BaCaSi
Batéké Carbon Sink

A large-scale afforestation operation has been kicked off by TotalEnergies on the Batéké Plateau in partnership with the Republic of the Congo and the group *Forêt Ressources Management*.

Starting date of the project	November 2021
Project localization	The Republic of the Congo, the Plateaux department (Batéké plateau)
Project objectives	The BaCaSi project plans the sustainable management of a 55,000-ha site made up of damaged grasslands exposed to regular bush fires, as part of the National Afforestation Program (ProNar) initiated by the Congo. The aim is to plant a new 40,000-ha carbon sink that will capture 12 million tCO_2eq over 35 years.
Detailed project description	The operation, due to last 35 years, includes: • Planting a new forest of 38,000 ha of *Acacia mangium*, which will be sustainably harvested as from 2040 (selection cutting) and used to supply sawed timber and plywood to Brazzaville and Kinshasa. • Developing a 2,000-ha agroforestry perimeter (with an eight-year rotation) of *Acacia auriculiformis*, associated with the production of agricultural commodities (cassava) and energy wood for the local market. • Preserving gallery forests and other sensitive ecosystems found on the site (around 5,000 ha).

Main project's drivers for reducing the greenhouse gas emissions

Reduction levers	Details on the aspects of the project
☐ Energy and resource efficiency (including behavior)	
☐ Energy decarbonization	
☐ Energy efficiency improvements	
☐ Improving efficiency in non-energy resources	
☒ Emissions absorption: creation of carbon sinks, negative emissions (BECCS, CCU/S, etc.)	Afforestation of a surface area of 40,000 ha
☐ Financing low-carbon producers or disinvestment from carbon assets	
☐ Reduction of other greenhouse gases emission	

Emission scope(s) on which the project has a significant impact and quantification

	Aspects of the project contributing to the reduction of emissions by emission category	Quantification of associated GHG emissions by emission category

of GHG emission reductions per emission scope

		Please follow the quantification methodology used in the Afep guidelines.
Reduction of the company's carbon dependency		
Scope 1 *Direct emissions generated by the company's activity.*		
Scope 2 *Indirect emissions associated with the company's electricity and heat consumption*		
Scope 3 *Emissions induced (upstream or downstream) by the company's activities, products and/or services in its value chain.*		
Increase of carbon sinks		
Emissions Absorption *Carbon sinks creation (BECCS, CCU/S, etc.)*	Afforestation of a surface area of 40,000 ha	The operation will help capture around 12 $MtCO_2$ over 35 years (almost 9 tCO_2/ha/year on average)
GHG emissions avoided by the company at third parties		
Avoided emissions *Emissions avoided by the activities, products and/or services in charge of the project or by the financing of emission reduction projects.*		

Clarification on the calculation or other remarks: Click here to specify

Modality of verification of the quantification

Calculation standard used (ADEME base, GHG protocol, etc.): based on the UNFCCC AR-ACM0003 v2.0 methodology
Verification of the calculation (internal or external): verification planned as part of the third-party validation of the project in line with an internationally recognized standard (VERRA, Gold Standard or equivalent).

Other environmental and social benefits of the project

The project will help preserve the gallery forests found on site, particularly through the implementation of firewalls and surveillance of the site.

The project will be developed in association with the local communities and indigenous people, who will benefit from the agroforestry perimeter. The project will generate direct and indirect employment, and a local development fund will support actions in favor of neighboring villages in the areas of health, nutrition and education.

- SDG 2 - Zero hunger: subsistence crops maintained in the agroforestry perimeter providing wood for heating and food commodities (cassava).
- SDG 8 - Decent work and economic growth: creation of decent direct jobs (1,000 on average in planting, maintenance, and surveillance activities) and around 200 indirect jobs; development of responsible work practices.
- SDG 13 - Urgent action to combat climate change: creation of carbon sinks.
- SDG 15 - Life on land: planting *Acacia mangium* and *auriculiformis* on sandy plateaus exposed to recurrent bush fires will create a forest environment, which in the long term, will increase the biodiversity of ecosystems – Conservation of existing gallery forests.
- SDG 17 - Partnerships for the goals: contributing to the development of local communities.

Project maturity level

☐ Prototype laboratory test (TRL 7)
☐ Real life testing (TRL 7-8)
☐ Pre-commercial prototype (TRL 9)
☐ Small-scale implementation
☒ Medium to large scale implementation

Remarks: 895 ha planted in 2021 and objective of 4,000 ha for 2022.

Capacity and conditions of the project reproducibility, with associated climate impact mitigation potential

The acacia-cassava model developed in the frame of the BaCaSi project has already been tested in the sub-region. It can be replicated on damaged grasslands.

Amount of investment made (in €)

$250 M over 35 years

Economic profitability of the project (ROI)	☐ ST (0-3 years) ☐ MT (4-10 years) ☒ LT (> 10 years) **Remarks**: the additionality of the project implies an absence of financial return in the traditional sense.
Engaged partnerships	*Forêt Ressources Management* through its Congolese subsidiary Forest'Neutral Congo
Open comments from the project owner	/
More about the project	
Contact the company carrying the project	https://totalenergies.com/fr/formulaire-de-contact
Project URL links	/

Illustrations of the project