



Submission to Call for input 2023 - structured public consultation:

Removal activities under the Article 6.4 mechanism

CONTRIBUTION TO THE ORIGINATION OF CARBON CREDITS FROM LONG-TERM
REMOVAL (Carbon Dioxide Removal - CDR) IN MANAGED FORESTS

PARAMETERS	Pools					
	FOREST GROWTH (AAI)	FORESTRY OPERATIONS	INDUSTRIAL WOOD	CONSTRUCTION TIMBER	BIOCHAR PRODUCTION	SOIL STOCKING
BASELINE	1m ³ /ha/year	0,5m ³ /ha/year	0,25m ³ /ha/year	0,2m ³ /ha/year	0,01m ³ /ha/year	0,01m ³ /ha/year
MRV	+ACI/AAI	+ EFICIENCY	+ EFICIENCY	+ EFICIENCY	+ BIOCHAR	+ SOIL ATRIBUTES (FOREST PRODUCTIVITY)
ELEGIBILITY	Permanent/standing forest	Permanent/standing forest	Permanent/standing forest	Permanent/standing forest	Permanent/standing forest	Permanent/standing forest
ADICIONALITTY	* enrichment (planting) * management intensity * shorter cycles * enhanced quality	+ biomass usage (production) + operational quality - operational damage	+ quality + productivity + end use (standard)	+ quality + end use (standard)	+ biochar	+ forest growth
ALOMETRIC EQUATIONS	IPCC	IPCC	IPCC	IPCC	IPCC	IPCC
INDICATORS	*área (ha) *productivity (DAP, h) *permance time (lyfe cycle)	*productivity (DAP, h) *productivity of biomass (m ³)	*productivity of HWP (m ³ , m ²) * productivity less residues (m ³)	* productivity (product dimensions) *productivity less residues (m ³)	*biochar (m ³)	*área (ha) *productivity of forestry (AAI/m ³)
CDR - UNFCCC	AFOLU	AFOLU	IPPU/SWR	IPPU/SWR	IPPU/SWR	AFOLU
Permanence	25y	1y	1y	30y	1y	200y

Accounting for Removals: each pool, using indicators at the table (ha, DAP, h, vol, life cycle)

Monitoring Period: each pool has its own, at the table we are assuming a forest plantation with native species of hardwoods for construction. This can also be applied to agriculture, pasture and silviculture at large, with harvested agriculture and pasture products having different destinations and life cycles.

Crediting Period: each pool has it own and its attached to the monitoring period, discount rates and other parameters apply according to permanence.



Timeframe for Addressing reversals: should apply for each pool and attached to the crediting and monitoring period. To avoid loss the discount of credits should be at least equal to the variation coefficient, or estimated error.

Avoidance of Leakage: also apply to each pool and to the crediting and monitoring period and with the project activity. For land based activities adequate balance must include CO₂ removals from grains, proteins, fibers, oils and other carbon based products that are harvested and transport outside boundaries into society. Socio-economy studies must include overall balance between activities and job and income creation.

Avoidance of negative environmental, social impacts: each pool has its own impacts and they should be addressed accordingly. IPBES framework for ecosystem services accountability must be used to address socioenvironmental impacts, both negative and positive.

MAIN GOAL

Create a methodology for generating carbon credits from increased production, use and disposal of industrial wood.

SPECIFIC OBJECTIVES

- I. Develop methodology for monitoring the baselines of forest areas including eligibility conditions, additionality and specific MRV criteria (measurement, reporting and verification).
- II. Develop/Select allometric equations to select suitable variables to measure the performance of forests in increasing CO₂ removal.
- III. Develop emission factors, length of stay, area and productivity to measure the performance of forests in CO₂ removal.
- IV. Generate technical subsidies for the development of parameters for forest exploitation in the generation of long-term CDR (carbon dioxide removal).



V. Develop technical subsidies for Public Policies, in order to increase the generation of CDR in managed forests.

SAW. Contribute to the improvement of data integration and interactions of the AFOLU-IPPU-RSU (UNFCCC) methods, in order to provide relevant information for the National GHG Inventory.

EXPECTED RESULTS

The generation of CDR carbon credits from forests managed for industrial production.

I. The generation of adequate and integrated CDR methodologies, for the entire industrial wood production chain, considering all the important stages in the preparation of carbon projects.

II. Adjusted allometric equations for each type of forest considered (plantations, natural tropical and temperate), as well as the definition of the most significant variables for these estimates.

III. The determination of relevant indicators and factors to assess the performance of forests and production chains in the generation of CDR credits.

IV. Definition of significant parameters for measuring CDR credits based on forest management.

V. Aggregation of value and knowledge regarding managed forests, as well as the consequent stimulus to national forestry production.

SAW. Creation of an integrated process for generating CDR credits for the entire industrial wood production chain, adding value to the sector and generating relevant information on the sector for the National GHG Inventory.