits from the FAO definition?

One important reason for why the FAO and their friends only talk about trees, or the wood, has a lot to do with the close relationship that the agency has with the timber and pulp and paper industries. This relationship, for example, can be found in the Advisory Committee on Paper and Forest Products loggers of the FAO, composed of executives in these industries. So, not surprisingly, the FAO definition includes industrial monocultures. Branding

industrial plantations as "forests" or "planted forests" helps companies to convince authorities and the population at large that its plantations do not cause environmental damage but provide the same benefits as "natural" forests.

The United Nations international conferences about climate change have taken the FAO definition as a reference. This allows the plantation companies to take advantage of the idea that the "forests" are important reservoirs and capturers of carbon dioxide. In practice, this has resulted in a company that establishes an industrial tree plantation in a country in the Global South can, through the carbon market, obtain higher profits by selling carbon credits generated by the plantation, to big polluters in the Global North.⁵

While promoters say the pollution emitted in one place can be compensated, for example, by a tree plantation established somewhere else through absorbing an amount of "equivalent" carbon, the fact is that plantations increase carbon emissions.

While the molecules of carbon dioxide stored in trees can be chemically identical molecules emitted by a polluter in the Global North, from the climatic point of view, both are radically different. The carbon stored in trees is released again after felling and burning the trees for pulp, paper and other wood products. Furthermore, quantifying the actual emissions of an industrial plantation is almost impossible: it would have to include the production of soil carbon, both within the boundaries of the plantation and downstream, the effects on displaced peoples, as they may migrate to urban centers where lifestyles have different pollution loads, and many other factors.6 The polluting company in the Global North for its part, by burning fossil fuels releases carbon dioxide into the atmosphere that was trapped underground for hundreds of years, thus increasing the total circulating carbon in the atmosphere.

Consequently, they have opened the doors for more subsidies and more profits for the plantation

industry and its financiers. Thus, according to the FAO definition of "forests" companies such as Suzano, Asian Pulp and Paper, Green Resources and many others that have obtained millions of hectares of land and forests, have not caused any deforestation. On the contrary, they may even benefit from the sale of carbon credits, and now as well with the REDD mechanism (Reducing Emissions from Deforestation and Forest Degradation).

REDD, created and discussed in the climate negotiations of the United Nations and pushed, among others, by the World Bank, is presented as a solution to halt forest deforestation. However, the logic behind it, again, is to allow for the expansion of the production and consumption hegemonic model, as long as they "compensate" for the destruction of forests. In 2009, during the climate negotiations in Indonesia, a "plus" was assigned to REDD, that includes the incentive to increase "carbon sinks".

The FAO definition of "forest" fits hand-in-glove with REDD plans, which allow industrial companies to count carbon in tree plantations and gain higher profits by selling the credits generated in the financial market. However, REDD does not address the real causes of deforestation, nor does REDD try to stop it. REDD creates an illusion that "forests" are but mere carbon reservoirs, priced in the market, publicly traded, emptied of people and controlled by companies. Indeed, the FAO was the one who suggested that "planted forests" are included in the mechanism REDD.8

False and unjust policies on forests in relation to climate change stem from an industrial and "others" point of view. The policies are determined and created from "above" to be, in one way or another, implemented "down". The forest is by no means just a collection of trees and even less a mere source of wood. That point of view only excludes people who have defended their territories and

forests from the guilty actors of deforestation and more large-scale pollution. For over 10 years, many organizations, networks and social movements have been fighting for a change in the FAO definition of forest FAO.9 Plantations are not forests!

World Rainforest Movement wrm.or.uy/es

- 1 "Bosques: Mucho más que una gran cantidad de árboles", WRM, 2011, http://wrm.org.uy/es/ videos/bosques-mucho-mas-que-una-grancantidad-de-arboles-2/
- 2 Vea más información en: "Bosques con la gente", Boletín 162 del WRM, Enero 2011, http://wrm. org.uy/es/articulos-del-boletin-wrm/seccion1/ bosques-con-la-gente/
- 3 "Una panorámica de las plantaciones industriales de árboles en países del Sur. Conflictos, tendencias y luchas de resistencia", WRM, 2012, http://wrm.org.uy/es/files/2013/01/EJOLT3_ESPs.pdf
- 4 Vea más información sobre las plantaciones industriales y sus impactos en: http://wrm.org.uy/ es/listado-por-temas/plantaciones-de-arboles/
- 5 Vea más información sobre casos y resistencias contra las plantaciones como sumideros de carbono en: http://wrm.org.uy/es/listado-por-temas/plantaciones-de-arboles/plantaciones-como-sumideros-de-carbono-3/
- 6 "Mercados de Carbono: la neoliberalización del clima", Larry Lohmann, 2012, www.thecorner house.org.uk/sites/thecornerhouse.org.uk/files/ Mercados de carbono FINAL.pdf
- 7 Más información sobre REDD en "10 Alertas sobre REDD para comunidades", WRM, 2012, http://wrm.org.uy/es/files/2012/10/10Alertas REDD-esp_intro1.pdf
- 8 http://www.fao.org/docrep/012/al248e/al248 e00.pdf
- 9 Vea algunos recursos en: http://wrm.org.uy/es/ listado-por-temas/resistencia-local-y-global/diainternacional-de-lucha-contra-los-monoculti vos-de-arboles/

12 REDD Perversions by Wally Menne

Contrary to UN hype, REDD+ is destroying biodiversity and damaging ecosystems including forests, while undermining local communities and Indigenous People's rights

The coming UN climate conference in Paris, France, will likely produce an agreement on implementing Reducing Emissions from Deforestation and forest Degradation (REDD). However, REDD is being developed and implemented in the Global South mainly to serve the interests of particular countries and industries that stand to benefit through landgrabbing and by profiting from flawed financial mechanisms that allow offsetting of their greenhouse gas emissions. This is why:

REDD PRINCIPLES

The concept of REDD has attracted support from a number of "Forest Countries" in the Global South as it was perceived to offer a viable means of protecting forests, while also delivering financial rewards in the form of emission offset payments. Instead of relying on logging, which would eventually deplete forests and lead to the degradation of the local environment and damage to ecosystems, in theory, it would compensate countries for not exploiting their forests.

REDD ORIGINS

REDD was given official status after being included in the Bali Road Map at the UN climate conference held in Indonesia in 2007. REDD was proposed as a system that would halt forest loss, reverse forest degradation, and lead to forest restoration, but instead REDD has triggered numerous local conflicts.¹

REDD and RIGHTS

REDD leads to the erosion of human rights. Forest peoples and forest dependent communities will be deprived of their rights of access to and utilisation of their forests and related resources. Although such utilisation is normally small-scale and done with care and respect for nature so as to preserve their biodiverse territories in the long run, it has been misrepresented in official UN and national documents as making a major contribution to forest loss. This has led to many violations of the rights of people who have protected their forests for generations!

REDD ALERT

Tree plantations have been mischievously presented as a "type of forest" which can be substituted for real forests. This falsehood ignores the importance of biodiversity in real forests, and the negative social and environmental impacts of plantations. It is a blatant lie that has been actively encouraged by the FAO, the UN, the climate negotiations, and the Forest Stewardship Council, the main certification scheme of so-called "responsible logging" and plantations, through the use of dishonest and misleading definitions and terminology – e.g. "planted forests".

REDD DANGERS

There is a real danger that REDD will allow tree plantations to be included in the scheme in order to attract investors. The deliberate conversion of the remaining forests on our planet into sterile, water-guzzling, invasive, fire-prone monoculture tree plantations of mostly alien species that destroy biodiversity is a real threat. All over the world, trees are being genetically engineered for the benefit of the timber, pulp and paper, and agrofuel industries. GE trees are already widely planted in China, and just recently GE eucalyptus varieties have been approved for outdoor trials in the US and Brazil.

A REDD INVASION

Just as industrial tree plantations have been promoted as "carbon sinks" under the UN offset programme, the Clean Development Mechanism (CDM), it is also the goal of corporate interests to promote even more tree plantations in non-forest countries in the form of REDD projects. This would allow logging companies to "offset" their continued deforestation through logging and land conversion elsewhere.

REDD for ENERGY

If tree planting under REDD is purely for forest restoration purposes, as the theory goes, it should only include species that occur naturally at any given location. However, there is another corporate agenda, aimed at creating vast industrial wood resources on other people's land in the Global South: Biomass-based energy fuels, which include woodchips, wood pellets, charcoal, ethanol and biodiesel.

REDD and RESTORATION

There are numerous examples of community-based projects and programmes that could genuinely qualify as "forest restoration" but are usually ignored by those with REDD aspirations. Indigenous Peoples and local communities have been actively doing this work already and possess traditional knowledge, understanding and the skills required to implement such projects successfully, and also to provide the maintenance and care needed to ensure long term survival of the restored forest.

REDD CONFLICTS

Displacing communities from their traditional forest areas is a direct violation of human and collective rights. This is largely done by force or coercion and also means that people's needs for biodiversity resources, including fuel and food, will need to be found elsewhere. This leads to increased competition for resources in the areas people are relocated to, and is a recipe for more conflicts. The Sengwer people in Kenya for example were evicted from their land in the name of REDD+. (2)

DELUSIONS of REDD+, REDD++ and REDD+++

Ever in search of new opportunities for carbon trading, the players in carbon markets have greedily identified new ways of expanding REDD to include other ecosystems, as well as agriculture, soils, water bodies, and even marine vegetation such as sea-grass beds. Besides the atmosphere, carbon traders are now trying to commoditise our entire planet.

REDD COMMODITIES as CORPORATE CAPITAL

If REDD is formally accepted by the UN climate negotiations or by the World Bank, polluting corporations will be able to include the costs of their REDD projects in their balance sheets as capital assets, instead of treating them as trading or production expenses. In effect, this will transfer ownership of community land under REDD projects to the shareholders of Northern corporations and banks.

REDD REAL ESTATE

The carbon in forests, or plantations, or even vegetable patches, owned by polluting nations or corporations would also give them control over the associated land areas, including their soils, water and biodiversity (except in tree plantations of course!). The Indigenous Peoples and

local communities that buy into REDD deals will lose decision-making power and free access to their own lands and resources!

REDD DEBITS

There have already been cases of corruption and criminal activities relating to carbon credit transactions, and this will become a major problem with REDD+ offset credits too. VAT avoidance, credits from fraudulent or non-existent projects, double counting of credits, and the resale of retired credits, have been exposed, showing that the emissions trading system can easily be manipulated and abused at the expense of forests and local communities.

REDD RESULTS

Over time, all forests could become tradable commodities, either through carbon credits, or even perhaps soil credits, water rights and oxygen futures! We have already seen how peat mining and water extraction activities have affected community access to their own resources. Production of bottled water and processed drinks such as colas are rapidly increasing commercial control over vital freshwater sources that should belong to all.

REDD RISKS

The so-called "safeguards" that are being promoted as a remedy for problems with REDD projects can only mean that REDD must be a high risk activity, that could potentially do more harm than the industrial pollution that it is supposed to negate. It is time to fight for the precious remaining forests on this planet and to knock a bit of sense into the heads of REDD-obsessed climate criminals at the UNFCCC COP21.

There are many problems with REDD, yet certain country players are intent on forcing a decision to establish a REDD mechanism in some form or other at the coming climate conference in Paris. This does not bode well for forest communities whose territories are being targeted for REDD projects. The promise of a REDD+ future will include desertification and impoverishment on a scale beyond imagination. The destruction of their fertile land, biodiversity, water resources and the displacement and enslavement of once proud and independent communities will be price to pay if REDD+ wins the day!

1 See http://www.no-redd-africa.org/ and http://www.redd-monitor.org/ for more information

13 INDIA'S NATIONAL REDD+ POLICY: OLD LIES IN NEW GARB

by Soumitra Ghosh

The Government of India has recently come up with a National REDD+ policy. This short article mainly responds to that draft and the accompanying "Reference Document for REDD plus in India" (Ministry of Environment, Forests and Climate Change, August 2013, hereafter RD).

India's National REDD plus Policy: Anything new?

The policy contains the same old package of unfounded assumptions, pseudo-science, half-truths and lies, which forms the core of the delusion that climate change and greenhouse gas emissions can be regulated and controlled by the neo-liberal capitalist market that demands more intensive use of fossil fuels like coal and petroleum. Forests and plantations "soaking up" emissions from industries and cities is an important part of this delusion. It is dangerous on two accounts: One, it helps perpetuate the myth that capitalist production/accumulation can be continued ad infinitum in an environmentally sustainable manner; Two, it directly financializes, and hence, capitalizes nature. Nature qua nature turns into capital through schemes like REDD plus, at great cost to communities whose food sovereignty, livelihoods and cultures are linked with natural systems like forests, and also to the general environment.

Peddling Clichés and Lies

Lies about forest cover

The forest cover data based on satellite imagery that government agencies offer have always been suspect.¹ The 2011 State of Forest Report published by the Forest Survey of India, shows that up to 30 percent deforestation was recorded at certain central Indian districts, even though the

net cover had increased. The 2013 Forest Survey also showed a net gain in forest cover, which was immediately challenged.² The reference document that came with the draft REDD+ policy reveals the trick: It stipulates that any area with tree vegetation with 10 percent canopy density and above must be treated as a forest, even if it falls outside the recorded forest area, because – as the argument goes – any form of tree vegetation renders the "service" of storing/soaking up carbon. This way, the forest cover can endlessly increase, even if organized and officially permitted deforestation in the form of "forest clearances" for development projects continues and increases including those for new coal mines and thermal power plants.

Claims about carbon storage

Following a process limited to government officials and a few handpicked NGOs, the forests are measured for their so-called "carbon value", avoiding that, even in the Indian national context, the measurement of "forest carbon" has always been a disputed issue, and there is still no universally accepted and standardized models of such a measurement.3 The carbon sequestration figures derive from questionable forest cover data and ignores the factor of organized deforestation. One of the main reasons why the carbon sequestration estimates offered by the Government of India do not stand scrutiny is that the rate of deforestation for industrial/commercial purposes in India is rising alarmingly, and the carbon markets completely sidestep that fact. One recent estimate shows that in 30 years (1981-2011), and since the Forest Conservation Act intended to stop diversion of forests for non-forestry purposes has come into force, 1,198,676 hectares of forests have been diverted.4 In the four years between 2007 and 2011, 204,425 hectares of forests were converted to mostly mines and various industrial projects.⁵

Claims about community involvement and benefits

If one reads the REDD+ policy in conjunction with the accompanying Reference Document, a more holistic picture emerges. Though the Reference Document presents a future scenario of so-called community REDD+ forests in detail, the policy/

(JFM) as the main operational strategy for forest governance in the new REDD+ regime. The strategy proposes to reduce "forest dependency" of forest communities by adopting a characteristically vague bundle of typical JFM instruments, like alternative cheap cooking fuel supply, non-conventional energy sources, low cost permanent housing, improved infrastructural facilities including health, and improving agricultural and livestock productivity. It is also made clear that REDD+ incentives will flow through JFM committees like the Forest Protection Committee and Eco-Development Committees, all of which are entities spawned and controlled by the Forest Department. It is ironic that though the policy projects FRA - Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act as an instance of legislative safeguarding for community rights, unapologetic promotion of JFM actually undermines the rights enshrined in the act. More importantly, the REDD policy also prescribes a forest governance strategy where communities will have less access over forests. More money to JFM committees will also be used against institutions like the new as well as customary forest governance institutions FRA provides for and recognizes.

Forest movements and community groups in India challenge Indian government's promotion of REDD+; REDD and REDD+ have been seen as attempts to short-sell the country's forests in the international carbon markets. REDD+ will only accentuate the prevailing inequity and miscarriage of justice inherent in India's forest policy regime, the core of which consists of coercive colonial legislation like the Indian Forest Act of 1927, and the draconian Wildlife Protection Act of 1972, they say.

Given the near-feudal tyranny by the government-owned Forest Department in most of the country's forests, and the increasing hold of corporate capital over forest areas, there is every danger that all kinds of community access in forests will be badly restricted in a functional REDD+ project. Throughout the policy and the Reference Document, the emphasis is on continuing with the "fortress conservation" model in the REDD+ regime. Communities and their use of forests are seen as

strategy talks about Joint Forest Management the principal drivers of deforestation/degradation (JFM) as the main operational strategy for forest — it is stated time and again that community access governance in the new REDD+ regime. The strategy proposes to reduce "forest dependency" of forensure that "REDD+ performance" of the forests is est communities by adopting a characteristically not "adversely impacted".

No Transparency

The Policy claims that REDD+ will be transparent and democratic: A National Forest Monitoring System will be established; monitoring/verification will be done in a "transparent, inclusive and effective" manner by putting in place a National REDD+ Architecture and Governance; "a Platform for Stakeholder engagement" will be created where "Forest Dependent Communities, civil society and other stakeholders" will "effectively participate in REDD+ decision making and implementation". In the strategy section, it has been mentioned that a mechanism to channelize REDD+ incentives to communities will be developed.

But what information about REDD+ will be given to the communities? Will the forest-dependent poor - already severely affected by changing monsoon cycles and an increasingly altered vegetational fabric (which translates into change in availability for crucial non-timber forest produce including medicinal plants and various kinds of forest food), as well as other climate change impacts - know that their forests are being traded in international markets so that polluting companies in wealthy countries can continue with their business-as-usual emissions? In most parts of India, where the government has control over all forms of forests, the answer is clearly no. We should also remember that the main purpose of this entire "verification/ monitoring" process is to find out about carbon storage, and not really the health of forests and people's dependence on those.

The Fraud in it: RL (Reference Level), not REL (Reference Emission Level)

The policy has no clarity regarding how the REDD+ projects will be funded. The Reference Document shows that one of the suggested financial instruments is domestic carbon trading: Corporate finance for forest conservation (financing options that leverage private sector finance) in

lieu of giving the companies liberal allowance in emission, or exempting those from the present obligatory requirement of using renewable power. The Reference Document states, "To optimize the REDD+ potential, it will be prudent to invest within and outside the forest sector...directly address the drivers of deforestation to enhance the mitigation services from REDD+."8 One can assume that a functioning and full-blown domestic carbon trading program will also help India in future climate negotiations, as it can always press for international recognition of this as part of any obligatory emission reductions in the future.9

The Reference Document shows ingenuity in prescribing how the forests in India can be projected as more carbon-rich than they actually are. Focusing on the "plus-side" of the game, it prescribes that RL and not REL of Indian forests need to be determined. RL stands for a generalized reference level of carbon sequestration/storage potential of a particular patch of forest (say 1 hectare), whereas REL is Reference Emission Level, the baseline for probable emissions in a future deforestation/forest degradation scenario. Replacing EL with REL means that India can effectively bypass "additionality" questions, and therefore, all sorts of forests, including those already "conserved" and "protected" under a number of existing domestic projects, can be used for REDD+. Also, the need for "leakage" calculations (the amount of emission that can "leak" despite the REDD/REDD+ project in probable scenarios in which deforestation/degradation will continue) will disappear once the need for determining reference emission level disappears.

Money and control

Instead of community-centricity and philanthropy, money – largely money from carbon forestry – is the core of REDD+. Small portions of that money can trickle down to the poor among the forest communities in some cases once REDD+ gets going, but the fund-flow will definitely not be controlled by the people. The trickling down too will happen essentially to keep the forest-dependent poor away from the forests, because the Indian Government is pushing a Joint Management model, where crucial decisions about forest usage are taken not by people but by forest officers.

Soumitra Ghosh (Soumitra Ghosh is a social activist and researcher working among the forest communities in Sub-Himalayan West Bengal, India. He is associated with All India Forum of Forest Movements (AIFFM), and can be contacted at soumitrag@gmail.com)

A longer version of this article appeared in India's climate magazine, Mausam, issue 3, March, 2015: see http://www.thecornerhouse.org.uk/resource/mausam-1

- 1 Ghosh, S et al, Imaginary Sinks: India's Forest Carbon Ambitions, in The Indian CDM :Subsidizing and Legitimizing Corporate Pollution, Ghosh, S and Sahu, S.K (eds), 2011, Kolkata: available at www.thecornerhouse.org.uk/resource/indian-cdm
- 2 Rajshekhar, M, *India's natural forests half of what ministry claims*, in Economic Times, July 17, 2014, http://articles.economictimes.indiatimes.com/2014-07-17/news/51656860_1_forest-cover-forest-survey-forest-area
- 3 Ghosh, S, et al, ibid
- 4 "Since October 25, 1980, the Ministry of Environment and Forest has granted approval for diversion of 11,89,294 ha of forest land for non-forestry purpose involving 23,511 proposals received from various state/ UT governments," Minister of Environment and Forests, Prakash Javadekar, said in a written response to the Rajya Sabha. See http://www.outlookindia.com/news/article/1189294-Hectares-of-Forest-Land-Converted-Since-1980/852455, accessed on 2 August 2014
- 5 See http://www.downtoearth.org.in/content/environ ment-ministry-creates-record-forestland-diversion

 The RD makes light of organized deforestation, which it terms as 'planned' deforestation, and within government control. It goes on say because 'these can always be adjusted to conform to the principle of sustainability', 'it may not be necessary to focus on planned drivers' and the main challenge is 'addressing the unplanned drivers', which translates into keeping the people away from forests.
- 6 A Formula for More Land and Resource Grabbing: Dangers of the Green India Mission, Joint Statement by Forest Movements in India, issued by National Forum of Forest People and Forest Workers (NFFPFW) and Campaign for Survival and Dignity(CSD), 2010 and ON REDD CLIMATE SCHEME, Joint statement by Indian forest movements, 2009.
- 7 India's National Redd+ Policy', 2014, http://www.moef.nic.in/sites/default/files/Draft%20National%20 REDD%2B%20Policy%20and%20Strategy%202014_0. pdf, last accessed on June 17, 2015.
- 8 Reference Document for REDD+ in India', http://envfor. nic.in/content/reference-document-redd-india, last accessed on 17 June, 2015
- 9 The REDD+ policy already says: 'Forests neutralize 11% of India's GHG Emissions. India added around 3 mha of forests in the decade of 1997-2007'.

ENGINEERING LIFE: 14 THE ILLUSION OF A "BIOECONOMY"

by Rachel Smolker1

In addition to the unimaginably vast amounts of

recognition of it's roots in capitalism and inequality has grown, but all too often, big conservationist NGOs and groups focusing on the amount of CO, molecules in the atmosphere end up having vague and unspecified demands for "action" or "solutions". For corporations and governments with a strong interest in maintaining business as usual, those vague demands are an open invitation: new opportunities for profitmaking and political gamesmanship.

Especially eager to maintain business-as-usual, and profit wherever possible, big agriculture and forestry, fossil fuel interests, the aviation industry, the US military and big biotechnology industries seek to develop and provide alternative forms of energy and chemicals - a "green bioeconomy" based on plant biomass rather than the current "brown economy" based on fossil fuels. They offer an easy out and the promise to avoid any threat to the status quo. They promise to perpetuate the same system, the same economy, and even more profitmaking - dressed up in a different color.

Awareness of the problem of climate change and

biomass required, industry insists that achieving a "bioeconomy" depends on some unimaginable feats of genetic engineering, which is where biotechnology enters the picture. Researchers are busily working to deliver the goods; engineering, synthesizing and redirecting the genetic heritages of various crops, trees, microbes, algae, and other life forms, turning them from their evolved place in the web of life into living chemical factories that spew out the raw materials of the "green economy": biofuels, biochemicals, bioplastics and biopharmaceuticals, bioproducts and much more. Thus, the hopeful and heavily subsidized embrace of a "bioeconomy" is sold as a "solution" to climate change that might seamlessly replace the fossil fuel economy.

Inconveniently, delivering a "bioeconomy" on the scale of the fossil fuel economy would require many planets worth of biomass (organic matter to be used as feedstock). Industry insists they can deliver "energy independence" with "low carbon" and "sustainable" bioproducts. They refer in glowing terms to plentiful and abundant "wastes and residues" and use of "marginal lands" (a term that often refers to lands that are not under production in service of the global economy, even though they may be central to the livelihoods of local people, small farmers or used seasonally by pastoralists). Yet, even at the current scale of production in order to fulfill mandates for transportation biofuels, especially from the US and the EU, impacts can be seen in rising food costs, loss of soil, water and biodiversity, land grabs and speculative investments.

For example, The US Department of Energy now hosts a project referred to as "PETRO", an acronym for "Plants Engineered to Replace Oil". Along with other government agencies, they seek to fast track field tests on a suite of genetically engineered crops and trees across the Southeastern US. Genetically engineered trees are a severe threat for expanding deforestation, depletion of soil nutrients and water and dispossession of local communities, especially in the Global South. In addition, the Defense Advanced Research Program Administration (DARPA) has opened a new Biological Technologies Office, with a "Living Foundries" program. They aim to use new synthetic biology technologies to quickly develop new fuels, chemicals, pharmaceuticals and materials for defense purposes. They also recognize potential applications for biowarfare.

Biotechnologists now have a whole range of extremely risky and essentially unregulated new synthetic biology tools to wield, with names like "CRISPR", "RNA interference" and "zinc fingers". These permit drastic manipulations and rearrangements of the evolved genetic heritage of living organisms, far above and beyond anything previously possible or even imagined, and at a much faster pace.

Among the new horizons researchers are working to develop "genome editing" and "gene drives" aimed to deliberately force new genes to spread in nature. They have developed techniques for "directed evolution", and are working to "enhance photosynthesis". Others are developing synthetic microbes to extract coal bed methane or secrete drilling lubricants for the fracking industry. Biotechnologists have engineered *E. coli* bacteria to pump out propane, 1 yeast to pump out morphine, 2 microalgae that squirt ethanol, chemicals for plastic manufacturing, or any of a variety of other industrial chemicals.

Aquabounty seeks commercial release of GMO salmon, and scientists amuse themselves by engineering featherless chickens,3 goats that produce pharmaceutical milk and chickens with dinosaur faces.4 Others seek the techno-resurrection5 of extinct species or are banking on profits from patented climate change resistant seed varieties. In garages and back rooms, DIYers (do-it-yourself) insert mail ordered gene sequences6 into microbes, offer glowing plants7 in exchange for kickstarter donations and struggle to poke "milk" out of yeast. Tree biotechnologists engineer designer trees9 to fulfill the vast dreams of pulp and paper and biomass industries. Synthetic microalgae secrete ingredients for face creams and vanilla flavoring is squeezed from yeast¹⁰ while vanilla farmers are squeezed out of business. Scientists have even succeeded to use new "gene editing" techniques on human embryos11 raising the potential for designer babies.

New techniques, new organisms, new horizons and new frontiers for profitmaking. For some, the prospects seem exhilarating. For many, they are terrifying. The scale and scope for biotechnology has blasted wide open and in the process, transgressed some sensitive boundaries.

So here we stand in the midst of a maelstrom of new techniques, new organisms, new concerns, and potential risks while there is ever greater pressure, funding and incentive to engineer and deliver the new "bioeconomy".

These tools are so powerful they enable us to create, recreate, resurrect and redesign life forms that evolved on earth over millions of years. Or do they? Perhaps what they really enable us to do is mess things up royally. The language of life is something sacred and wondrous, full of mystery and surprise. It is not something to be taken off into a laboratory to be distorted, manipulated and recoded into service of the human industrial economy and corporate profitmaking. With modest humility we have to recognize that we simply cannot control genes, their expression, or their evolution over time. Nature is complex, messy and unpredictable and furthermore has a right to its own ways, its own place in creation and its own future evolutionary path.

Underlying the "bioeconomy" push is the myth that plant biomass is "carbon neutral". The story goes that new plants or trees will grow and reabsorb an amount of carbon equivalent to what is released when they are cut and converted to fuels. This myth has been effectively perpetuated among industry and policymakers in spite of the fact that researchers and social movements have repeatedly demonstrated otherwise. For example, cutting trees to burn for electricity releases more CO, than even coal (per unit of energy), and that does not even consider the loss of forest carbon sequestration, the land use change or the emissions from harvest and transportation. Similarly, when fully assessed, transportation biofuels such as corn ethanol or palm oil biodiesel contribute to climate change rather than reducing emissions. Nonetheless, all are still generally assumed to be effective in reducing emissions or more generally considered "carbon neutral". Not surprisingly, the energy industry is the big winner in the run up to build such a "bioeconomy".

Building on that misconception are calls at international fora, such as the UN climate conferences, for "net zero" emissions and climate geoengineering. Bioenergy with "carbon capture and sequestration"

(aka BECCS) is presented as a means of removing CO₂ from the atmosphere. The logic is based on the assumption that all bioenergy is carbon neutral, and when the emissions are captured and buried somewhere under ground they would become "carbon negative". Climate geoengineers argue that on a very large scale this technology could "fix" the pollution in the atmosphere. The IPCC even incorporated BECCS into the scenarios they considered in the recent assessment report (on mitigation).12 They argued that BECCS or other "carbon negative" technologies make it acceptable for emission pathway trajectories to "overshoot" because we can later "clean up" the excess CO₂. These technofixes completely disregard the fact that bioenergy is never "carbon neutral" in the first place and can therefore never become "negative". Deploying bioenergy on a very large scale based on such false misconceptions would be utterly disastrous.

The entire concept of manipulating and engineering trees, microbes and other life forms to meet an insatiable demand for fuels, chemicals and materials, is ethically and morally bankrupt. The arrogant and reductionist mentality that approaches nature as something to engineer for commercial purposes entirely ignores any understanding of the profound, intricate and beautiful interconnectedness of all life forms, achieved as a product of our shared evolutionary heritage.

- 1 Rachel Smolker has a PhD in biology and worked for many years as a field zoologist prior to switching to climate activism. She is co-director or Biofuelwatch. and a board member for Global Forest Coalition.
- 1 http://blogs.scientificamerican.com/plugged-in/ researchers-produce-propane-using-e-colibacteria/
- 2 http://www.pbs.org/newshour/updates/brewersyeast-morphine-sugar/
- 3 http://www.reuters.com/news/picture/genetically-modified-animals?articleId=USRTXTZ7A
- 4 http://www.bbc.com/earth/story/20150512-birdgrows-face-of-dinosaurhttp://www.bbc.com/earth/ story/201
- 5 http://www.ted.com/talks/stewart_brand_the_dawn_of_de_extinction_are_you_ready
- 6 http://parts.igem.org/Help:An_Introduction_ to_BioBricks
- 7 http://www.etcgroup.org/kickstopper
- 8 http://www.wired.com/2015/04/diy-biotechvegan-cheese/
- 9 http://stopgetrees.org/
- 10 http://www.foe.org/projects/food-and-technology/synthetic-biology/No-Synbio-Vanilla
- 11 http://www.nature.com/news/chinese-scientists-genetically-modify-human-embryos-1.17378
- 12 IPCC, Climate Change 2014, Mitigation of Climate Change

15 INDUSTRIAL BIOENERGY: A DANGEROUS FALSE SOLUTION TO CLIMATE CHANGE

by Almuth Ernsting

Most people will associate renewable energy targets with wind turbines and solar panels – yet at least in the EU and US, a power station smokestack might be a more representative image. Burning biomass and waste accounts for two-thirds of what is classified as renewable energy across the EU.¹ In the US, bioenergy accounts for over 49% of "renewable energy", compared to figures of 17% for wind and 4% for solar power – hydro dams account for most of the remainder.²

Bioenergy includes liquid biofuels such as biodiesel made mainly from rapeseed oil, soya and palm oil, and ethanol made from sugar or grains. Biofuels are mainly used in cars and other vehicles but in some countries (e.g. Italy) they are also burned in power stations and combined heat and power plants. The most bioenergy, by far, comes from burning wood. Fuelled by subsidies, there has been a major surge in woodstoves and boilers across Europe and North America. In addition, many new power stations are being designed for burning wood as well as smaller amounts of other biomass such as straw.

The biggest wood-burners, however, are coal power stations: In the UK, the largest coal power station, Drax, is on track to burn pellets from 14 million tonnes of wood every year. That is 27% more wood than the UK produces annually. Drax already burns more wood than any other power plant in the world (whilst still burning more coal than any other UK power stations) and coal power station operators elsewhere are also burning or looking to burn vast quantities of wood.

Globally, the picture is a bit more complicated: Most non-fossil fuel, non-nuclear energy worldwide comes from burning biomass, especially wood, but most of that is classified as "traditional" rather than "modern" biomass. International agencies and the large public-private partnership "Sustainable Energy for All" increasingly classify all traditional biomass as unsustainable and non-renewable. This would include wood or dung used by women to cook meals - unless they are using a "modern" stove. A UN's General Assembly resolution backing the Sustainable Energy for All, identified just one single energy source as being of concern, traditional biomass for cooking and heating.4 Yet this initiative's flawed logic does not even exclude coal from being supported under its remit. When it comes to "modern renewable energy", bioenergy is still surpassed by hydropower worldwide. As International Rivers Network and many others have long shown, the impacts of large hydro dams on communities and ecosystems can be devastating and their greenhouse gas emissions (mainly methane) can be as great as those of coal power stations. 5 But "modern" or industrial bioenergy – following the examples of the EU and US - is increasingly being promoted and expanded across the world.

The often devastating impacts of biofuels are widely known. Well over 30 million hectares of land worldwide are now under crop and tree monocultures plantations in order to produce feedstock biofuels.6 Some of this land had previously supported highly biodiverse ecosystems – such as rainforests on peatlands in Indonesia and Malaysia (home to Indigenous and other forest-dependent Peoples) or remnants of diverse prairie grasslands in the US. Some of it has been grabbed from small farmers, pastoralists and other communities. And in many cases, vegetable oil, sugar and grains have simply been diverted from food and animal feed markets. Among the direct impacts are increased pesticide use and poisoning, freshwater pollution and depletion, larger and new ocean "dead zones" due to agrotoxic runoffs from fields, biodiversity loss and increased soil erosion.

The impacts of biofuels, however, are felt far beyond those 30+ million hectares of land: First, there are real problems with what is widely referred to as "Indirect Land Use Change". This is an area of land that previously produced food, such as grains or vegetables, and is converted into a biofuel production area. As a result, prices go up and somewhere else forests will be cut down or other ecosystems will be ploughed up to "replace" the food or feed. Further, biofuels linked to the destruction of forests and other ecosystems – whether directly or indirectly – are generally worse for the climate than equivalent amounts of fossil fuels, at least when considered for a period of a few decades.

A second major problem is that land speculation is aided by the expectation of ever growing biofuel use. According to ActionAid, European investors had acquired 6 million hectares of land in sub-Saharan Africa for biofuels by May 2013.7 Yet actual biofuel production in or biofuel feedstock exports from Africa remains miniscule. The "promise" of biofuel profits, it appears, has been widely used to attract investment in landgrabs for quite different - often purely speculative - purposes. But many of those biofuel schemes may be fictitious, those landgrabs, undertaken under the guise of "biofuels projects", are all too real, causing large-scale displacement and evictions of communities, loss of food sovereignty, more hunger and malnutrition and water grabbing. And finally, growing demand for biofuels has combined with speculation in food and other "agricultural commodities" to cause major volatility in food prices, such as the global food price spikes of 2008 and 2012.

Virtually all of those devastating impacts can be traced back to biofuel subsidies, including quotas, mandates and tax reductions, i.e. to artificial markets. The region most responsible for the global trade in biofuels is the EU with its 10% "renewable energy for transport" aka (mainly) biofuel target by 2020. Yet despite the major global impacts of biofuels, their contribution to global transport fuel remains a tiny 2-3%.8

Some ten years after the start of those disastrous biofuel policies, the EU and North America seem intent to repeating the experience with wood-based bioenergy (biomass). Energy companies and wood pellet producers are rapidly creating a new global market in wood pellets, while the global (or more often regional) woodchip trade is "diversifying" to serve bioenergy markets including traditional pulp and paper and wood panel markets.

The impacts of industrial wood-based bioenergy are very similar as those of liquid biofuels and both are largely artificial markets – i.e. markets created and propped up by direct and indirect subsidies. However, there are two important differences:

Firstly, energy companies and their suppliers (e.g. wood pellet manufacturers) are sourcing wood directly from logging natural forests as well as from industrial tree plantations. In fact, cutting down slow-growing hardwood trees makes for higher-quality wood pellets which are favoured by many energy companies compared to pellets made from fast-growing tree plantations or sawmill residues. Coal power stations in particular tend to rely on the highest quality pellets. This is why, in the southern US, remnants of highly bottomland hardwood forests – amongst the most biodiverse temperate ecosystems in the world – are now being clearfelled to make wood pellets for export to the EU (especially to Drax in the UK).

Secondly, unlike the global trade in biofuels, the trade in wood-based bioenergy is currently almost entirely a North-to-North trade and there are few signs of this changing in the near future. The only exception is a much smaller intra-Asian trade, with South Korea importing pellets from Southeast Asian countries, especially Vietnam. The world's main pellets exporters are the southern US and Canada and they are currently able to outcompete any other pellet exporting regions due to cheap domestic energy (turning wood into pellets requires a lot of energy) and lax or absent logging regulations. Therefore, the impacts of biomass policies

in the North on countries of the Global South are at present almost entirely indirect ones – which does not make them any less serious. And just as EU biofuels policies have been used by speculative investors to legitimise and finance land-grabs in sub-Saharan Africa, hype about EU biomass policies is already being exploited by companies to advance their land-grabbing in Africa.¹⁰

Biofuel and now industrial wood-based biomass policies and investments result from a convergence of different interests – interests of energy companies, agribusiness, logging and tree plantation firms, speculative landgrabbers and others. They rely on policy choices made by different governments. However, UNFCCC agreements and mechanisms have boosted such bad choices:

Firstly, under member states' UNFCCC reporting requirements, all stack or tailpipe emissions associated with bioenergy are ignored. Biomass power stations, for example, emit up to 50% more CO per unit of energy than coal power stations from their smokestacks, but governments report them as zero carbon emitters. Emissions are supposed to be reported as part of countries' LULUCF (land use, land use change and forestry) emissions, though accounting rules for that sector have been heavily criticised by civil society groups. But even if they were improved, we would still be left with a situation where the EU can for example claim "carbon savings" from burning more palm oil biofuels in cars whilst the blame for the vast emissions from deforestation for producing that palm oil is placed entirely on countries such as Indonesia. And secondly, biomass and biofuel projects in Southern countries have been approved under the Clean Development Mechanism (CDM) - while the EU treats all bioenergy as "carbon neutral" in the EU Emissions Trading System.

As long as industrial bioenergy remains included in the definition of renewable energy in the EU and elsewhere, higher renewable energy targets will, perversely, translate into more land-grabbing, more forest destruction, more biodiversity loss and even more greenhouse gas emissions. And within overall renewable targets, biofuels and wood pellets will continue to compete, not with fossil fuels, but with wind and solar power (which have a much lower carbon and land footprint). The same is true for the false definition of large hydro dams as renewable energy. As long as the definition of renewable energy remains as flawed as it is now, climate justice activists need to avoid blanket calls for "more renewables". There is a need for solidarity amongst campaigners and social movements against different forms of destructive energy and with communities whether they are affected by coal mines, fracking, polluting biomass plants and waste incinerators or land-grabbing and forest destruction for bioenergy.

- 1 Eurostat
- 2 US Energy Information Administration
- 3 http://www.biofuelwatch.org.uk/axedraxcampaign/
- 4 http://www.se4all.org/wp-content/uploads/ 2013/10/GA-resolution-A-67-215-SE4ALL-DECADE.pdf
- 5 http://www.internationalrivers.org/
- 6 See http://www.europarl.europa.eu/intcoop/ empa/pdf/energie_draft_report_biomasse_plus_ amendments_en.pdf but note that this dates from 2007 - since then, EU and global biofuel use has increased very substantially
- 7 http://www.actionaid.org/sites/files/actionaid/ adding_fuel_to_the_flame_actionaid_2013_ final.pdf
- 8 http://www.iea.org/publications/freepublications/publication/biofuels_roadmap_web.pdf
- 9 See www.dogwoodalliance.org
- 10 http://www.biofuelwatch.org.uk/2014/biomass-landgrabbing-report/

ESCAPING THE 20TH 16 **CENTURY NEOLIBERAL** PRISON COMPLEX: WHAT SHOULD CLIMATE **JUSTICE ORGANIZATIONS DO**

WITH THE GREEN CLIMATE

FUND IN THE 21st CENTURY?

by Sarah Bracking and M. K. Dorsey1

For example, last year, CSOs worked to attract public and private finance into the Green Climate Fund on behalf of, and in cooperation with, the Board Members and Secretariat. They also assisted in writing technical documents and helping organizations in gaining the status of accredited entities. Inputs have been provided for the investment framework, safeguarding, ethics and integrity policy, targeting, voting procedures and country readiness, among many others.

But empirically, in the aftermath of the world financial crisis, there is a case to be made that specific pools of finance directly contribute to the worsening climate crisis. Those heavily invested in the fossil fuel sector represent the most obvious example. Other pools of capital and managers of capital offer "climate solutions" yet simultaneously provide financial resources to some of the largest carbon polluters. The World Bank falls into this category; alongside a great number of development banks and large private banks and, at the time of writing, the GCF itself, which will also invest in fossil fuels. Notably, the World Bank disputes the size of some of its carbon pollution investments - the Bank has never denied making those investments. Neither has it ever released a public statement to cease fossil fuels investments. Many of the 20 accredited entities of the GCF (as of July 2015) are of this polluting type.

Mainstream thinking on climate change governance is dominated by neoliberal ideologies and constrained within neoliberal policy frameworks. Therefore, practitioners accord primacy to narrowly conceived, financialized solutions, despite the lack of evidence that climate problems can be solved through financial means or institutions; and the growing decade of evidence that financial approaches can even be counterproductive.²

Financialized policy is ubiquitous across a wide range of environmental policy areas, such as carbon trading or biodiversity offsets, but contributes little to averting climate catastrophe. At best, financialized policy produces a spectacle or illusion of care, a globalized narrative which is embedded and generated within traditional supranational institutions like the United Nations and new institutional architecture such as the Green Climate Fund (GCF).

The Governing Instrument for the GCF was approved by the Conference Of the Parties (COP) to the UNFCCC on 11 December 2011 in Durban.3 It was conceived as something that would catalyze a "paradigm shift" in climate finance toward "low emissions development pathways"; which would be able to raise much larger sums than current flows of climate finance; and that would grant or lend to both the public and private sector simultaneously; while also generating funds from both. It was designated as an operating entity of the Financial Mechanism of the Convention.

Since then, and incentivized by small "victories" over voting, participation, consultation forum and contribution powers at Board meetings, convenings and conferences, Civil Society Organizations (CSOs) have invested much discursive effort and energy on the GCF, which inevitably prevents them from tackling other institutions and issues that may have better outcomes in addressing climate change. This opportunity cost is rarely discussed.

By July 2015, the Green Climate Fund's Investment Framework protocols remain ring-fenced in a less than publicly transparent private sector facility. GCF managers are answerable only to overarching targets and goals in the investment framework and its (eventual) derivative investment contracts which will be required to be loosely referenced to poorly elaborated "priority areas".

In technical terms, the GCF is a 'fund-of-funds' institution: it uses a largely mitigation based expenditure model; is managed using private finance oriented results and evaluation techniques; and it will generate dirty energy subsidies. Additionally, the GCF will use offshore funds which are overseen by equity fund managers promoted to decision-makers over portfolio expenditures, which it will distribute using multilateral entities as gatekeepers that stand to profit (or quite possibly *compradors*). In less technical terms: the GCF is murky.

Has the Green Climate Fund Taken Civil Society Activists Hostage?

Fundamentally, the GCF promises incremental reform over strategic withdrawal, structural change and the insistence on effective regulation.⁴

In its own words, the Green Climate Fund claims it, "will provide simplified and improved access to funding, including direct access, basing its activities on a country-driven approach and will encourage the involvement of relevant stakeholders, including vulnerable groups and addressing gender aspects." Such an approach is codified in terms of 'international best practice', while concepts such as 'country-driven', and 'relevant stakeholders' have been used vaguely to show how the politics of climate change is negotiated and by whom.

However, when CSOs are arguing and assisting in revenue generation and pledging for the new Green Climate Fund, there is a lack of empirical analysis that spending of the increased revenue would indicate any improvement to a cleaner economy whatsoever, or whether by supporting this structure we are delaying or retarding the type of changes needed to actually address the problem.

Yet the nexus between markets, climate finance, expenditures and environmental *destruction* is very strong. Carbon trading is the poster-child of this crisis: as one commentator put it: "Carbon trading is one final bloated corpse that needs to be hoisted into a hearse and whisked away quickly before it poisons genuine investment initiatives."

The Green Climate Fund Design Folly

Designated as an operating entity of the Financial Mechanism of the UN Convention, the Governing Instrument for the GCF has key concepts, such as "paradigm shift to climate resilient development", "country ownership", and even "climate finance", with weak foundational definitions and little international legal or institutional precedent.

The Investment Framework approved at the seventh meeting of the GCF in Songdo in May 2014 prioritized the delivery of private sector prerogatives. While committing to a 50:50 portfolio divide between adaptation and mitigation "over time" in its "portfolio targets", the document also commits to a "significant allocation to the Private Sector Facility" without it being entirely clear whether this is accounted for before or after the 50:50 guideline is measured.⁷

By the seventh meeting, the "paradigm shift potential" looked very much like the late 20th century definitions of the "catalytic" and "demonstration" effects of development finance. These effects suggest that public funds can catalyze private sector counterparts by demonstrating a "good idea", here indicated by "replicability", "scalability", "knowledge and learning" and the contribution of spending to an "enabling environment".8

Resource mobilization was begun in early July 2014 aimed at reaching capitalization of between US\$10 and US\$15 billion for an expected operational start in November 2014. However, in June 2014, the Indian country representative, among others, noted at the UNFCCC's Ad Hoc Working Group for Enhanced Action under the Durban Platform in Bonn that the lack of a legal definition to terms such as "climate finance" and "additionality" still warned

of the problem of financial fungibility, or re-classifying, of current Official Development Assistance (ODA) as "climate finance". How could anyone tell if funds were "additional" or merely reclassified ODA? The complexity of counting between promises, pledges, commitments, contracted and dispersed finance is compounded by some confusion over the differences between the categories, and 'roll-overs' within and between them, which add even more complexity to the counting game.

The World Bank, as trustee, was allowed during negotiations in Durban in 2011 to become an embodiment of this "international best practice" and was influential in designing many operational procedures from its pre-existing funds, while timid IMF safeguarding standards were adopted in May 2014, albeit as an interim measure, for at least three years.

However, the term "international best practice" fails to generate detail on the specifics of GCF operations. For example, accounting standards for climate or development finance do not exist, and the safeguarding and impact evaluation models currently employed by generic development finance institutions, from which climate funds seek to borrow, are thin and problematic, including the IMF system.⁹ The Investment and Business modalities drew on the same methodology of global 'experts' selected opaquely and from the realms of finance.

In short, the GCF has become a murky, pooled private equity fund, lacking sufficient public look-through rights, with a firewall to stop the cognitive connection between what is needed to prevent catastrophic climate change, and what capital is prepared to do in the GCF.¹⁰

A Non-performing spectacle?

Two clear outcomes are consequent upon the GCF's 'existence' to date: the non-performance of actual climate change governance and expenditures from 2009 to 2014 (current global public expenditure on climate change by OECD members remains a derisory US\$9 billion in financial year 2013–2014) and the locking of CSOs concerned with the GCF into complex technical engagements which drain their resources and time, but which contribute to

the performance of environmental care as non-material spectacle. 11

The non-performance of climate change governance must be our starting point in respect to improving influence and traction at a global level. In this respect, it is unfortunate that many observers prefer to frame the problem as many neoliberals would, not as a problem of unequal power and a lack of democracy, but as a temporary problem of implementation, capacity, or resources. Non-outcomes suit the powerful, such that we are observing an 'anti-politics', where the appearance and performance of care and concern has taken over from the actual practice of beneficial policy and government action. In reality, within the GCF powerful countries, corporations and banks have extended their control over and non-delivery of climate finance. Sadly, to date, most CSOs involvement has no direct relationship to furthering the objectives of ecological justice, not least because the technologies they are helping to design are legitimating devices that are thinly referent to science. The significance of operating modalities to eventual investment decisions and their substantive outcomes is also unknown, since inbuilt flexibility allows Board members some largesse in the commitment of resources, not least because of the non-fixity of key categories and concepts to date, and the amorphous and broadly conceived nature of monitoring, evaluation and results areas.

In short, the current form of CSO practice is problematic in a number of ways. First, there is time and energy spent which are resources not spent on building movements in national contexts for changing national environmental policies and the behaviors of nationally-authored representatives in supranational structures. Second, having an inflated and not very well proved faith in the ability of supranational structures to change our future also detracts from efforts to build it ourselves in the everyday now. Third, participation within the GCF and indeed the climate negotiations process more broadly seems to lend itself to people believing that the problem of responding to climate change is financial, and that more money will help solve it. This leads to uncomfortable alignments

with corporate power, where CSOs join a chorus asking for fiscal resources from states, many of whom are hard-pressed with funding social welfare. Or, CSOs become involved in trying to persuade corporate entities to commit with financial resources. Either way, the entrapment is in the language of financialization. At some point, it is better to stop and consider a new model, or in our case, a whole new lifestyle designed to live with different technologies altogether.

A practice of democratic government which can act on science and peoples' needs at a national and international level is the first requirement in this respect, to assist communities to live differently; a requirement which demands a peoples' based political movement to make it happen. Intervention needs to be realigned to political movements beyond and outside the epistemic financial elite. As writer Quincy Saul lamented recently, "We need to stop chasing the ruling class around the world... When are we going to stop just conference-hopping... putting up a big pagoda, and having the "alternative people's tent?" An alternative, according to Saul, is that "we need to build our own autonomous bases of resistance and prefiguration".12 We also need a critical realist analysis of what the GCF can and cannot do: it is not very green, its 'climate' is business friendly and its funds are missing. Moreover, if it had money it may just trap us further into overly slow and insufficient climate change governance.

- S. Bracking is Professor at the University of KwaZulu-Natal, Durban, South Africa and University of Manchester, UK. M. K. Dorsey, is a full member of the Club of Rome.
- 2 See also: Taibbi, M. (2011). Griftopia: a story of bankers, politicians, and the most audacious power grab in American history. Updated and expanded ed. New York: Spiegel & Grau; Fulcher, J. (2004).
 Capitalism: a very short introduction. Oxford [England]; New York: Oxford University Press.
- 3 Green Climate Fund (GCF) (2012), Governing Instrument for the Green Climate Fund, available from http://gcfund.net/fileadmin/00_customer/documents/pdf/GCF-governing_instrument-120521-block-LY.pdf [Accessed on 9th November 2013]

- 4 Bracking, S (2015), "The Anti-Politics of Climate Finance: The Creation and Performativity of the Green Climate Fund", Antipode, 47, 2, ps. 281-302
- 5 GCF. http://www.gcfund.org/about/the-fund.html. Accessed 30 June 2015.
- 6 Lohmann, L (2009), "Climate as Investment," Development and Change, 40(6), ps 1063-1083.
- 7 GCF (2014), Investment Framework, available from http://gcfund.net/fileadmin/00_customer/docu ments/MOB201406-7th/GCF_B07_06_Investment_ Framework140509_fin_20140509.pdf
- 8 GCF (2014:5), Investment Framework, available from http://gcfund.net/fileadmin/00_customer/documents/MOB201406-7th/GCF_B07_06_Investment_Framework140509_fin_20140509.pdf, GCF (2014b), Initial Proposal Approval Process, Including the Criteria for Programme and Project Funding, available from http://gcfund.net/fileadmin/00_customer/documents/MOB201406-7th/GCF_B07_03_Initial_Proposal_Approval_Process_fin_20140508.pdf
- 9 Bracking S and Ganho, A (2011), Investing in Private Sector Development: What are the Returns? A review of development impact evaluation systems used by development finance institutions in Europe, Norwegian Church Aid, Oslo, 6th June, 2nd ed. From http://www.kirkensnodhjelp.no/en/About-NCA/Publications/Reports/report-on-investing-in-private-sector-development/
- 10 Igoe, J (2014), "Firewall" in Fredriksen A, Sarah Bracking, Elisa Greco, James J Igoe, Rachael Morgan, and Sian Sullivan, "A conceptual map for the study of value: An initial mapping of concepts for the project 'Human, non-human and environmental value systems: an impossible frontier?", LCSV working Paper Series No. 2, available from http://thestudy-ofvalue.org/wp-content/uploads/2013/11/WP2-A-conceptual-map.pdf
- 11 Organisation of Economic Cooperation and Development (OECD) (2013), Aid Activities targeting environmental objectives, statistics, available from http://stats.oecd.org/Index.aspx?DataSetCode=RI-OMARKERS [Accessed on 26th April 2013]. See also: Igoe J (2013), "Nature on the Move II: Contemplation Becomes Speculation", New Proposals: Journal of Marxism and Interdisciplinary Inquiry, 6, 1-2, 37-49
- 12 Saul Q and J S Castro (2015), "A Discussion with Quincy Saul: On Climate Satyagraha", Counterpunch, April 10th-12th available from http://www.counterpunch.org/2015/04/10/on-climate-satyagraha/

CARBON TRADE WATCH



BEYOND PARIS: MOVEMENTS, ACTION AND SOLIDARITY TOWARDS CLIMATE **JUSTICE**

Throughout over 20 years of international climate change negotiations, talks continue to move further away from identifying the root causes of the climate crisis. With promoted "climate policies" (aka economic policies) financing the most destructive industries and polluters, often blocking genuinely effective actions that support community livelihoods and keep fossil fuels in the ground. While financial markets have a growing influence over economic policies, the "financialization of nature" goes beyond a privatization process as it turns over management to corporations, financial intermediaries and banks, whose sole concerns are to further accumulate capital.

These short, sharp articles highlight years of struggle, passion and commitment towards environmental, social and climate justice. The writings found in the following pages are contributions from committed activists, researchers, scholars, feminists and thinkers who participate with wide networks of dynamic peoples and groups. They continue to push the limits in the quest towards global justice. This Climate Justice Compendium attempts to address the root causes of climate change beyond the fallacy of the climate negotiations and towards building international solidarity.



This report is available for download at www.carbontradewatch.org/publications/paths-after-paris.html

www.carbontradewatch.org

CARBON TRADE WATCH

carbontradewatch@gmail.com