

Bioenergy (Biomass, Biogas, Biofuels)

Source Metadata

Field	Value
source	cbi
source_version	CBI Taxonomy (current)
source_id	CBI-ENE-004
cbi_sector	Energy
bond_eligible	partial
mitigation	Y
adaptation	N
last_checked	2026-05-26

CBI Sector Criteria

CBI Bioenergy Criteria are under ongoing development and apply conditional eligibility. Biomass, biogas, and biofuel projects must demonstrate sustainable feedstock sourcing and net lifecycle emission reductions compared to fossil fuel baselines. The criteria impose feedstock sustainability requirements to prevent land-use change emissions and competition with food production. Only bioenergy pathways demonstrating substantial GHG reductions qualify.

Eligible Activities & Assets

Conditionally eligible assets include: biogas plants using agricultural waste, manure, or municipal organic waste; biomass combined heat and power (CHP) plants using sustainably sourced residues; advanced biofuel production from non-food feedstocks (cellulosic ethanol, renewable diesel); landfill gas capture and utilization systems; and biorefinery infrastructure producing bio-based chemicals alongside energy. First-generation food-crop biofuels face stricter scrutiny and may not qualify.

Certification Process

Verifiers assess feedstock supply chain documentation, lifecycle analysis (LCA) demonstrating emission reductions, and land-use impact assessments. Pre-issuance review requires evidence of sustainable sourcing certifications (e.g., RSB, ISCC). Post-issuance monitoring includes feedstock origin tracking and actual versus projected emission reduction reporting.

LATAM Market Context

Brazil is a global bioenergy leader with extensive sugarcane ethanol and bagasse power generation. Colombian bioenergy projects have focused on palm oil biomass residues and sugarcane bagasse in the Valle del Cauca region. Green bond issuance for bioenergy in LATAM is growing, particularly for waste-to-energy projects in Brazil and Mexico that align with circular economy objectives.

Colombia Green Finance Taxonomy Alignment

The TVC includes bioenergy from sustainable biomass as an eligible mitigation activity, with specific criteria requiring proof of sustainable feedstock sourcing. Colombia's palm oil and sugarcane industries provide significant biomass residue feedstocks. TVC criteria align with CBI's emphasis on avoiding deforestation-linked feedstocks, consistent with Colombia's commitments under the Paris Agreement.

Cleantech Taxonomy Crosswalk

Maps to Cleantech Taxonomy sector ES (Energy) — specifically ES-RE-BIO (Renewable Energy: Bioenergy). Cross-references to AF (AFOLU) for feedstock sustainability, WA (Waste) for waste-to-energy pathways, and IN (Industry) for biorefinery processes.

Revisión #2

Creado 2026-05-27 03:39:02 UTC por Gideon Blaauw

Actualizado 2026-05-27 03:51:10 UTC por Gideon Blaauw