COP30 Contribution – Niger / Sahel (Final English Version)

Transitioning Away from Fossil Fuels & Halting and Reversing Deforestation (Notes + MRV Annex)

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NOTE A – Transitioning Away from Fossil Fuels (Sahel & Niger)

Context. Niger and the Sahel combine high climate vulnerability with low access to modern energy. Electricity access remains very low (~20% in 2023), final energy consumption is dominated by traditional biomass (~69%), and technical & commercial grid losses are around ~21%. At the same time, solar potential is among the highest globally.

Critical barriers

- High cost of capital and country risk that limit project bankability.
- Infrastructure constraints: fragmented grid, insufficient regional interconnections, and high losses.
- Low purchasing power and heavy reliance on biomass-based cooking.
- Regulatory frameworks still being consolidated (VRE grid codes, mini-grid frameworks).
- Exposure to climate shocks (heat extremes and heavy rainfall).

Acceleration levers

- Scale up solar (IPPs + public) and deploy mini-grids + storage; run competitive tenders with risk mitigation.
- Strengthen regional interconnections (WAPP) to share variability and reduce system costs.
- Reduce T&D losses through metering, rehabilitation and digitalization — target ≤ 12% by 2030.
- Expand clean cooking (LPG/electric/biogas) with targeted subsidies and PAYG models for affordability.
- Use concessional finance and guarantees (IDA/GCF) and deploy data-driven MRV (ICAT) to track NDC progress.

Trajectory & 2030 targets (2026–2030)

2030 targets: Electricity access 45–50%; T&D losses ≤ 12%; Biomass share 55%; Installed solar 1,000–1,100 MW; Operational mini-grids 10,000; Clean cooking 40–45%; Energy-sector emissions −20% (realistic) to −45% (reinforced).

NOTE B – Halting & Reversing Deforestation (Sahel & Niger)

Context. Niger has limited dense forest cover but vital agro-silvo-pastoral systems (e.g., Faidherbia parklands). Degradation is driven by demand for fuelwood/charcoal, agricultural expansion and overgrazing. Farmer-Managed Natural Regeneration (FMNR/ANR) has restored several million hectares over the last two decades.

Critical barriers

- Dependence on fuelwood/charcoal for cooking; informal value chains.
- Land/tree tenure insecurity despite progress under the 2020 Presidential Decree.
- Limited enforcement capacity and data gaps on degradation beyond gross deforestation.

Acceleration levers

- Scale FMNR/ANR (rights, local committees, incentives).
- Expand clean cooking to reduce pressure on woody biomass.
- Develop nature-positive value chains (honey, oils, gum) and high-integrity results-based payments/carbon finance.
- Strengthen monitoring systems: GFW + satellite imagery (Sentinel/Landsat) + participatory inventories (MRV AFOLU).

Trajectory & 2030 targets (2026–2030)

2030 targets: FMNR restoration 3.2 Mha; Reduction in natural cover loss −40%; Communes applying the FMNR Decree 100%; Fuelwood per capita −30%; On-farm tree carbon +15 $MtCO_2e$; Degraded land −20%.

MRV ANNEX – Data, Indicators, Legends & Targets

Energy KPIs (short definitions)

Electricity access (%): Share of population with minimum service ≥ 4 h/day.

T&D losses (%): (Injected − billed) / injected (technical + commercial).

Biomass share (%): Share of solid biomass (wood/charcoal) in final energy.

Installed solar (MW): PV capacity connected to grid + mini-grids.

Operational mini-grids (no.): Number of live mini-grids with telemetry/billing.

Clean cooking (%): Households using LPG/electric/biogas (non-biomass).

Energy GHG reduction (%): Change vs BAU using IPCC 2006/2019 guidelines.

AFOLU KPIs (short definitions)

Reduction of natural cover loss (%): Annual decrease of deforestation/degradation across natural formations.

FMNR (Mha): Area restored through Assisted/Managed Natural Regeneration.

Communes applying FMNR Decree (%): Share of communes applying the 2020 decree on tree use rights.

Fuelwood per capita (%): Change in per-capita fuelwood/charcoal consumption.

On-farm tree carbon ($MtCO_2e$): Additional carbon in parklands based on allometric models.

Degraded land (%): Share of areas with low NDVI/bare soil (remote sensing).

Chart – 2030 Targets : ENERGY

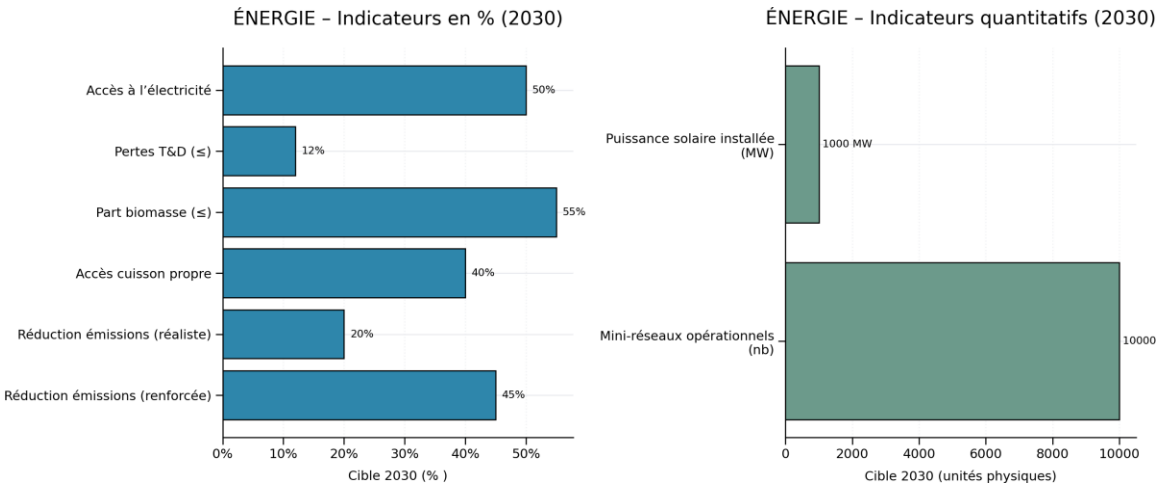
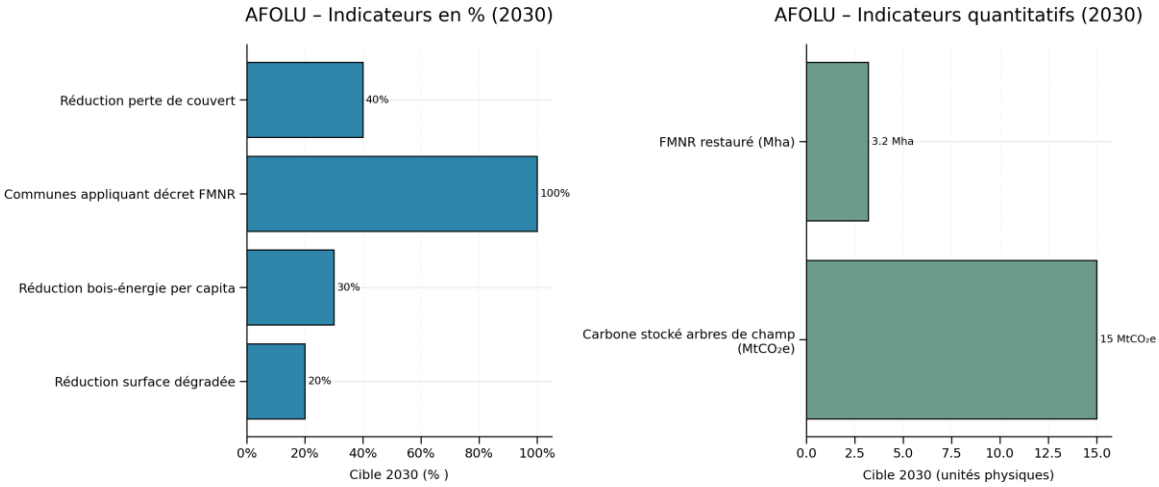


Chart – 2030 Targets : AFOLU



Comparative targets 2026–2030 (Energy & AFOLU)

Indicator	**2026**	**2027**	**2028**	**2029**	**2030**
Electricity access	26%	30%	36%	42%	45–50%
T&D losses	18%	16%	14%	13%	≤ 12%
Biomass share	66%	63%	60%	57%	55%
Installed solar (MW)	300	500	700	850	1,000–1,100
Operational mini-grids	2,000	4,000	6,500	8,500	10,000
Clean cooking	12%	20%	28%	35%	40–45%
Reduction of natural cover loss	–10%	–18%	–25%	–33%	–40%

FMNR (Mha, cumulative)	0.6	1.3	2.1	2.7	3.2
Communes applying FMNR Decree	35%	55%	75%	90%	100%
Fuelwood per capita	−8%	−13%	−20%	−25%	−30%
On-farm tree carbon ($MtCO_2e$)	+3	+6	+9	+12	+15
Degraded land	−5%	−8%	−12%	−16%	−20%

Bibliography (key public sources)

• IEA (2021), Clean Energy Transitions in the Sahel.

• ESMAP/World Bank – RISE & country data for Niger (access, clean cooking).

• Enerdata (2023–2025) – Network losses & biomass share (Niger).

• UNFCCC/ICAT (2024) – Niger, data-driven NDC tracking (energy).

• AfDB – Desert to Power / WAREP – programme documents.

• Global Forest Watch – Niger dashboards.

• Tropenbos/ICRAF (2023–2025) – FMNR in Niger (evidence).