COP30 Presidency Roadmap for Halting and Reversing Deforestation and Forest Degradation by 2030

Environmental Paper Network
BIOMASS ACTION NETWORK

Submission by the Biomass Action Network

The Biomass Action Network, a global coalition of over 230 organisations working to protect forests and communities from the centralised, industrial scale burning of wood for energy, welcomes the COP30 Presidency's call to contribute to the Roadmap for Halting and Reversing Deforestation and Forest Degradation by 2030 ("the roadmap"). We are submitting the following views:

The roadmap presents an important opportunity to prevent biodiversity loss, secure ecosystem services provided by forests and to contribute to addressing the climate crisis through protection and restoration of forest ecosystems.

In order to secure the success of both roadmaps of the COP30 Presidency- this one and the roadmap on Transitioning Away from Fossil Fuels in a Just, Orderly and Equitable Manner- it is of utmost importance that they be mutually reinforcing. Without this consideration, the transition away from fossil fuels poses a significant threat to forest ecosystems globally - while on the other hand, the transition away from fossil fuels will fail in halting emissions if it increases deforestation and degradation through the use of wood for bioenergy.

Key barriers:

1. Flawed definitions - a root cause for gaps in halting deforestation and forest degradation

The UNFCCC defines **forests** as a minimum area of 0,5-1 ha with a tree crown cover (or equivalent stocking level) of more than 10–30%, and trees with the potential to reach a minimum height of 2–5 metres at maturity in situ. This narrow definition considers only forest cover and does not account for the varying condition of forests, that is their ecological integrity, nor the amount of carbon stock. Further, areas where the trees have been removed due to harvesting or logging and where the forest is expected to regenerate naturally or with the aid of silvicultural measures are classified as forests. This means that conversion of natural forests to plantations is not considered as deforestation, despite the impacts on forest structure, ecological function, and carbon stocks. It considers plantations to be forests.

Industrial logging bringing primary forests into production and converting them to secondary natural forests or into plantations should be considered as **forest degradation**, as it causes massive emissions and loss of ecological integrity and biodiversity, however the UNFCCC has never adopted a definition of forest degradation despite the intention to adopt biome based definitions declared in the

Marrakesh Accords when the current forest definition was adopted (16/CMP.1 Land Use Change and Forestry 2005).

Forest degradation is often overlooked, especially in forests of the Global North, but its impacts are at least as large as those of deforestation. Claims that 'sustainable forest management' addresses this problem are incorrect, as this refers to forests managed for wood production which cycle on a dramatically reduced carbon stock (minus 30-70%) of that in primary forests, with depleted biodiversity, ecological integrity and consequent loss of resilience to climate change and fire. For example, in Finland, which is often considered a model for sustainable forestry, only around 3% of forests are primary forest, yet according to the flawed definition, there is no deforestation. Sustainability claims of the forestry industry refer only to sustaining wood production and cannot be relied on as a guide to forest degradation..

In order to address deforestation and forest degradation, the definitional flaws need to be fixed and biome-based definitions developed, such that: plantations are distinguished from natural forests, the various stages of degradation are identified (for example by adopting in the interim the FAO sub-categories of forests: primary forests, naturally regenerating forests, planted forests, and plantations), and changes in carbon stocks identified along this continuum.

2. The substitution of fossil fuels with forest bioenergy leads to increased deforestation and forest degradation, higher emissions and biodiversity loss

The **substitution of fossil fuels with forest biomass poses a profound and escalating risk** to forests, climate, and communities. Global wood consumption already exceeds sustainable supply, driving over-extraction, accelerating deforestation and degradation, and eroding biodiversity and local livelihoods. Demand for high-volume, low-value wood products has intensified harvesting rates to the point where carbon stocks and sinks capacity are declining, and in some regions forests have become net carbon sources. These natural carbon stocks and sinks are indispensable for climate mitigation, yet current policy frameworks continue to undermine them.

Industrial-scale biomass combustion in centralized electricity and/or heat generation **has been wrongly incentivised as "renewable" energy**. This has entrenched, intensified, and expanded logging pressures, contributing to forest degradation and deforestation in sourcing regions. Co-firing biomass with coal, promoted as a climate solution despite offering no real emissions reductions, further amplifies these impacts whilst entrenching the use of coal. In Indonesia, for example, a national co-firing directive is projected to drive the loss of at least 2.3 million hectares of natural forest.

The **rapidly expanding biomass industry** represents the largest share of OECD renewable energy. Between 2010 and 2021, woody biomass burning increased by 50%, electricity generation from solid biomass rose fivefold between 2000 and 2022, and wood pellet production surged by 250% to 47.5 million tonnes in 2022. Under the IEA Net Zero Scenario, impacts on forests will be exacerbated as biomass electricity capacity is expected to grow by 90% by 2030, with woody biomass supply for energy tripling.

Flaws in UNFCCC carbon accounting and IPCC inventory systems further propel this industry. As research shows, immediate emissions from burning woody biomass per unit of energy are at least equivalent to coal and often higher, yet they are accounted as zero in the energy sector. Emissions are instead transferred to the land sector, where they are obscured through net accounting. International trade exacerbates this distortion: biomass-consuming countries (primarily in the Global North) claim emissions reductions, while producer countries—sometimes in the Global South—carry the land-sector emissions burden. In the Global South this dynamic reflects broader patterns of environmental injustice, where consumption in the Global North drives ecological degradation and social impacts in producer regions.

To align with the need to identify and address forest degradation, carbon accounting for forests must evolve beyond the accounting only of carbon flows, that is, emissions and removals, to also calculate and report on forest carbon stocks, that is, quantifying the loss or gain of such stocks. Ideally the condition of that forest, being its ecological integrity, would also be assessed as an indicator of the resilience of those stocks and likelihood of their loss.

The **assumption that forest biomass is carbon neutral is scientifically unfounded**. It ignores the decades-to-centuries carbon debt created by burning wood and the fact that biomass combustion occurs continuously. Regrowth is not guaranteed, especially under conditions of escalating climate impacts, unplanned logging, erosion, fire, pests, and diseases. Natural forests hold far more carbon than managed plantations or converted land; once lost, their carbon stocks may never fully recover. As a result, biomass energy increases atmospheric CO_2 during the critical period to 2100, worsening global warming rather than mitigating it (Sterman et aSterman et al. 2018l. 2018).

Emerging **technologies further threaten forests** by creating new demand pathways, such as charcoal-based steel production, e-methanol and e-diesel produced with wood, biochar and BECCS. These approaches reflect a broader trend of promoting ‘false solutions’ that rely on continued extraction and combustion of carbon-based resources rather than enabling transformative change in energy and production systems. Rather than doubling down on these false solutions, climate strategies must shift away from all carbon-based fuels toward electrification, energy efficiency, and genuinely renewable energy sources.

In order to halt deforestation and degradation, the replacement of fossil fuels with forest biomass needs to be rejected as a false solution.

3. Economic drivers of deforestation and degradation: phase out subsidies and fix the value chain

Subsidies for bioenergy are one of the clearest examples of **harmful subsidies**, which should be eliminated according to Target 18 of the Global Biodiversity Framework, and under Paris Agreement Article 2(1)(c) “making finance flows consistent with a pathway towards low greenhouse gas emissions”. Billions of dollars globally, have been misdirected to support burning wood (pellets and chips) for electricity and heat resulting in the expansion of a biomass industry that is driving

deforestation and forest degradation, polluting communities, and releasing more CO2 than the fossil fuels it is intended to replace.

The **value chain of wood production** is being distorted by the scale of demand of the forest bioenergy industry, together with its subsidies. Although high quality solid wood products are usually priced higher per unit weight or volume than lower quality wood used for bioenergy, the vast amount of wood sold for bioenergy compared to sawlog never-the-less becomes the major income source from a production forest. Hence a transition from selective logging for quality sawlog to clearcutting regimes, and escalation of forest degradation. This transition should be resisted through policy prescriptions. Emphasis should be placed on the value of non-extractive products and services that intact forests provide.

International trade and finance rules must be reformed to **prevent the externalisation of environmental and social impacts to producer countries** in the Global South, reinforcing inequalities and limiting pathways to equitable forest governance. This includes reshaping private-sector finance formats to discourage land-use change and redirecting investment towards restoration, ecological integrity, and community sovereignty over natural resources.

Key levers:

1. Regulation to prevent logging of primary and old-growth forests

To date, international attempts to halt deforestation and forest degradation have failed. Binding regulation is necessary on international, regional and national levels to prevent the exploitation of remaining primary, old growth, and intact natural forests. It is necessary to establish frameworks for forest monitoring, and close loopholes that currently allow destructive operations to continue under the guise of “sustainable forest management”. The forest industry has failed to halt biodiversity loss and secure forest carbon storage and sinks in industrial forests - this underlines the need for strict protection of all remaining natural and old growth forests.

2. Global climate policy must shift to a 100% renewable transition that excludes woody biomass

Burning woody biomass is incompatible with climate mitigation, biodiversity protection and carbon-sink stability, and should not be treated as a renewable energy source. Biomass use at scale must therefore be excluded from all climate targets, as they contribute to monoculture plantation expansion, land dispossession, and ecological degradation rather than genuine decarbonisation.

3. Recognition and enforcement of land rights for Indigenous Peoples and local communities, support for community led conservation and securing forest equity

Human rights must be fully respected through the recognition of local communities’ and indigenous people’s rights to land. Land grabbing for monoculture plantations for bioenergy is far too common and needs to be prevented and criminalized. Indigenous peoples have consistently demonstrated the highest success rates in safeguarding forests, yet they remain underfunded and politically marginalized. Increasing direct funding to community-led, rights-based and gender-just forest protection initiatives is essential. Advancing forest equity—ensuring that those least responsible for emissions are not the ones bearing the highest costs—is essential for just and effective global climate governance.

4. The recognition that the cost of climate change is escalating rapidly, for societies and for business alike — urgent action is required

Recent disasters—from floods in Sumatra and Nairobi to mega-fires in Brazil, Portugal and Chile—demonstrate the catastrophic impacts of climate change combined with the impacts that monoculture plantations impose. Plantations for bioenergy, especially eucalyptus, acacia, and pine, increases risks of forest fires. Furthermore, tipping points, such as the Amazon forest losing its carbon sink function and beginning to release carbon, underscore how little time remains to halt the ecological crisis we are facing. Scientific evidence increasingly warns that crossing ecological tipping points in major forest systems could trigger cascading and irreversible climate impacts at the global scale.

Best practices for safeguarding forests while reflecting diverse and local realities

Across regions, Indigenous Peoples, local communities, and civil society are already demonstrating effective, rights-based approaches to halting deforestation and forest degradation. These **community-led models prioritise human rights, gender justice, traditional knowledge, and collective territorial governance**—providing proven alternatives to carbon markets and the financialisation of nature. Indigenous governance systems, such as those of the Gunadule in Panama, have safeguarded biodiverse territories through biocultural practices while rejecting mechanisms like REDD+ that threaten their autonomy and conservation systems.

Sustainable practices developed by communities, including **agroecology, continuous-growth forestry, and Indigenous agroforestry systems** such as the women-led nainu model, show how forest protection, biodiversity conservation, soil restoration, climate resilience, and food sovereignty can be achieved together. These approaches maintain ecosystem integrity and offer clear best-practice models in contrast to monoculture plantations and industrial forestry, which are well-documented drivers of ecological degradation and livelihood loss. Community resistance movements—such as mining-free declarations in Indigenous territories in Bolivia—further demonstrate how grassroots mobilisation, legal action, and community-based economies can defend forests and water systems from extractive pressures.

Cross-regional networks and collaborations strengthen these community-led solutions by enabling knowledge exchange, solidarity, and coordinated advocacy. Platforms such as the Biomass Action Network, the Environmental Paper Network, and the Global Forest Coalition highlight common drivers of deforestation and elevate community-based, rights-based, and gender-just governance models as the most effective pathways for transformative change. These best practices underscore that successful forest protection relies not on new technological fixes, but on shifting power, resources, and decision-making to Indigenous Peoples and local communities, and dismantling the structural drivers of deforestation and inequality.