DEMAND CLIMATE JUSTICE

FALSE SOLUTIONS WG: TALKING POINTS

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Real, proven,

community-centered, cost effective solutions to justly address the climate crisis are increasingly being swept aside in favor of industry-basked, risky, expensive, and harm-inducing false solutions. Climate justice begins with ending financing for and promotion of these false solutions.

This briefing provides simple talking points to help debunk and counter various false solutions. Feel free to use them as you engage with decision-makers, media, and civil society.



LARGE SCALE FOREST BIOMASS ENERGY GENERATION

Large-scale burning of forest biomass for energy: Harms the climate - It is not low carbon, and is encouraged by flawed carbon accounting methodology that gives a false impression of zero emissions and of carbon neutrality; Harms forests - It threatens biodiversity and climate resilience, and undermines the climate mitigation potential of forests; Harms people - It undermines community rights and interests. It also harms human health and well-being; and Harms the clean energy transition - It provides a lifeline for burning coal for energy production. It also pulls investment away from other low emissions renewables.

RELEVANCE FOR BONN/ COP28: Global Stocktake relies on accurate carbon accounting but biomass burning methodology is incongruous with fossil fuel accounting and can wrongly attribute emissions responsibility. Art 6.4 removals assumption of carbon neutrality of biomass energy is incorrect.

HERE ARE SOME THINGS YOU MIGHT HEAR THAT ARE FALSE:

- Biomass energy is zero carbon or carbon neutral
- Forests must be managed for forestry to tackle climate change effectively
- Biogenic carbon is not a problem like fossil carbon

HERE'S HOW TO RESPOND:

- Burning forest biomass for energy is not carbon neutral. It immediately emits large quantities of greenhouse gases into the atmosphere equal to, or greater than those from coal, per unit of energy produced. In contrast it takes decades to centuries for forests to regrow and sequester the carbon, which is far too long to effectively contribute to the 1.5°C Paris Agreement target.
 - Current carbon accounting rules incentivise forest bioenergy by considering biomass combustion as a zero-emission technology, expressed as zero emissions in the energy sector. The assumption is that all emissions are instead to be accounted for when the biomass is logged, placing the burden on the forest producer rather than the biomass consumer. Yet emissions accounting of forests in the land sector is fatally flawed and generally understates emissions. The true carbon cost of biomass burning rarely appears accurately on any country's balance sheet.
 - 3. Using forest biomass for energy can entrench, intensify and expand logging. This degrades forest ecosystems, depletes biodiversity and soils and harms forests' abilities to deliver clean drinking water, flood protection, and clean air. Conversion of forests and other ecosystems to industrial monoculture tree plantations for biomass is especially harmful. We recognise that rights-based protection and ecological restoration improve the health and well-being of forests and make them more resilient to climate change and other environmental disturbances

- Letter Regarding Use of Forests for Bioenergy sent to World Leaders, signed by 500+ scientists and experts. (2021)
 - https://www.documentcloud.org/documents/20482842-scientist-leter-to-biden-van-der-leyden-michel-suga-moonfebruary-11-2021
- John Sterman, et al., Bulletin of the Atomic Scientists Volume 78, Issue 3. (2022) *Does wood Bioenergy Help or Harm the Climate?* Accessible from: <u>https://www.tandfonline.com/doi/full/10.1080/00963402.2022.2062933</u>
- Timothy Searchinger, Oliver James, Patrice Dumas, Thomas Kastner & Stefan Wirsenius, Nature (2022) EU climate plan sacrifices carbon storage and biodiversity for bioenergy. Accessible from: <u>https://www.nature.com/articles/d41586-022-04133-1</u>



MARINE, SOLAR AND LAND GEOENGINEERING

Geoengineering refers to large-scale technological interventions in the Earth's oceans, land and atmosphere with the aim of weakening some of the symptoms of climate change. Geoengineering perpetuates the false belief that the status quo cannot be changed and that we need climate and ecosystem manipulating techno-fixes to tame its effects. Geoengineering technologies are usually grouped into two categories – Carbon Dioxide Removal (CDR) (large-scale removal of GHGs from the atmosphere after they have been emitted) and Solar Radiation Management (SRM) (Reflects or blocks solar radiation to reduce warming effect).

RELEVANCE FOR BONN/ COP28: Article 6.4 (carbon markets/ removals) includes

engineering-based removals. Submissions on SRM expected in the Global Stocktake. Large promotion of land geoengineering via CCS at COP28. Advocates at Bonn and COP28 for quiet diplomacy and normalisation.

HERE ARE SOME THINGS YOU MIGHT HEAR THAT ARE FALSE:

- We need all options on the table to not undermine climate ambition
- These techniques are proven to have potential, with more research we can make them work
- Let's get Geoengineering right let's research everything and assess "all" scenarios
- If everything else fails, we need this as back up
- Geoengineering is the only pragmatic pathway to limit global temperatures given the situation we are in.

HERE'S HOW TO RESPOND:

- 1. CDR technologies are in the early lab phase and conceptual they are not proven at scale and many are unprovable when precaution is applied because of the risks to rights and ecosystems. CDR is increasingly considered vaguely within country policy commitments and in international discourse because of the exaggerated claims of their research stage, readiness, efficiency and feasibility.
- 2. CDR technologies are already being considered by large polluting industries and corporations, as a substitute for reducing and transforming their operations on large scales, which generate greenhouse gases via production and transportation, driven by colossal consumption.
- 3. Recent IPCC reports make it clear that projected 1.5-degree pathways involving CDR pose both known and unknown risks, and that these technologies may not be available or scalable in the timeframe needed for averting further and irreversible climate harm. The (externally provided) models within the IPCC include large amounts of CDR. These models are not designed to consider technologies' effects on ecosystems nor the protection of the rights of communities.
- 4. SRM has the potential to introduce massive new disruptions and aggravate already disrupted climate systems through weather and precipitation changes causing increasingly disastrous and unpredictable impacts on regional climates, ecosystems and peoples' livelihoods.
- 5. There are current precautionary methods of governance of CDR and SRM, such as The Convention on Biological Diversity (decision X/33, 2010) as well as The London Convention / London Protocol which is undergoing a review of marine geoengineering techniques.

- Analysis and reports by Geoengineering Monitor https://www.geoengineeringmonitor.org/
- Hands Off Mother Earth Manifesto, signed by 200+, 2018, <u>https://www.handsoffmotherearth.org/</u>



CARBON CAPTURE & STORAGE (CCS)

Carbon capture is the basis of the myth that carbon dioxide can be safely sucked out of smokestacks or directly from the air, and stored. Carbon capture and storage/sequestration (CCS) is often a catch-all term proposed to be used on natural gas facilities, fertilizer plants, ethanol refineries and coal-fired power plants (sometimes referred to as "clean coal"). The CO2 is then compressed into a liquid and transported to be stored in underground geological formations. CCS is usually referred to when addressing enhanced oil recovery (EOR). EOR is an older technology used by the oil and gas industries to inject CO2 into underground oil and/or gas deposits in order to extract more oil and gas. Carbon capture, utilization (use) and storage (CCUS) is the idea that CO2 could be converted into a new product to be stored in manufactured materials like cement and plastics or used for Enhanced Oil Recovery. Bioenergy with CCS (BECCS) is the concept of burning wood pellets or trees (from monocrop plantations) and capturing the CO2 emissions (see "Bioenergy). Direct air capture (DAC) proposes removing CO2 directly from the atmosphere using chemical & mechanical means.

RELEVANCE FOR BONN/ COP28: largely promoted with Article 6.4 and by oil-extracting economies, such as USA, OPEC states, Japan e.t.c.

HERE ARE SOME THINGS YOU MIGHT HEAR THAT ARE FALSE:

- We need to manage our carbon emissions, not manage carbon emission production at source
- The world can not phase out fossil fuels completely

HERE'S HOW TO RESPOND:

- 1. In many models, the potential of DACCS and BECCS has been based on theoretical assumptions and a limited set of factors which are not reflected in the real world, with overstated claims of feasibility, safety, readiness and effectiveness.
- 2. DACCS is an energy-intensive and (sometimes) water-intensive process, which is currently being used for more Enhanced Oil Recovery and as an argument to not pursue emission reductions.
- 3. DACCS is currently more expensive than nearly all other forms of mitigation, additionally, the emissions produced from the construction of DACCS infrastructure could be astronomical, risking our carbon budget. It is much cheaper for most companies to reduce their own emissions than to buy expensive DACCS credits (and safer for our carbon budget).
- 4. At present, more DACCS facilities have failed than worked, and ones that work have captured significantly small amounts of CO2 compared to what they have been modelled or promised.
- 5. The carbon captured (via CCS) would need to be transported one method of transport is through pipelines over large distances, which could further threaten human rights via land-grabs, health and safety.
- 6. CCS is a delay tactic for the global north who do not want to pursue climate ambition, but instead secure their economies and their elite. The Global South can not risk delay against the former's continued and unjustifiable expansion of fossil fuel production and use.

- Carbon Capture and Storage briefing by Center for International Law <u>https://www.ciel.org/issue/carbon-capture-and-storage/</u>
- Carbon Capture and Storage 'False solution' or vital tool to curb emissions? By DeSmog https://www.desmog.com/carbon-capture-and-storage-technology/

CARBON MARKETS AND OFFSETS



Article 6 of the Paris Agreement contains the various forms of carbon trading. Article 6.2 will link emissions trading systems (ETS) and other trading platforms to be used for Parties for trading credits for their nationally determined contributions (NDCs). Article 6.4 will take the place of the clean development mechanism (CDM) of the Kyoto Protocol and intends for countries to buy, sell and trade carbon offsets on an international platform. Article 6.8 is the so-called non-market based section but includes nature-based solutions (NBS) and will likely include false solutions like environmental services that already exist. At COP 27, the SB had put forward recommendations to include nature-based and engineering-based CDR removals. The Supervisory Body (SB) of the 6.4 mechanism have been tasked to develop recommendations and rules to govern carbon markets. The SB is a group of "experts" serving in their individual capacity (though many of them are the current or past market negotiators for their countries or country groups),

RELEVANCE FOR BONN/ COP28: the 5th meeting will conclude in May 2023, with the 6th, 7th and 8th meeting continuing till COP28. The Supervisory Body will meet to continue discussing recommendations for how to assess potential activities including activities involving removals.

HERE ARE SOME THINGS YOU MIGHT HEAR THAT ARE FALSE:

- Carbon dioxide removals (CDR) are the only way to achieve 1.5 degree C by balancing emissions. We must pull CO2 out of the air or capture at source. We need a carbon market to drive climate action and R&D.
- Carbon markets/pricing/instruments/ETS/cap and trade/offsets can be set up so that we are accounting for all of the emissions and then calculate the emissions down in trading platforms.
- Safeguards will protect Indigenous Peoples from the harms of the carbon markets. Article 6.2 and 6.4 can be contained separately and still account for emissions. Article 6.4 must include the private sector in order to ensure a robust market.

HERE'S HOW TO RESPOND:

- 1. Carbon Markets allow CDR technologies to bypass external regulations related to rights, safety and biodiversity. They provide an easy excuse for the fossil fuel industry, high-polluting businesses and governments to continue as normal. Carbon market advocates (economics minded) and engineers (with huge gaps and limitations in their claims) steer the climate ambition conversation.
- 2. After almost 20 years of carbon trading, it is clear that market-based mechanisms do not work. Rather, this fundamentally flawed approach incentivizes the private sector to profit from non-transparent systems. Carbon markets/pricing systems should be eliminated and a plan to phase out fossil fuels should be foregrounded before it is too late.
- 3. Safeguards have not protected Indigenous Peoples from the predatory and land-grabbing practices of the carbon brokers, conservation NGOs, carbon market managers, banks and states forming what is being termed as carbon colonialism. Indigenous Peoples have inherent sovereignty and jurisprudence over their territories.
- 4. The private sector administrates the voluntary markets and have made billions of dollars on a fake commodity that ends up void or with harms. Including the private sector carbon mafia into any UN system undermines any action on climate change. New start ups enter the conversations as demonstrated experts rather than as opportunists with a unproven tech.
- 5. Carbon Markets promote the idea that carbon removed can be accurately monitored and verified, or that they are permanent, or that the emissions produced and resourced used in the whole lifecycle of a removal project is very little and allowable within our carbon budget.

- Meetings of the Article 6.4 Supervisory Body. Link here
- NO to legitimizing geoengineering and land-based offsets by HOME Alliance, 2022. Link here
- Carbon Pricing Volume 1. Link here. See: www.ienearth.org
- https://www.foei.org/publication/chasing-unicorns-carbon-markets-net-zero/



CLIMATE SMART AGRICULTURE

It's no secret that industrial agriculture plays a major role in warming the planet. The IPCC estimates that the food system at large could produce as much as 37% of global greenhouse gas emissions. In 2009, Climate Smart Agriculture (CSA) was developed by the United Nations as a way for farmers to respond to climate change by enhancing food security, embracing climate-resilient practices, and reducing greenhouse gas emissions. CSA promotes a mixture of broad conservation practices disguised as climate change mitigation, which co-opts Traditional Ecological and Indigenous Knowledge and agroecology, and exploits them alongside Big Ag and carbon trading.

RELEVANCE FOR BONN/ COP28: The Koronivia Joint Work on Agriculture (KJWA) was established at COP23 and is heavily focused on CSA. At COP26, conflict arose around its use of soil and methane offsets in NDCs under Article 6.2. Approaching COP28, the U.S. and U.A.E. have co-created the Agriculture Innovation Mission for Climate (AIM for Climate) to increase global technology and spending on CSA.

HERE ARE SOME THINGS YOU MIGHT HEAR THAT ARE FALSE:

- CSA is necessary as global food production increases to feed a growing population.
- CSA leads to fewer pesticides. CSA is helping small farmers.

HERE'S HOW TO RESPOND:

- 1. Much of industrial agriculture is not "food" but is used for fuels, animal feed, and materials that go into everyday products. CSA does not "feed the world" using more ecologically responsible practices, but "feeds the world" the myth that Big Ag can save the planet. CSA is financed by powerful international financial institutions and profit-driven agribusiness aiming to profit from scaling up CSA. Indigenous Peoples' self-determination, sovereignty, land-use decisions, and traditional food systems are increasingly under threat as the interests of Big Ag dominate the CSA landscape.
- CSA prioritizes adding Big Ag into global carbon markets by expanding markets for soil offsets, methane digesters and other forms of expanding carbon markets and offsets. Doing so, Big Ag profits from additional revenue by selling carbon offsets, which incentivizes the industry to continue polluting and land grabbing. This is dangerous for Indigenous Peoples, farmers and the planet.
- 3. CSA co-opts genuine regenerative farming practices and corrupts efforts to meaningfully address climate change. CSA practices, such as "no till", can actually increase the need for pesticides. While Big Ag may give lip service to environmental responsibility, the 2022 Global Pesticides Report forecasts annual production rates to rise by 8.9%, leading to a \$105.9 billion industry by 2026. Further, CSA equates Traditional Indigenous Knowledge and agroecology with "climate smart" practices that embrace destructive practices like monocropping and seed+chemical subscriptions. This ultimately prioritizes maximizing productivity and profits over ensuring Indigenous, agroecological, and locally-driven approaches for an autonomous food web.
 - CSA expands colonial frontiers and prioritizes "expert" knowledge. CSA embraces genetic engineering and digital software—tools that are not designed to assist the 70% of small farmers that actually feed the world, but are instead used to increase profits, yields, and interests that boost big business and industrial farming. Further, as climate change accelerates, the colonial pursuit of farmland for carbon accounting leads to land-grabbing, forced land-use changes, unsustainable agriculture practices and coercion of Indigenous Peoples' knowledge and territories.

- Indigenous Environmental Network. 2022. <u>Climate Smart Agriculture</u>.
- ETC Group. 2022. <u>Small-Scale Farmers and Peasants Still Feed the World</u>?
- Center for International Environmental Law. 2022. <u>Fossils, Fertilizers, and False Solutions</u>.
- Peter Newell and Olivia Taylor. 2018. Contested Landscapes: The Global Political Economy of CSA.
- IBON International. 2020. <u>Rights for Sustainability: Community-led Practices on People-Powered Consumption and Production.</u>



NATURE-BASED SOLUTIONS

The concept of Nature-based Solutions has been co-opted and misused for a long time and there has not been a multilaterally agreed concept nor guidelines. With the recently launched UNEA resolution 5/5, this concept is still very broad and lacks appropriate regulation mechanisms, so corporations can continue their business-as-usual activities, including greenwashing through carbon and biodiversity offsets, environmental services, and 'net zero' pledges, all of which are flawed and failed approaches. Such activities have led to land grabbing and the violation of the rights of Indigenous Peoples and local communities (IPLCs), and has indeed worsened the biodiversity and climate crises.

RELEVANCE FOR BONN/ COP28: NbS is part of the Sharm el-Sheikh Implementation Plan (Section XIV: Forest). Also, NbS is included in Article 6.8 of the Paris Agreement, the ENACT (Enhancing Nature-based Solutions for an Accelerated Climate Transformation) initiative, proposed by the Egyptian COP27 Presidency, the Government of Germany and the International Union for Conservation of Nature (IUCN), will deliver a report at COP28.

HERE ARE SOME THINGS YOU MIGHT HEAR THAT ARE FALSE:

- NbS is an upgrade of the Ecosystem Approach
- The concept and proposal of Nbs comes from a bottom up approach, taking into account the voices and needs of the communities vulnerable to climate change and biodiversity loss
- NbS are not linked to offsetting mechanisms nor greenwashing

HERE'S HOW TO RESPOND:

- 1. The Ecosystem Approach had clear principles defined in the CBD which safeguard ecosystem functions and the communities who depend on these, while NbS do not.
- The concept and proposal of NbS comes from a consortium of Big Non-governmental Organizations and finance institutions, there are no critical Indigenous Peoples Organizations or grassroot organizations involved
- 3. NbS have been used already by big polluters to greenwash their activities and keep their emissions level.
- 4. NbS language is included in A6.8 of the Paris Agreement and has been related to net zero, carbon neutral and net gain in ecosystems, showing clear links to carbon offsetting, biodiversity offsetting and market based mechanisms.

- https://www.ienearth.org/nature-based-solutions/
- <u>https://climatefalsesolutions.org/</u>
- https://twn.my/title2/resurgence/2020/345-346/eco2.htm
- <u>https://www.climatejusticehub.org/2023/05/15/submission-for-the-first-global-consult</u> ation-on-nature-based-solutions/
- <u>https://www.nbsyouthposition.org/</u>
- <u>https://globalforestcoalition.org/forest-cover-61/</u>
- https://www.foei.org/publication/chasing-unicorns-carbon-markets-net-zero/

HYDROGEN



More than 99% of hydrogen is produced from fossil fuels. Hydrogen production is responsible for huge amounts of greenhouse gas emissions, particularly due to the release of fugitive methane-80 times more harmful than CO2. Blue hydrogen (from gas, with CCS) emissions are 20% greater than directly burning natural gas or coal for heat, and 60% greater than burning diesel oil for heat. It also relies on and encourages the unproven and risky technology of CCS (another false solution). Green hydrogen (from renewable electricity) production is highly inefficient, requiring huge amounts of both cheap renewable electricity and fresh water. Hydrogen-based electricity generation is more costly than solar + wind + battery storage. The hydrogen hype is created and fed by the fossil industry wanting yet another lifeline to keep on emitting (especially fossil gas in the case of hydrogen). In Europe, this hydrogen hype also further enables extractivist and neocolonial dynamics with most hydrogen production being planned across Africa to feed the European frenzy

RELEVANCE FOR BONN/ COP28:

- This will likely surface in discussions on energy transition
- May also be alluded through EU's post-COVID-19 economic recovery package

HERE ARE SOME THINGS YOU MIGHT HEAR THAT ARE FALSE:

- "Hydrogen can electrify long distance travels and heavy industries"
- "Blue hydrogen can be harnessed from natural gas, cushioned with CCS"
- Hydrogen is a clean energy source that must be part of the transition

HERE'S HOW TO RESPONDE

- 1. Narratives on the potential of hydrogen are often bloated. There is still very limited scientific evidence.
- 2. Hydrogen is not clean. Only 1% of the current hydrogen production is derived from clean energy sources, and even that 1% of so called green hydrogen is linked to extractivist projects that create tension around land and water, especially in Africa (to feed Europe's hydrogen frenzy).
- 3. Green hydrogen cannot be rolled out at scale to be a big part of the transition because it requires huge amounts of constant, cheap renewable energy and freshwater, rendering it highly inefficient and economically unviable.
- Hydrogen is highly likely to leak during production or transport, causing more GHG emissions.
 CCS is still unproven and pose its own environmental risks. Fossil industries are hyping blue hydrogen from gas, claiming to have the technology to capture 80-90% of CO2. Studies so far point to less than 12%. This is a mere attempt at delaying the phase out of fossil fuels
- 6. One thing is certain: the IPCC says we can't afford to tinker around the edges, fossil fuels must be phased out in the near-term to limit global warming.

- <u>The Hydrogen Hype: Gas Industry Fairy Tale or Climate Horror Story?</u>, Corporate Europe Observatory, Food and Water Action Europe, Recommon, December 2020
- Hydrogen Factsheet, Friends of the Earth Scotland, November 2021
- <u>The illusion of green hydrogen</u>, ReCommon, November 2022
- <u>Hydrogen Hype Pay no attention to the polluter behind the curtain</u>, Friends of the Earth US, February 2023
- Green hydrogen solution or pipe dream? Part I and Part II, Energy Transition, April 2023