Form
ghana

Forestry & Climate Change

formghana.com

Verra Project ID:	Proponent:	Location:	Type:	Duration:	Methodology:
VCS 987	Form Ghana	Ghana, Ashanti Region	Reforestation & Revegetation	40 years (2008 – 2048)	AR-ACM0003

I am proud to present the Form Ghana Carbon Prospectus on behalf of our founders, Board of Directors, management team, and employees.

Message from **Form Ghana's** CEO

At the core of Form Ghana's actions and operations lies a profound belief in the resilience of people and nature. We protect, sustainably restore and manage Ghana's degraded Forestry Reserves effectively, benefiting people and nature.

Aligned with the United Nations' Sustainable Development Goals (SDGs), Form Ghana promotes nature-based solutions, collaboration, and effective communication with our social partners to facilitate our objective to reforest 20,000 hectares of degraded forest reserves in Ghana.

Our Carbon Prospectus reflects how we do business. We have identified the questions asked by the global carbon traders' market and answered the questions as briefly and factually as possible. The document references hyperlinks to our website, where we expand on how our ethos of shared value is the essential nutrient that feeds our social, environmental, and business sustainability.

We acknowledge the contributions of the individuals and organisations who made this document possible. The Carbon Prospectus and the Website reflect Form Ghana's people's hard work and dedication. Thank you, Team.

Willem Fourie

GHG Standard:	GHG Forecast:	CORSIA*
Voluntary Carbon Standard (VCS)	2,381,779 tons CO2 over 40 years	Eligible

Introduction

Ghana is a West African country situated in the Gulf of Guinea. It shares borders with Ivory Coast in the west, Burkina Faso in the north, and Togo in the east. Ghana covers an area of 239,567 km2, spanning diverse biomes that range from coastal savannas to tropical rainforests. With over 32 million inhabitants, Ghana is the second-most populous country in West Africa.

More than a century ago, nearly half of the country was covered with tropical hardwood forests rich in biodiversity. The forests are concentrated in the country's southern parts and experience substantially higher rainfall than the northern regions.

*CORSIA eligibility is limited to 2016 - 2020 vintages, except for ART (Architecture for REDD+ Transactions) and ARC (Attributes of Recycled Content), which are limited to 2016 - 2023. Carbon credits from 2021 – 2023 require host country approval.

Harvesting vs Deforestation and Degradation

However, despite declared Forest Reserves, widespread degradation caused by agricultural expansion driven by climate change and migrant cattle herders, uncontrolled timber harvesting, and illegal mining is destroying ecosystems.

Over three million rural Ghanaians depend on wood to survive, and fuel wood and charcoal meet 75% of Ghana's energy requirements. Forestry, therefore, plays a significant role in providing food, fuel, shelter, furniture, natural medicines, potable water sources, bush meat and land for agriculture, thus leading to continuous deforestation.

In 1990, Ghana had a total forest area of just over 7.4 million hectares. However, an annual deforestation rate of around 2% reduced the forest area to about 4.9 million hectares in 2010* and is continuing.

**Mongabay: worldrainforests.com/deforestation/2000/ghana.htm*

Partnerships

Form Ghana is managing the factors driving forest degradation through the Public-Private Partnership with the Forestry Commission and sustainable forest management. However, the climate crisis requires urgent action to reduce greenhouse gas (GHG) emissions.

Climate Crisis

Indigenous and plantation forests are vital in mitigating the impacts of climate change. Forests act as carbon sinks, absorbing carbon dioxide (CO_2) from the atmosphere and storing (sequestrating) it in trees and soil.

Deforestation and forest degradation contribute to greenhouse gas (GHG) emissions, exacerbating the climate crisis. Form Ghana's sustainable forest management (SFM) practices include reforestation, afforestation, and intercropping by communities. These factors all help improve the soil, increase carbon sequestration, and enhance the resilience of Ghana's forests to changing climatic conditions.

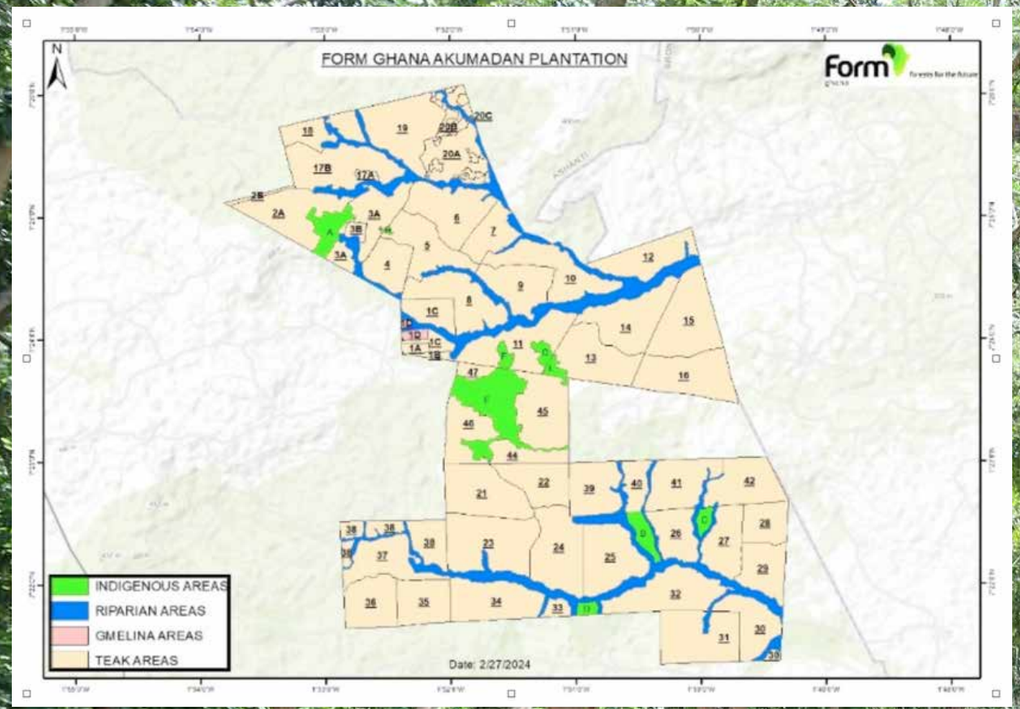
Form Ghana's verified carbon offsets are available as Carbon Credits for entities wishing to counterbalance the emissions they cannot directly reduce, remove or avoid. Our Carbon Credits can mitigate your climate impacts.

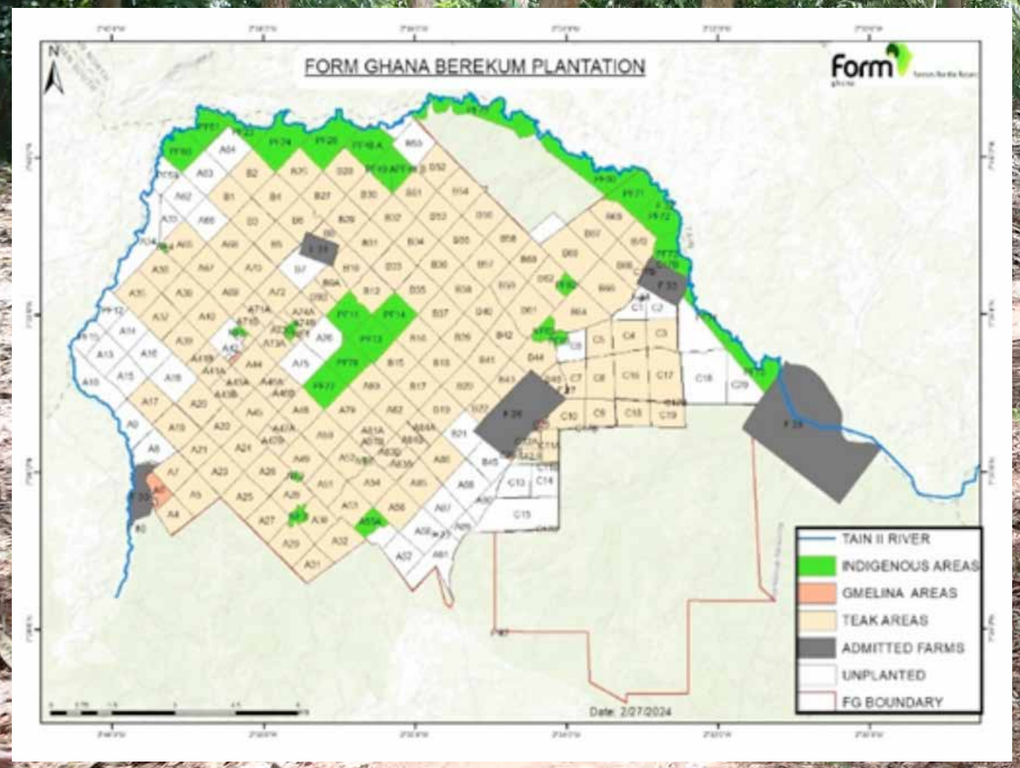
Form Ghana's Background

Sustainable Forestry Investments BV in The Netherlands established its subsidiary, Form Ghana Ltd, in Ghana in 2007. Form Ghana is a forest plantation management company focused on reforesting degraded Forest Reserves while conserving and restoring indigenous and riparian forestry areas.

Form Ghana and the country's Forestry Commission made history by developing and signing the first public-private partnership (PPP) forest management lease agreement. This landmark agreement paved the way for other reforestation companies to follow suit.

The Asubima and Afrensu Brohuma Forest Reserves (Akumadan, See Map 1) and the Tain II Forest Reserve (Berekum, See Map 2) were once productive areas with high, semi-deciduous forests. However, they were severely degraded by overexploitation, bushfires, and conversion to agricultural land, particularly between 1980 and 2000.





The first reforestation project began in March 2008 in the **Asubima Forest Reserve,** followed by **Afrensu Brohuma** in March 2011. The **Tain II Forest Reserve** activities were initiated in March 2013.

We manage our teak plantations on multiple rotations under a renewable lease spanning 50 years. The plantations consist of a mosaic of forest stands of different age classes, with each commercial stand planned for clear-felling at 20 years and subsequent replanting.

Form Ghana received its first Forest Stewardship Council™ (FSC-C044035) certificate for Sustainable Forest Management in 2010 for our Asubima and Afrensu Brohuma Forest Reserves. We plan to extend this certification to the Tain II Forest Reserve.

Areas we restore to natural vegetation are not clearfelled but are carefully maintained and monitored for pests, pathogens, fire, and illegal logging. Without the reforestation project, the reserves would have remained degraded and faced further deterioration due to unlawful farming, bushfires, and logging of the remaining trees.

Form Ghana and the SDG's

***"Aligned with the United Nations' Sustainable Development Goals (SDGs), Form Ghana promotes nature-based solutions, collaboration, and effective communication with our social partners to facilitate our objective to reforest 20,000 hectares of degraded forest reserves in Ghana"**, Willem Fourie, Form Ghana CEO.*

The SDGs are a set of 17 global objectives established by the United Nations in 2015 as part of the 2030 Agenda for Sustainable Development. They provide a comprehensive framework for countries, organisations, and individuals to work towards a more sustainable and equitable world by 2030.

Each goal is interconnected and mutually reinforcing, emphasising the need for integrated approaches to development that leave no one behind.

The following SDGs are pertinent to Form Ghana's operations and guide our ethos, operations and actions.

SDG 1: No Poverty

Form Ghana is committed to addressing poverty by creating employment opportunities, particularly in rural areas where its reforestation projects are located. By providing stable employment, the company contributes to poverty alleviation and enhances the livelihoods of local communities.

SDG 2: Zero Hunger

Form Ghana's reforestation efforts promote food security by restoring degraded lands and protecting watersheds, vital for agricultural productivity. Moreover, the company engages in sustainable agriculture practices within its forest reserves, promoting biodiversity while ensuring food security for local communities.

SDG 5: Gender Equality

Form Ghana prioritises gender equality by promoting the inclusion of women in its workforce and community development initiatives. The company strives to empower women by providing training and employment opportunities and promoting gender-sensitive policies and practices.

SDG 6: Clean Water and Sanitation

Form Ghana recognises the importance of water resources and actively works to protect and restore them through its reforestation projects. By conserving and restoring forest ecosystems, the company maintains clean water sources and prevents water pollution, benefiting local communities and ecosystems.

SDG 8: Decent Work and Economic Growth

Form Ghana fosters decent work and economic growth by creating employment opportunities, supporting local businesses, and promoting sustainable forest management practices. Our operations contribute to economic development while upholding workers' rights and well-being.

SDG 12: Responsible Consumption and Production

Form Ghana promotes responsible consumption and production by implementing sustainable forest management practices and adhering to international standards such as the Forest Stewardship Council™ (FSC™) certification. We continually strive to minimise waste, conserve resources, and promote sustainable use of forest resources.

SDG 13: Climate Action

Form Ghana's reforestation projects play a crucial role in climate action by sequestering carbon dioxide from the atmosphere and mitigating climate change. We contribute to efforts to combat climate change and its impacts by restoring degraded forest lands and promoting sustainable land management practices.

Form Ghana's Carbon Project

While timber remains the primary focus of the business model, carbon income is crucial in the investment phase. The project incorporates CO_2 sequestration in tree plantations with exotic and indigenous species, natural forest restoration in riparian buffer zones, and harvesting high-quality timber.

Our activities are conducted and monitored following an approved carbon project methodology for a project period of 40 years. The reforestation activities are independently verified under the Verified Carbon Standard (VCS), confirming our contributions to climate change mitigation as tradable carbon credits.

SDG 15: Life on Land

Form Ghana's core mission revolves around restoring and conserving forest ecosystems, promoting biodiversity and supporting terrestrial life. Through our reforestation efforts, our goal is to protect and enhance the diversity of plant and animal species, thereby safeguarding ecosystems for future generations.

SDG 16: Peace, Justice, and Strong Institutions

Form Ghana recognises the importance of peace, justice, and strong institutions in fostering sustainable development. The company operates under local laws and regulations, promotes transparency and accountability, and engages with local communities to ensure their voices are heard and their rights are respected.

SDG 17: Partnerships for the Goals

Form Ghana actively seeks partnerships and collaborations with government agencies, non-governmental organisations, and other stakeholders to achieve its sustainability objectives. By fostering multi-stakeholder partnerships, we leverage collective expertise and resources to address complex sustainability challenges effectively.

What are Carbon Credits?

Writing for Harvard Business Review, Varsha Walsh and Prof Michael Toffel explain that "More than one-third of the world's 2,000 largest publicly held companies have declared net zero targets according to Net Zero Tracker, a database compiled by a collaboration of academics and nonprofits.

"These targets typically entail public commitments to reduce GHG emissions through measures such as process modification, product reformulation, fuel switching, shifting to renewable power, investing in carbon removal projects — and a pledge to zero-out their remaining emissions by purchasing carbon offsets, also known as carbon credits.

"Carbon credits are financial instruments where the buyer pays another company to take some action to reduce its greenhouse gas emissions, and the buyer gets credit for the reduction".

Individuals, organisations, or governments purchase voluntary carbon credits to support emission reduction strategies by proactively addressing their carbon footprint and demonstrating social and environmental responsibility.

Form Ghana's Carbon Credits are verified by the Voluntary Carbon Standards (VCS) Programme.

What Every Leader Needs to Know About Carbon Credits by Varsha Ramesh Walsh and Michael W. Toffel
December 15, 2023, in Harvard Business Review. https://hbr.org/2023/12/what-every-leader-needs-to-know-about-carbon-credits

Voluntary Carbon Units

Under the VCS Programme, projects are issued unique carbon credits known as Verified Carbon Units or VCUs. **Each VCU represents the project's reduction or removal of one metric ton of carbon dioxide equivalent (CO_2e) GHG emissions from the atmosphere.**

By selling these verified VCUs Form Ghana is incentivised to conserve forest areas, plant trees, and implement sustainable forest management practices.
See Table 1 & Fig 1

Issuance Period	VCU's Generated
2008 - 2012	4,640
2012 - 2018	207,332
2018 - 2019	140,183
2019 - 2021	414,333

Table 1

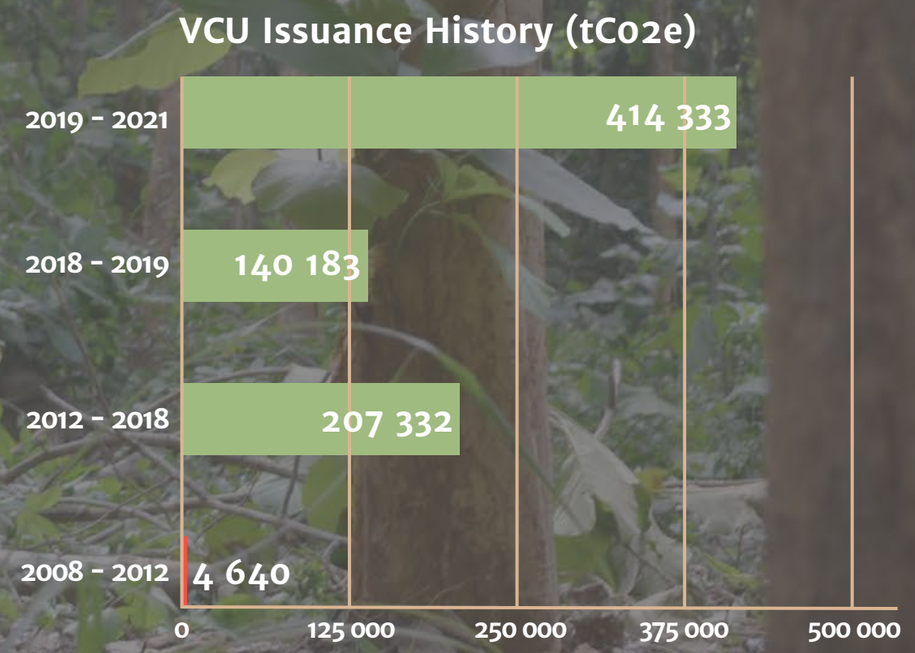


Fig 1: The historic VCU issuance for Form Ghana's afforestation activities

How are VCUs Assessed?

High-integrity carbon offset projects should result in real and additional reductions in carbon emissions. When carbon offset projects lack integrity, they can increase carbon emissions.

"Real" means the projects must generate an actual reduction in GHG emissions or increase in sequestration directly attributable to the project activities.

"Additional" means the increase in sequestration generated by the project would not occur without the incentive provided by the offset scheme.

Assessment Factors

The following risk factors are assessed to evaluate the inherent integrity of carbon projects:

1. Additionality

Does the reduction or removal of a GHG emission arise from an activity that would have occurred without the revenue from the sale of carbon credits? All VCS-approved methodologies include a detailed approach for determining the additionality of a specific project activity.

2. Over-crediting

Will a project issue more credits than tons of CO_2e achieved? Over-crediting occurs when unrealistic baseline assumptions are made, or data with large uncertainties are used.

- **Baseline overestimation:**
- Are the baseline emissions associated with a project inflated or overestimated?
- **Project emissions:** Is the risk that emissions associated with the implementation of the project underestimated?
- **Leakage:** Can some effects of an offset occur outside the project's carbon accounting boundary? For example, when an action causes emissions reductions in one place, it causes increases elsewhere.

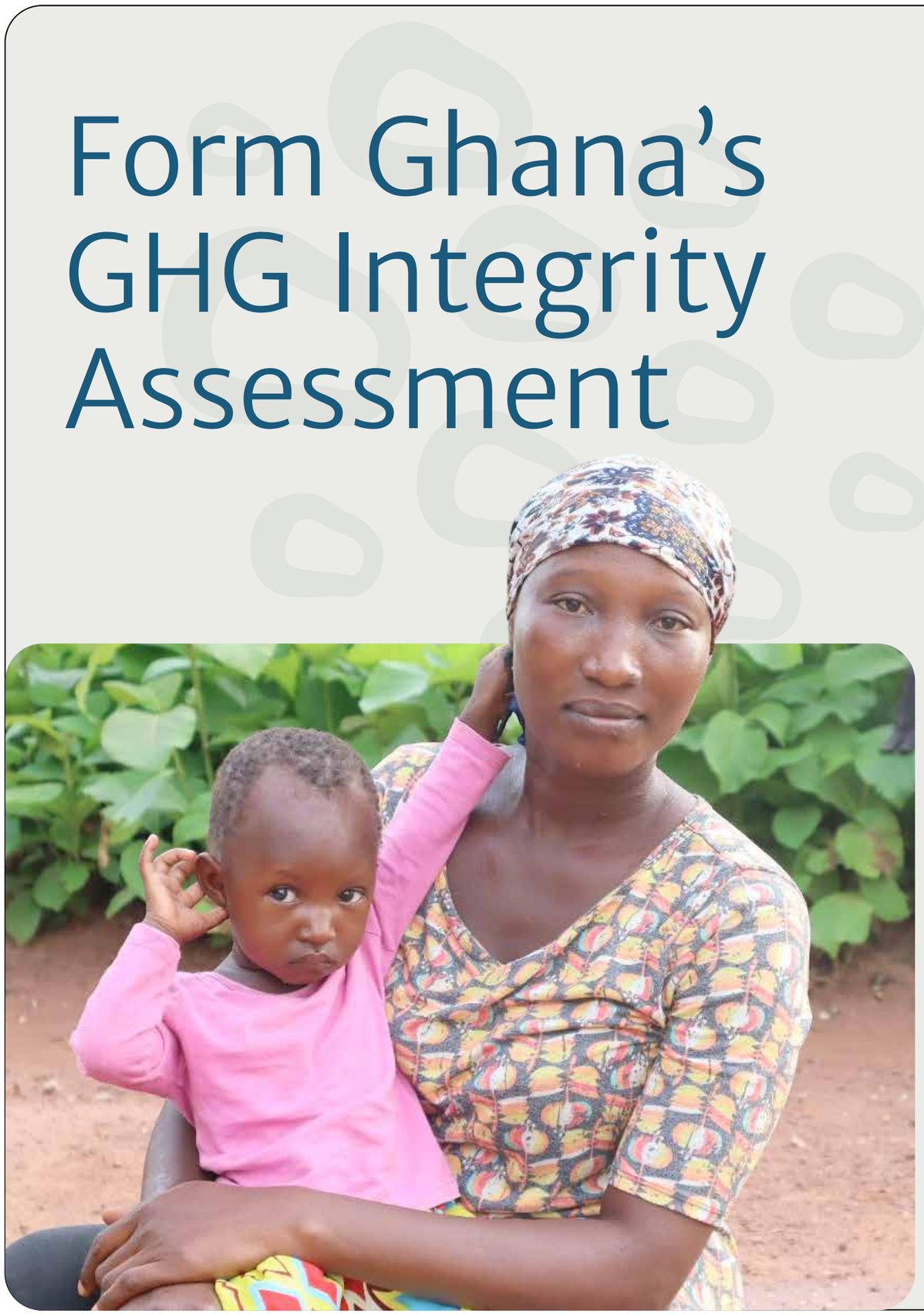
3. Permanence

Is there a risk that a carbon project may not sequester carbon with a long-lasting impact on reducing GHG emissions? Examples of risks for forest projects include forest fires, insect infestations, logging, and climate change.

4. Overlapping claims

Is there a risk that the carbon benefits from a project are accounted for more than once (double-dipping)?

Form Ghana's GHG Integrity Assessment



Form Ghana requested CDM Africa Climate Solutions to conduct an independent review to assess the integrity of our performance. The outcome of the integrity assessment is "Low Risk" (See Table 2 and Fig 2).

Risk	Finding	Result
Additionality	At the time of development, the project was a first-of-its kind project in Ghana, facing several institutional and investment barriers to implementation. It was demonstrated clearly that carbon revenue was required to ensure the implementation and sustainability of the project.	**Low Risk**
Permanence	Since the implementation of the project, it has been demonstrated that our adaptive management practices are continuing to mitigate any permanence risks.	**Low Risk**
Baseline Inflation Risk	The establishment of the emission baseline is sound and based on historic evidence.	**Low Risk**
Project Emission Risk	Emissions relating to site preparation were incorporated at the start of the project. The risk of underestimated project emissions are zero.	**Zero Risk**
Leakage Risk	Leakage is considered to be insignificant for the teak plantation, the indigenous plantation and the planted buffer zone. The risk of leakage is zero.	**Zero Risk**
Overlapping Claims Risk	The project is not participating in any other carbon reduction programmes and the risk of overlapping claims is zero.	**Zero Risk**

Table 2: Results of Form Ghana's GHG Risk Assessment

Additionality Low Risk	**Permanence** Low Risk	**Baseline** Low Risk
Project Emissions Zero Risk	**Leakage** Zero Risk	**Overlapping Claims** Zero Risk

Fig 2: The integrity of Form Ghana's carbon project is assessed to be "Low Risk"

Timeline

Table 3:

FORM GHANA REFORESTATION & PROJECT AUDIT TIMELINE

	Plantations and Audits	Commercial afforestation	Natural reforestation
1 Mar 2008	Akumadan (Asubima) Forest Reserve commenced	2,930.18	516.36
1 Mar 2011	and Afrensu Brohuma Forest Reserve commenced		
1 Aug 2012	Verification audit by SCS Global Services 1 March 2008 – 1 August 2012 (53 months)		
23 Jan 2013	Validation audit by SCS Global Services		
1 Mar 2013	Berekum Tain II Forest Reserve commenced	7,398.70	1,790.41
1 Apr 2018	Verification audit by Rina Services SPA 2 August – 1 April 2018 (68 months)		
30 Jun 2019	Verification audit by Rina Services SPA 2 April 2018 – 30 June 2019 (27 months)		
31 Jul 2021	Verification audit by Rina Services SPA 1 August 2019 – 31 July 2021 (24 months)		
31 Jul 2023	Verification audit by AENOR 1 August 2021 – 31 July 2023 (24 months)		

Thank you

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Produced by ForSawn Media (Pty) Ltd
The photos in this report were taken in Berekum and Akumadan, Ghana by Joy Crane of ForSawn Media (Pty) Ltd