

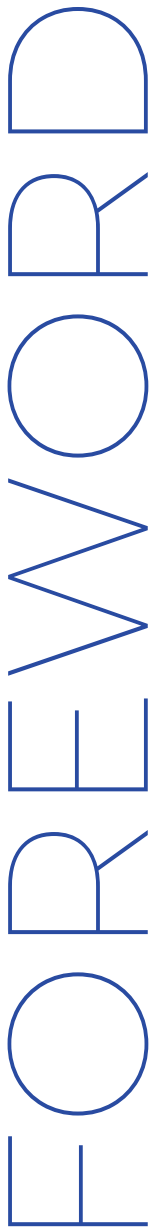


GHANA'S CARBON MARKET OFFICE

Ghana's Report on the Implementation of Article 6 of the Paris Agreement

2023

Foreword



I am thrilled to present the maiden Article 6 implementation progress report. Article 6 under the Paris Agreement is the market instrument for raising carbon finance for investing in NDC actions.

Carbon markets are an efficient way to accelerate decarbonisation commitment in the first generation of NDC. Globally, several NDCs identified the carbon market as a way of mobilising finance and up its ambition.

Ghana committed to mitigate 64 million tonnes of its 2030 greenhouse gas emissions in its revised NDC. The NDC requires USD 6.3 billion to invest in 34 mitigation actions in the energy, transport, industry, waste, agriculture, and forestry sectors to achieve the 64 million tonnes target.

An estimated USD 1.4 billion will be mobilised from domestic efforts to invest 9 unconditional mitigation actions to achieve 25 million tonnes of emission savings.

An additional USD 4.9 billion will be needed from international cooperation, including the carbon market, to achieve an extra 39 million tonnes of emission reductions in the conditional measures and beyond. These investments are expected to align Ghana's development along a low-emission pathway and mobilise green investments to benefit the wider economy.

The Carbon Market Office (CMO) has put together this report to document and inform stakeholders and the general public on Article 6 activities in the country for 2023.

The report highlights key achievements, progress, and plans ahead of 2024. It also presents the big picture of Article 6 implementation in Ghana, covering investment trends, policy and regulation, project development, and capacity development.

In this maiden report, we have demonstrated the substantial progress we have made in laying out the policy, institutional, and regulatory arrangements for Article 6 implementation. It is now the time to focus on scaling investment in carbon finance projects in the country.

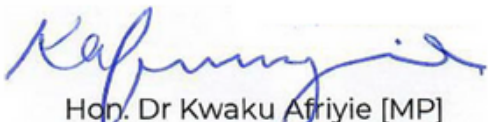
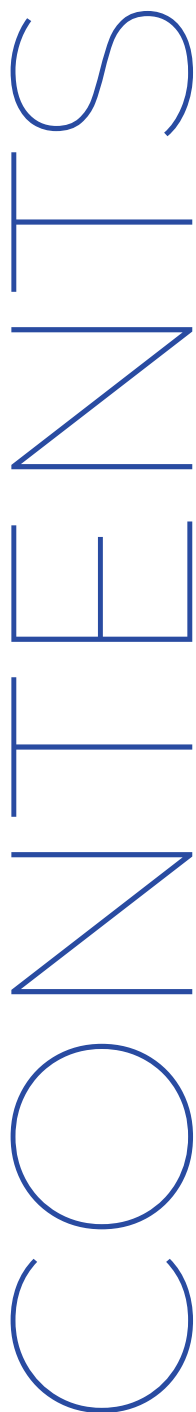

Hon. Dr Kwaku Afriyie [MP]
Minister for Environment, Science,
Technology & Innovation

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Minister's Message

01

Message 1

2023 was a busy year for my Article 6 team. They've worked collaboratively with all stakeholders to push H.E. the President's vision of making Article 6 work for all and to support Ghana's NDC. I am also thrilled by the dedication of our local and international partners and the impressive results we are seeing.

02

Message 2

Above all, I have observed with keen interest the constructive, collaborative efforts among my team and the partners to realise the full potential of Article 6 in scaling carbon finance, delivering sustainable development benefits, powering innovation, guaranteeing high environmental integrity carbon assets that promote ambition of climate action and support local communities.

03

Message 3

Ghana will continue to actively engage in the global effort to finalise the additional guidelines on Article 6 rules established in 2021 and join forces to promote high integrity standards for Article 6 implementation. We are open for business and will work with anyone. I wish to share some of the major milestones in 2023 through the hard work of our partners and the Article 6 team.



In 2023 alone, our early efforts on Article 6 bilateral voluntary cooperation unlocked the flow of USD 850 million investments up to 2030.

The investments are expected to create 7,000 green jobs, save 6 million tonnes of GHG emissions and increase access to clean cooking, renewable energy, electric mobility and green cooling.

Hon. Dr Kwaku Afriyie [MP]
Minister for Environment, Science,
Technology & Innovation

04

Milestone 1 - adopted national carbon market framework

In January 2023, we published Ghana's framework on the international carbon market and non-market approaches following the cabinet's approval to pave the way for implementing voluntary cooperation under Article 6 of the Paris Agreement in Ghana.

05

Milestone 2 - developing 5 G2G and 1 G2P approaches

Ghana is engaged in 5 Government-to-Government (G2G) bilateral cooperative approaches as envisaged under Article 6.1 of the Paris Agreement and to guide Article 6 project developments in Ghana. The participating parties, with Ghana being the host country, include Switzerland, Sweden, Singapore, South Korea and Liechtenstein.

The Swiss agreement was signed in 2020 and is under implementation. Negotiations, legal reviews, and cabinet approval of the Sweden and Singapore agreement concluded in 2023. Both agreements are pending in Parliament for ratification.

The drafting and negotiation of the South Korea framework agreement were concluded by December 2023 and the minutes of the adopted text were initialed at COP28. The next step is to kick-start internal government consultations, legal review, cabinet approval, and Parliament ratification. A letter of intent has been exchanged with Liechtenstein. Discussions with EY and British Petroleum are ongoing to develop a first-ever unilateral approach in Africa.

06

Milestone 3 - Unlocking \$850 million financial flow

Twelve projects are being developed under the Ghana-Switzerland agreement. Eight have reached investment decision points and unlocked up to ~ USD850 million from direct investment, carbon revenues, and fees by 2030. The eight projects are expected to create a minimum of 7,000 green jobs.

07

Milestone 4 - 35 project pipeline, announcement of tender

In 2023, the CMO project pipeline almost tripled from 12 in Q1 to 35 in Q4. private companies and individual entities lead all 35 projects. The project scope in the pipeline includes renewable energy, waste management, sustainable agriculture, clean cooking, electric mobility, green cooling, energy efficiency, etc. In December 2023, Swedish Energy Agency also announced a tender for 3 energy-related ITMO projects.

08

Milestone 5 - Authorisation of 2 ITMOs

Ghana, through the Ministry of Environment, and Switzerland (through the Federal Office of Environment) have authorised 2 Article 6 projects in sustainable agriculture and waste to compost with a total investment of USD 100 million and a carbon value of USD 29 million.

Unlocking Article 6 investments in the waste sector



Hon. Dr. Freda Akosua Prempeh,
Minister for Sanitation and Water
Resources

01

Overview

Under the dynamic leadership of His Excellency, our President, Ghana has embarked on a transformative journey through Public-Private Partnerships with the private sector.

Of the five programmes of Action for the environmental sanitation sector in Ghana's NDC, increasing compost capacity has resulted in the initiation of the large-scale installation of 16 Integrated waste Recycling and Compost (IRECOP) facilities.

These IRECOP facilities are strategically located across all regions. Six of the facilities are anticipated to generate Article 6 investments, covering over 1.5 million tons of emission reduction valued at USD 20 million until 2030, producing 13,000 metric tons of compost annually, and fostering the creation of approximately 1,000 meaningful jobs.

02

Authorisation of the Six IRECOP facilities

Ghana and Switzerland officially endorsed the letter of authorisation for the expected mitigation outcomes. The combined capacity of all 16 facilities will divert about 35 percent of total volumes of waste from landfills.

03

Call to action

Stakeholders, including MESTI, EPA, and UNDP, have been commended for their support. Dr. Joseph Agyepong, Executive Chairman of Jospong Group of Companies, assured the success of the project through robust waste collection efforts. The call to action is to collectively work towards the realization of waste management goals, supporting the project's success and contributing to Ghana's sustainable development agenda.



HE President Nana Addo Dankwa Akufo-Addo in the company of
Minister for Environment, Minister for Sanitation, Swiss Ambassador and Executive Chairman for Jospong

Climate actions in Ghana



Dr Henry K. Kokofu (Esq.)
Executive Director, EPA

Climate change is not only a development risk multiplier but also presents new economic opportunities. While local businesses can invest in building resilient value chains, it is the surest way to create sustainable jobs and participate in climate actions.

After becoming a party to the United Nations Framework Convention on Climate Change in 1995, Ghana has adopted a programmatic development-led approach to tackle climate change frontally. In 2015, Ghana communicated its priority climate actions in the updated NDC in line with Article 4 of the Paris Agreement (PA).

Ghana's NDC covers 47 climate-priority actions in eleven sectors. The NDC aims to achieve absolute greenhouse emission savings of 64 million metric tonnes; build resilience to climate impacts and reduce vulnerability; avoid 2,900 premature deaths due to air quality improvement; create more than 1 million jobs and unlock a minimum of USD9.3 billion by 2030.

Ghana needs to mobilise finance from multiple public and private sources to invest in climate actions that contribute to accelerating sustainable development in the country.

16 of the climate actions are unconditional - *Ghana considers them as low-hanging fruit that would lead to mobilising finance for implementation.*

The remaining 31 conditional climate actions can only be implemented through international, private capital, and carbon financing.

Ghana has identified Article 6 of the PA to support the implementation of conditional climate actions and raise its ambition in the long run.

MESTI and the EPA published the Ghana framework for international markets and non-market approaches as the technical and administrative requirements for Article 6 transactions.

The framework received Cabinet approval and was successfully launched at COP27 in Sharm El-Sheikh by the Minister responsible for MESTI, Dr. Kwaku Afriyie.

The framework covers the operational modalities for Article 6.2 cooperative approach, the Sustainable Development Mechanism under Article 6.4, and the voluntary carbon market. Some elements in the framework include:

- Institutional arrangement for Article 6.
- Eligibility criteria for projects and entities.
- Methodology and standards.
- Authorisation and Corresponding adjustment.
- Carbon project development steps.
- Digital Infrastructure.
- Fees / Charges
- Reporting

With the framework in place, the standards and rules are ready for Article 6 implementation.

UNDP supported Ghana to develop national Article 6 framework

Ghana's Article 6 national framework resulted from a long-standing collaboration between MESTI and the UNDP Ghana country office. The idea to develop an Article 6 framework for Ghana was conceived after the COP26 in Glasgow after adopting the Article 6 rule book.

Ghana's Article 6 framework was born out of the COVID-19 pandemic. The co-creation and execution of the idea of Article 6 was first informed by the elements of Decision 2/CMA.3 and early lessons from a few Article 6 pilots worldwide.

It took nearly 24 months of iterative and participatory efforts to craft, review, and finally adopt the national framework by the Cabinet in September 2022. After the first draft, the document underwent serious technical reviews from many international and national stakeholders.

Special thanks go to the UNDP team, World Bank, Klik Foundation, SECO, and BAFU for providing elaborate feedback on the document. The Ghana team of MESTI, EPA, and the UNDP country office worked tirelessly to turn the draft document into an advanced version.

A series of national stakeholder consultations were held with financial and technical support from the UNDP. At stakeholder meetings, we assembled relevant national and international actors and public, private, and academic stakeholders.

The stakeholder meeting was followed by additional focus group discussions with selected sector agencies and civil society organisations who provided rich inputs into the framework.

MESTI facilitated the cabinet approval process of the national framework. After the cabinet approval, the Hon. Minister of Environment officially released Ghana's framework at COP27 for implementation.



Dr Stephen Sabunam Kansuk
Team Leader & Climate Change
Specialist, UNDP Ghana



Mr Ebenezer Appah-Sampong,
Former Deputy Executive Director
Technical Services, EPA



Dr Antwi Boasiako Amoah, Ag
Director, Adaptation, Climate
Change Unit, EPA

Carbon Market Office [CMO]

 Ghana Carbon Markets Office  <https://cmo.epa.gov.gh/>
 Ghana Carbon Markets Office  @CMO Ghana

Website - <https://cmo.epa.gov.gh/>



Mr Patrick Nomo
Chief Director, MESTI

01

Who are we?

The CMO is a secretariat established under the Climate Change Unit of the EPA to support Article 6 project implementation in Ghana by offering administrative and technical support services to authorized public and private entities based on the requirements in the “*framework*”.

02

Vision and Mission

Our vision - “*Powering the possibilities of carbon markets for all*”.

Our Mission - “*Become a trusted regional hub for transacting credible Article 6 carbon assets for businesses, governments, and global partners*”.

03

Our support services

- Ensures alignment between Ghana’s NDC and Article 6
- Develops bilateral cooperative and unilateral approaches.
- Manages NDC baselines upon which authorisation may be granted.
- Supports match-making of project developers and buying partners.
- Supports Article 6 project activation and origination.
- Review and publish eligible Article 6 project scopes.
- Grants approval to A6.4 projects Ghana intends to host including crediting periods.
- Recommend methodology and standards for Article 6.2 transactions
- Receives and evaluates all authorisation requests.
- Monitors the performance of independent validators and verifiers.
- Manages Ghana’s carbon market registry for tracking ITMOs.
- Administers Article 6 project development cycle.
- Performs corresponding adjustments on the annual emission balance.
- Liaises with the Article 6.4 Mechanism Supervisory Body
- Reports Article 6 operations to UNFCCC.

Ghana's G2G & G2P Engagements - 1

Developing Article 6 voluntary cooperations

Article 6.1 of the Paris Agreement recognises that Parties may engage in voluntary cooperation to support NDC implementation for higher ambition in climate action and promote sustainable development and environmental integrity.

As a result, Ghana has been one of the forerunners of Article 6 implementation. It is actively engaged in Government-to-Government (G2G) bilateral cooperation and has started exploring options under a unilateral approach involving the private sector (G2P).

I wish to present the status of the Ghana engagements in 2023 below:

01

Ghana-Switzerland Bilateral Cooperation

Ghana signed a bilateral agreement with the Government of Switzerland to implement Article 6.2 of the Paris Agreement in November 2020. Parliament ratified the bilateral agreement in June 2021 for implementation to start.

Both countries adopted a road map as a political forum to track progress and a joint technical team from EPA and BAFU for exchanging views. Twelve projects are being developed under the Ghana-Switzerland agreement under 3 tracks.

The Klik Foundation track has the biggest portfolio, with 6 projects receiving Klik Board approval in 2023 to kick-start. The overall investment outlook of the 6 projects is up USD700 million, with an additional USD150 million in carbon revenues and a government fee of ~USD30 million.

The UNDP track has 2 projects under implementation after receiving authorisation from Ghana and Switzerland. The total investment outlay is estimated at USD100 million, with USD29 million in carbon revenues.

The third track is an independent option where Climate Gains explores the capital market to raise upfront finance and invest in 6,000 institutional improved stoves for boarding schools. They seek to raise capital through an ITMO auction organised by the London-based Carbon Credit Exchange (CTX).

The joint technical team has completed 2 rounds of authorisations and initial reports covering the mitigation activities and submitted the same to the UNFCCC.

Regular meetings (fortnightly) of the joint technical team have helped to address technical challenges and facilitate better communication and sharing of learning experiences.



Dr Peter Dery, Director of Environment, MESTI

Ghana's G2G & G2P Engagements - 2

PROGRESS ACTION 2

02

Ghana-Sweden Cooperation

Ghana-Sweden initiated bilateral cooperation by signing and exchanging a memorandum of understanding in 2021.

Ghana and Sweden announced the conclusion of the carbon market bilateral agreement negotiation at COP27 in Egypt in 2022, followed by legal review and cabinet approval in 2023.

The concluded agreement was laid in Parliament in November 2023 and is pending ratification.

In November 2023, the Swedish Energy Agency (SEA) and Stella Futura signed a partnership agreement to step up towards mitigation goals in Ghana under Article 6 of the Paris Agreement.

This milestone represents an innovative financing model for green healthcare electrification projects (use of solar PVs) in rural Ghana. The programme will release USD10 million from green and reliable financing using ITMOs.

In December 2023, SEA opened a new tender for Article 6 ITMO projects in Ghana. SEA aims to select 3 energy-related ITMO projects with an aggregate volume of at least 200,000 tonnes, each with a negotiated price below USD40/tCO₂e.



Signing event between SEA and Stella Futura in Sweden

At COP28, the EPA participated in launching SEA's Climate Ambition Raising Through Article 6. The initiative is a collaboration between SEA and UNDP. The initiative aims to promote energy transition in African countries through Article 6. The Executive Director of EPA joined the launch event and expressed Ghana's keenness to cooperate with Sweden to deliver Article 6 to advance sustainable development.



Executive Director, EPA at the SEA's climate ambition raising through Article 6 event

Ghana's G2G & G2P Engagements - 3

PROGRESS ACTION 3

03

Ghana-Singapore Cooperation

In 2021, Ghana and Singapore held an initial meeting at the sideline of COP26 to discuss possible Article 6 collaboration. Then, by February 2022, Ghana and Singapore exchanged letters of intent for voluntary cooperation.

It took 10 months for Singapore and Ghana to conclude negotiations on an Implementation Agreement (IA) on carbon credit cooperation in November 2022. The IA will enable the bilateral transfer of carbon credits (ITMOs) aligned with Article 6 of the Paris Agreement.

The announcement paved the way for both countries to commence the country-level process of government consultations, legal review, cabinet approval and parliament ratification. In 2023, the IA completed the full cycle of stakeholder, legal and political approvals awaiting Parliament endorsement.

In 2023, the Singapore delegation visited Ghana twice to engage with the Ghana team to discuss various issues, including the arrangement for rolling out the IA. The delegation also engaged with major stakeholders in the country - project developers to assess possible investment areas.

At COP28, Singapore and the independent standards (Gold Standard and VERRA) organised a side event on the standardisation of Article 6 transactions. The EPA participated in the event.



Executive Director of EPA received the Singapore team to Ghana in his Office

GenZero and AJA Climate Solutions Ghana have started developing the Kwahu Landscape Restoration Project under the anticipated Ghana-Singapore IA. In 2023, AJA Climate Solutions obtained a letter of intent from the CMO. The request letter is under consideration by the CMO.



Parliamentary oversight on Article 6

01

Review of Singapore and Sweden Agreement

After the cabinet approval, the Singapore and Sweden bilateral agreement was laid in Parliament in September, 2023. In November 2023, the Committee on Environment Science and Technology (CEST) met in Koforidua to review the two draft agreements. During the meeting, the committee invited MESTI and EPA to attend and respond to their queries on the agreement. The consideration of the agreement was deferred to February 2024, when Parliament resumes.

02

Field visits to AWD Rice and WAHU

The CEST members visited the Alternate Wetting and Drying (AWD) in the Volta Region and WAHU Factory at Spintex in the Greater Accra Region. The field visit allowed the MPs to see the implementation of Article 6 project in Ghana. It was also an opportunity for the MPs to see how the Swiss Agreement is being implemented.

03

Presentation of Progress of Bilateral Agreement

As part of considering the Singapore and Sweden agreement, the Environment Committee invited MESTI and EPA to present the implementation progress of the Switzerland bilateral agreement on Article 6. The Minister of Environment, Science, Technology, and Innovation led a team from the sector to brief the select committee on the status of the Swiss Agreement. The MPs raised constructive comments on ways to improve the implementation of the Article 6 Agreement, especially on the need to deepen the involvement of Parliament.



Hon. Dr Emmanuel Marfo,
Chairman, CEST



Hon. Terlabi Okletey
Ranking Member, CEST

Article 6 projects development trends -1

01

35 Article 6 project pipeline, 9 onboarded on GCR

In 2023, the CMO received 35 Article 6 project requests in its pipeline, of which 9 were fully onboarded onto the GCR and assigned mitigation activity participant identification numbers (MID).

Of the 9 projects, 2 received authorisation from Ghana and Switzerland on sustainable rice cultivation by UNDP and waste to compost by Jospong and UNDP. The authorised activities' total ITMOs amount to 2.7 MtCO₂e, representing 11% of the total authorisable volumes of at least 24 MtCO₂e over Ghana's NDC baseline.

02

Sector and activity scopes

The 35 pipeline activities cover 10 activity scopes including;

- Solar [2]
- Clean cooking [14]
- Transport [2]
- Nature Based Solutions (NBS) [6]
- Agriculture[4]
- Landfill Gas Management[1]
- Avoided methane[1]
- HFC[1]
- Bioenergy[3]
- Low-carbon water purification[1]

Of the total, 30 are being developed under G2G, whereas 5 are under VCM. Twenty-two of the activities under the G2G are at the concept note stage.

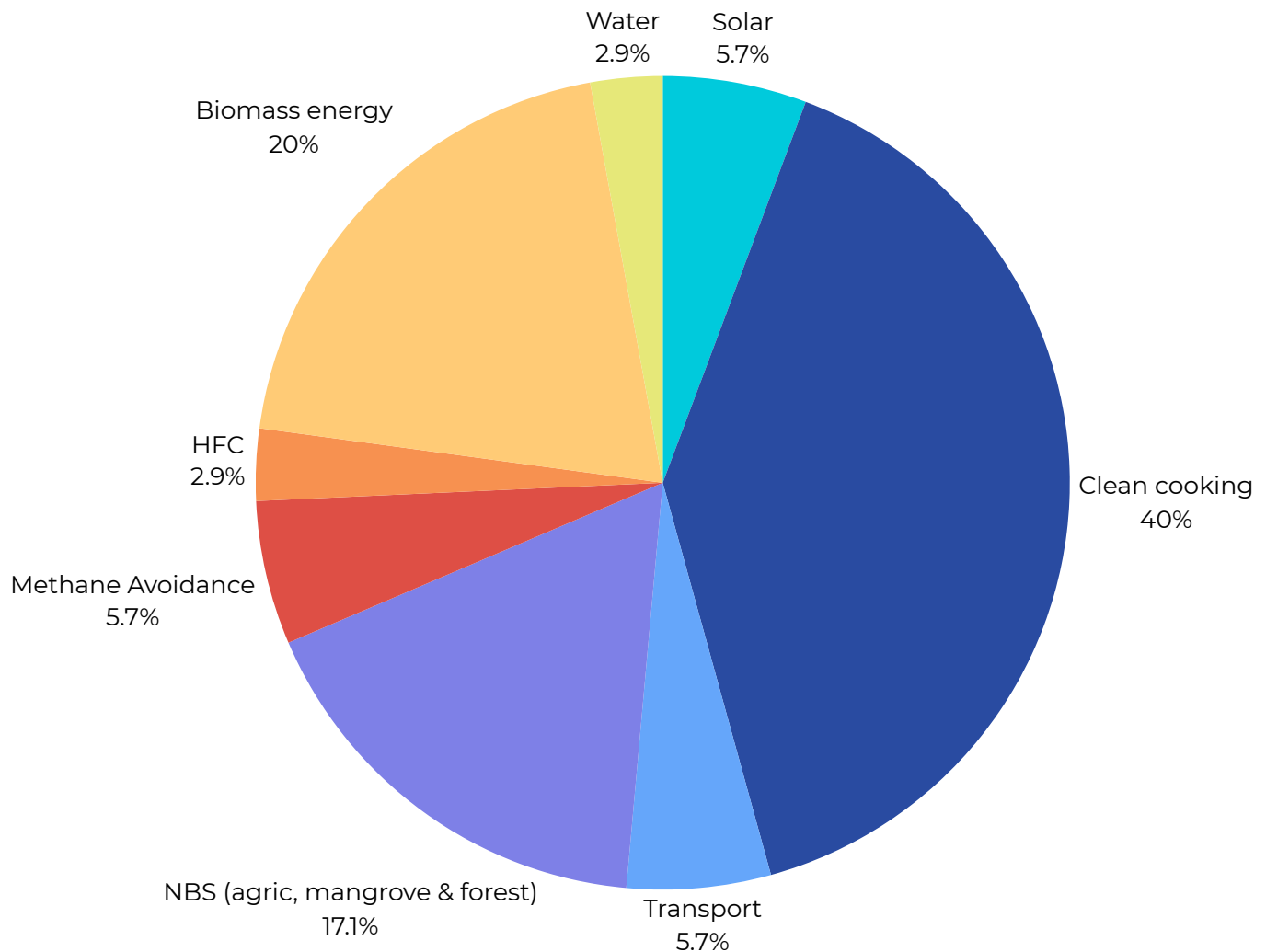
Of the remaining 9 activities:

- 2 [Rice cultivation and waste to compost] are under implementation.
- 1 [Transformative cookstove project] requested authorisation.
- 2 [Green cooling and electric bike project] completed the mitigation activity design document and requested approval for validation.
- 1 [Ghana Green School Programmes] is at the mitigation activity design document preparation stage and mobilising upfront finance through auction.
- 3 of the projects are at the MADD development stage.

The remaining 5 in the pipeline are VCM projects being developed to seek authorisation or endorsement for mitigation contribution. They include 4 clean cooking projects and 1 agroforestry project. These projects will be developed under the unilateral approach.

Article 6 projects development trends -2

Breakdown of Ghana's Article 6 project pipeline as at December, 2023



Daniel Benefoh (PhD), Acting Director, UNFCCC Focal Point for Ghana, Climate Change Unit, EPA

Ongoing works on methodologies and certifications

- Update the Article 6 project leads database.
- Catalogue and update applicable methodologies for Article 6.2 projects.
- Developing independent assessor performance checklist.
- Document standard Article 6 MADD technical review questions for cookstove projects on stacking and KPT surveys, geographic scope, fNRB, assessment of financial additionality, demonstration of the impact of carbon revenues, and monitoring.
- Preparing guidelines on:
 - a. Article 6.2 project eligibility and development steps
 - b. Cookstove project development.
 - c. ITMOs issuance, first transfers, and cancellations.
 - d. NDC baseline and risk of crediting.

Ghana-Switzerland bilateral cooperation agreement project pipeline

No	Entity name	Project Name	Remarks	Delivery Partner
1	ACT Commodities	Transformative Cookstove Activity in Rural Ghana	Authourisation request	Klik Foundation
2	GIZ/ Klik Foundation	Green cooling ACs	MADD submitted for consideration	Klik Foundation
3	Up Energy	Reducing charcoal consumption through Improved stoves	MADD development	Klik Foundation
4	Up Energy	Building pathways for electric cooking	MADD development	Klik Foundation
5	Village Corps Ghana	Renewable energy from biomass	MADD development	Klik Foundation
6	Klik	NCEP	MADD under review	Klik Foundation
7	WAHU	Electric mobility	MADD development	Klik Foundation

Ghana-Switzerland bilateral cooperation agreement project pipeline

No	Entity name	Project Name	Remarks	Delivery Partner
8	Jospong	e-Trucks	Concept note	Klik Foundation
9	Solidaridad	Sustainable palm oil production	MADD development	Klik Foundation
10	UNDP	Sustainable rice cultivation	Implementation	UNDP
11	IRECOP	Waste to compost	Authorisation approved	UNDP
12	Cookclean/ Climate Gains	Ghana Green Schools Programme	MADD development	Cookclean/ Climate Gains

Tracking NDC emission accounting - 1

No	Metric	Parameters	Value	Unit	Notes
1	Base year	2019 total GHG emissions	~ 60	MtCO ₂ e	88% coverage
2	BAU	2030 BAU emissions	100	MtCO ₂ e	Not economy-wide
3	NDC	2030 NDC target	-64	MtCO ₂ e	Unconditional plus conditional NDC
	Uncon NDC	2030 unconditional NDC target	- 25	MtCO ₂ e	Climate finance secured. Red list
	Cond NDC	2030 conditional NDC target	-39	MtCO ₂ e	Additional mitigation with carbon credits
4	Outside NDC	Emissions in not covered under NDC	36	MtCO ₂ e	Additional mitigation potential
5	Minimum to authorise	% of conditional for Article 6	-24	MtCO ₂ e	Mininum authorisable volumes
6	ITMOs	Total ITMOs authorised in 2023	-2.7	MtCO ₂ e	ITMOs authorised from conditional NDC and outside NDC
	ITMOs	: of which authorised from conditional NDC	-1.6	MtCO ₂ e	Compost project under Ghana-Switzerland cooperative approve
	ITMOs	: of which authorised from outside NDC & included in latest GHG inventory	-1.1	MtCO ₂ e	Rice AWD project under Ghana-Switzerland cooperative approve

Tracking NDC emission accounting -2

No	Metric	Parameters	Value	Unit	Notes
7	ITMOs Transfer	ITMOs authorised for international transfer	-0	MtCO2e	% of authorised ITMOs verified, positively examined, issued ITMOs for transfer
8	Recognised ITMOs as first transfer	ITMOs recognised as first transfer	-0	MtCO2e	% of ITMOs recognised by receiving party as first transfer
9	ITMOs cancellation	Cancellation of first transfer ITMOs	-0	MtCO2e	First transferred ITMOs cancelled on CCR
10	ITMOs use cases	Confirmation of uses of ITMOs	-0	MtCO2e	% first transfer ITMOs
		of which	-0	MtCO2e	NDC
		of which	-0	MtCO2e	IMP
		of which	-0	MtCO2e	OIMP
		of which	-0	MtCO2e	OMGE
11	Annual emission balance	Annual GHG inventory	+0	MtCO2e	Annual GHG inventory under NDC
12	CA of ITMOs	CA of used ITMOs	+0	MtCO2e	Ghana apply CA to ITMOs used for the purpose it was authorised for transfer in annual emission balance

Ghana carbon registry operations

01

Access to registry for tracking ITMOs

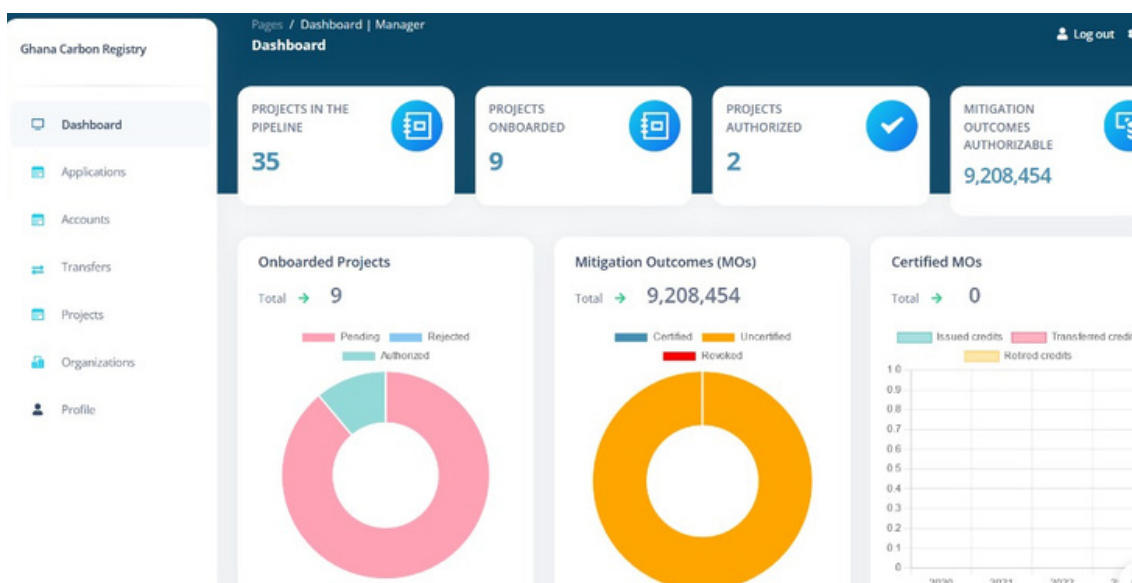
Chapter VI. A of the Annex to Decision 2/CMA.3 requires each participating Party in a cooperative approach to have access to a registry for recording and tracking ITMO transactions. The CMO manages the Ghana Carbon Registry (GCR) that performs MRV and database, transactional and accounting functions. The GCR's URL is gcr.epa.gov.gh

02

Design, functionality and performance of GCR

The CMO's IT has redesigned the GCR landing page and streamlined the functionality to align with participating Parties' requirements. The GCR's database and transaction functionalities are up and running. So far, 35 project MIDs have been issued on the GCR, and 9 are fully onboarded.

With support from the World Bank, an expert team is assessing the GCR's readiness to meet the interoperability requirements of other national registries, private registries, and international registries. The team will also weigh the technical and legal options available to Ghana in connecting the GCR to the CAD Trust meta registry.



Screenshot of Ghana Carbon Registry

03

Registry Administrators



Samson Botchway



Emmanuel Oduro

Guidelines on cookstove projects

01

Article 6 cookstove project guidelines

The NDC aims to achieve the dissemination of conditional 3 million improved cookstoves by 2030. That is why 40% of the Article 6 pipeline is on clean cooking. The pipeline covers existing and new cookstove projects under VCM, Article 6.2 cooperation, and the A6.4 mechanism.

In the international carbon market framework, energy-efficient cookstoves further fall in the category of the NDC whitelist technology for the period up to 2025. Thus, all cookstove projects seeking to create authorised mitigation outcomes for the corresponding adjustment for international transfer must meet the policy, thermal efficiency, and authorisation requirements.

MESTI, the Ministry of Energy, CMO, and the Energy Commission (EC) collaborated to develop a Formal Guideline on Energy-Efficient Biomass Cookstoves under Article 6.2 Cooperative Approach of the Paris Agreement.

The guideline aimed to streamline the cookstove project developers to follow and obtain policy approvals from the Ministry of Energy, thermal efficiency standards from the Energy Commission, and Authorisation from the CMO. The draft guidelines were prepared, followed by a consultation with the cookstove market players. By Q2 of 2024, the CMO will officially publish the cookstove guidelines.

02

Country-specific FnRB study

The MESTI, Ministry of Energy, CMO, and EC team started work on the development of a country-specific FnRB study. TOR for the study was concluded in December 2023. Partial funding for the study was obtained from the Ministry of Energy. In Q1 of 2024, the EC will publish the call for proposals for the Ghana FnRB study.



Ing Seth Mahu,
Ministry of Energy



Ms Paula Edze, Energy
Commission



Mr. Kennedy
Amankwah, Energy
Commission



Ms. Doris Doudo,
Ministry of Energy

International programmes

01

International initiatives

Ghana is actively engaged in several initiatives on Article 6 globally, ranging from capacity building, regulations and policy methodologies and certification, registries, and project activation. The CMO contributes to the following global initiatives in Article 6 voluntary cooperation and related areas:

- UNFCCC Article 6 negotiation with AGN.
- Paris Agreement Article 6 Implementation Partnership by the Government of Japan and coordinated by IGES.
- UNFCCC Registry Administrators Forum.
- West African Alliance on Carbon Markets and Climate Finance.
- World Bank's Climate Market Club.
- Climate Perspective's Carbon Mechanisms Working Group.
- The PURE initiative by EY and UNDP on Unilateral Approaches.
- C CAC's Household Working Group.
- Global Methane Initiative.
- Singapore's Initiative with Gold Standard and VERRA on standardisation of Article 6 transactions.

02

Private sector engagements

Ghana recognises that unilateral engagement with the private sector as a basis for authorising ITMOs for international transfer toward other mitigation purposes has a huge potential to increase the NDC's ambition and spur the value of the downstream secondary market.

The unilateral approach model has attracted tremendous interest through 2023 as the CMOs started to engage international commodity companies such as Trafigura Environmental Solutions, Marubeni Cooperation, British Petroleum, and GenZero to explore options for G2P approaches.

The unilateral engagements are at different stages. Mecuria Energy Trading signed a memorandum of understanding with the Ministry of Energy on developing an improved cookstove programme.

Trafigura and the country have exchanged letters of intent. A team from Marubeni Cooperation subsequently visited Ghana following the exchange of letters of intent. British Petroleum has made initial contact, leading to further discussions with the Ghana CMO team.



Gyimah Mohammed, Deputy Director
(Head of Climate Change Unit, MESTI)

Stories - Klik Board visits Ghana

In March 2023, a 7-member board from the KLIK paid a working visit to Ghana to meet key stakeholders as part of the development of its mitigation projects. The KLIK procures ITMOs through the projects on behalf of motor fuel importers in Switzerland.

EPA's management welcomed the KLIK board and assured them of their commitment to providing the needed support in furtherance of the implementation of the tenets of the agreement. The KLIK's board discussed with the Energy Commission the development of a green cooling programme, KOFA on its battery swapping programme for bikes, the Agro Kings Limited, and the UNDP on the alternate wetting and drying technology for rice farms.



At Kasei, a community in the Ejura Sekyere-Odumase District of the Ashanti Region, the board members interacted with women who are benefiting from improved cookstoves, a technology through a partnership among Act Commodities, Envirofit, and Farmerline. The Chairman of the Board of Directors of the KLIK Foundation, Daniel Bischof, expressed optimism that the programmes will yield the needed results.



Yannick Träris
Carbon Procurement Manager



Michael Kofi Abrokwa
Country Manager, Ghana

Article 6 capacity building programme

- When the Kyoto Protocol became operational in February 2005, most small-sized developing countries struggled to take advantage of the opportunities the Clean Development Market (CDM) presented to them.
- To date, Ghana has recorded 4 CDM projects, of which 2 have been registered, representing 1.2% of the total registered CDM projects in Africa. None issued CERs.
- On the Programme of Activities (pCDM) front, the country has been involved in 44 activities as a host country in cooking, waste management, renewable energy, and water purification.
- Several factors account for the limited projects in developing countries like Ghana.
- Some of the often cited reasons are inadequate capacity and awareness, high upfront transaction costs, administrative burden, unpredictability or high risk of complex technical processes, and limited information on project feasibility.
- That said, for Article 6 to make a positive difference, it will require deliberate governmental effort to identify potential projects within the public and private sectors, backed by targeted capacity-building and awareness-creation programmes.
- Reaching out to the key actors to educate them on the new Article 6 market will help the opportunities for project development.
- The CMO has proactively designed a comprehensive outreach and activity sourcing programme.
- The programme will engage all stakeholders (business associations, government agencies, local bankers, investors and project financiers, technical service providers, business schools, investment promotion, and business development bodies) on a one-to-one basis.
- The goals of the outreach programme are as follows:
 - Sensitise key stakeholders on the technical and regulatory procedures in the carbon market framework for developing carbon market projects.
 - Create a platform for participants to learn from the experience shared by local and international project developers, project financiers, and carbon credit brokers involved in the international carbon offset markets and international carbon transfers.
 - Explore establishing Ghana's carbon readiness community of practice as the platform for critical support to project actors and a knowledge hub for the carbon market ecosystem.
- Already, the CMO has commenced initial informal engagements with some business communities, such as the Upstream Petroleum Chamber, Chamber of Mines, and Association of Ghana Industries, to whip interest in the carbon market space.



Mrs Juliana Bempah
Principal Programme Officer
Climate Change Unit, EPA

Stories - UNDP's AWD rice project

01

Overview

Alternative Wetting and Drying (AWD) promotes sustainable rice cultivation through efficient water management and reduces methane emissions by up to 50%. Under AWD, farmers can increase rice yields, cut water pumping costs, and improve water use efficiency. In conjunction with promoting AWD, the project will train farmers on the holistic concept of Sustainable Rice Intensification (SRI) measures. SRI is an approach that allows farmers to use less seed, less water, and fewer or no chemical inputs, which leads to an increase in rice yields.

02

Facts and Figures

- Shift continuous flooding to intermittent flooding
- Involve 11,000 rice farmers on 20,000 hectares
- Expected to reduce 1,125,655 tCO₂e by 2030
- Actors: UNDP, MOFA, GIDA
- Authorised in December 2022
- Initial report to UNFCCC published in September 2023
- Implementation (on-boarding, farmer training, adoption of AWD practice by farmers)
- Monitoring (satellite application, on-time field measurement, online data system)
- Projected to generate USD 9 million investment by 2030.

03

Progress

- Developed training and monitoring manual.
- Established an online monitoring data portal.
- Onboarded ~8,200 ha across Upper East, Central, Western, Volta (Aveyime, Adidome, Weta), Greater Accra & Ashanti region.
- Commercial farms are Agrokings, Farmer Globale, Spring Agro, HGL, GADCO, and Eroceht Ghana Limited. Jospong Group has onboarded 21,000ha, but they are yet to commence development.
- The first ITMO volume delivery is planned for Q3 of 2024.
- Annual information to UNFCCC CARP due 15/4/2024



Dr. Abdul-Razak Saeed of UNDP demonstrating the installation of piezometer on a rice field



Mr Isaac Kwabena Danso
Assistant Programme Officer
Climate Change Unit, EPA

Stories - IRECOP's composting project

01

Overview

The IRECOP project supported by UNDP established 6 compost facilities in Volta, Bono, Oti, Western North, Savannah, and Ahafo regions of Ghana capable of processing over 2,600 metric tons of municipal solid waste daily. Organic waste will be treated in the 6 composting facilities to reduce methane and nitrous oxide emissions from food and garden waste. Only after successful verification of monitored data and positive examination ITMOs will be approved for international transfer.

02

Facts and Figures

- Divert municipal waste from landfills to compost sites.
- Projected to generate 1.56 MtCO₂e.
- Expected value at USD 20 million by 2030.
- The project owner is IRECOP under the Jospong Group of Companies.

03

Progress

- Construction of compost facilities on all sites completed.
- 1.56 MtCO₂e of ITMOs authorised by Ghana and Switzerland.
- Article 6 initial reports completed for submission to UNFCCC.
- Monitoring framework has been completed and is currently applied to all operational facilities.
- ITMO delivery schedule developed.



IRECOP Site at Goaso in Ahafo Region



Ing Fiifi Boadi, MSWR



Dr Glenn Gyimah, JGC



Dr Alex Soezer, UNDP

Stories - Namibia Article 6 tour to Ghana

The CMO, on Monday, March 20, 2023, welcomed a 9-member delegation from Namibia who were on a 5-day visit to learn about the country's Article 6 implementation. The team, led by the Head of Multilateral Environmental Agreements at Namibia's Ministry of Environment, Forestry, and Tourism, Mr. Petrus Muteyauli, was in Ghana to understudy the country's carbon market project.

Namibia is establishing a carbon market office, and the visit allowed them to learn from Ghana's experiences in the carbon market space. The Namibian team paid a courtesy call to the Minister of Science, Technology, and Innovation, Dr Kwaku Afriyie, at his office in Accra.



Minister of Environment with the Namibian delegation

Dr. Afriyie assured them of the readiness of Ghana to share her expertise with Namibia on the carbon market and its related programmes. As part of the visit, the team took time to familiarise themselves with some CMO project sites, including rice farms in the Volta Region, a solar taxi office, and a compost plant.



Rosemary Boateng, Snr Admin Officer

Stories - Singapore delegation visit

A 7-member delegation from Singapore visited Ghana to conclude an implementation agreement between Ghana and Singapore under Article 6.2 of the Paris Agreement to allow the two countries to collaborate on Article 6 projects that can then generate carbon credits. After the two countries exchanged a letter of intent in April 2022, the Singaporean team came to Ghana, held extensive discussions, and developed a road map to pave the way for implementing the carbon market. Ghana and Singapore started the negotiation in 2021. The CMO also facilitated the delegation's engagement with state and non-state actors to discuss potential projects.



Minister of Environment with the Singapore delegation

Some potential project development areas were gas flaring in oil and gas production, landfill gas management, waste to energy, biological treatment of waste through composting and generation of biogas, wildfire management, forest conservation, and forest plantations. During the visit, the team called on the Minister of Environment, Science, Technology, and Innovation, Dr Kwaku Afriyie, who welcomed the Singaporeans and assured them of his support.

At a meeting with the Executive Director of EPA, Dr. Henry Kwabena Kokofu affirmed the agency's readiness to offer support. The Director General of the National Climate Change Secretariat Strategy Group, the Prime Minister Office of Singapore, Mr. Benedict Chia, expressed satisfaction with the work progress. He was convinced the proposed projects would activate emission reductions, generate revenue through private investments, result in sustainable development, create jobs, build resilience, improve the livelihoods of local people, and reduce air pollution.



Executive Director of EPA with Singapore delegation

Other Stories

01

Malawi team visits Ghana

A delegation from Malawi embarked on a study tour to Ghana from 3rd to 7th July 2023. The visit aimed to promote the carbon market in Malawi for an enhanced implementation of their NDC towards net-zero emissions and climate-resilient development in response to the climate emergency. The delegation supported by the UNDP, comprised representatives of the Ministry of Natural Resources and Climate Change, the Environment Affairs Department, and the University of Malawi.

The delegation paid a courtesy call to the EPA Executive Director and the Hon. Minister of Environment. After that, the Ghana and Malawi teams discussed the various topics in Article 6. They also visited some selected carbon market projects being implemented in the country.

02

Initialling of Minutes of Concluded Negotiation

At the margins of COP28, Ghana-South Korea initialled the agreed minutes of the negotiation on a framework agreement for cooperation on climate change. The initialing of the minutes was to give way to Ghana and South Korea to commence their respective national processes of consultation, legal review, cabinet approval and Parliament ratification.



Dr Peter Dery of MESTI, and Ms Han Minyoung, Deputy Director-General of South Korea's Foreign Affairs displaying copies of the initiated minutes

03

Exchange of Letter of Intent from Liechtenstein

On the sidelines of COP28, officials from Ghana and Liechtenstein met to decide on the next steps following the request to exchange a letter of intent to collaborate on Article 6. The two teams had cordial and constructive meetings and agreed to follow up in the Q1 of 2024.

2024 Outlook - 1

Ing. Esi Nerquaye-Tetteh
Ag. Deputy Executive Director
Technical Services, EPA



In 2024, the CMO will continue to work closely with all its partners to carry forward the outstanding work it started. The office will prioritise its support programme on Article 6 project origination and activation, targeted outreach, and innovation on upfront financing. Below are the highlights of the CMO's 2024 activities.

01

Bilateral cooperations and unilateral approach

- By Q1, Parliament hopes to complete ratification of the Ghana-Sweden and Ghana-Singapore bilateral agreements, followed by a signing ceremony.
- By Q3, South Korea and Liechtenstein agreement will be signed.
- By Q3, the unilateral approach with BP will be concluded.

02

Project development support, certification

- Authorise at least 6 more Article 6 projects. Issue 1st ITMOs by Q3.
- Publish 4 technical guidelines on authorisation, issuance and transfer, project eligibility, and NDC baselines.
- Catalogue methodologies for Article 6.2 projects.

03

Submit all mandatory reports to UNFCCC

- Annual Information by 15th April, 2024
- Biennial Transparency Report by December, 2024
- Initial Reports as and when authorisations are approved.

2024 Outlook - 2

04

Outreach Programmes

- Organise a series of Article 6 project activation events for potential project developers with business associations, chambers, investment houses, banks, etc
- Broadcast quarterly podcasts on selected Article 6 topics
- Publish a bi-yearly newsletter for Article 6 activities.
- Undertake general public awareness training of local experts in the Roster of Experts (ROE).
- Train EPA and MESTI staff on Ghana's international carbon and non-market approach and emerging

05

National Arrangements

- In Q1, inaugurate the carbon market committee.
- By Q2, the Environmental Protection Bill successfully passed by Parliament
- Organise inception meetings for joint committees established under the Ghana-Sweden Agreement as well as the Ghana-Singapore Agreement

06

Registry operations

- By Q3, issue the first ITMOs on GCR and complete the transfer and recognition process.
- Initiate work to develop registry interoperability with selected international standard programmes.
- Complete the consideration of connecting the GCR to the CAD-Trust system.

07

Revenue model

- By Q2, conclude work on the revenue model and formulae for CA fee proceeds.
- Initiate discussions on sharing of proceeds with Singapore and Sweden.

List of Stakeholders

Public Institutions

- Ministry of Energy
- Ministry of Sanitation and Water Resources
- Ministry of Lands and Natural Resources
- Ministry of Transport
- Ministry of Finance
- Ministry of Foreign Affairs and Regional Integration
- Ministry of Trade and Industry
- Energy Commission
- Forestry Commission
- Ministry of Food and Agriculture

Private sector Institutions

- Association of Ghana Industries - RE Centre
- Chamber of Mines
- Environmental Services Providers Association
- Ghana Alliance for Clean Cooking
- Ecobank Ghana Limited
- Development Bank of Ghana
- Stella Futura
- British Petroleum
- Mercuria Energy

International Bodies and Development Partners

- UNFCCC
- International Emissions Trading Association
- Climate Perspectives
- Climate and Clean Air Coalition
- Global Methane Initiative
- United Nations Development Programme
- World Bank
- Federal Office for the Environment, Switzerland
- State Secretariat for Economic Affairs of (SECO) Switzerland
- Klik Foundation, Switzerland
- National Climate Change Secretariat - Singapore
- Swedish Energy Agency
- Korea Trade-Investment Promotion Agency
- Swiss Embassy, Accra
- EY, South Africa and Poland
- West Africa Alliance on Carbon Market and Climate Finance
- Ministry of Environment, Japan and IGES (A6IP)
- Global Carbon Council
- VERRA - Verified Carbon Standard
- Gold Standard Foundation - Gold Standard



Mr Derek Sarfo-Yiadom
Programme Officer
Climate Change Unit, EPA

Article 6.2 activity development steps

Stage	CMO [Host Party]	Project Owner	Independent bodies	Receiving Party	International carbon standards
Pre-activity implementation	Cooperative approach			Cooperative approach	
	Eligible activities per NDC	Project identification			
		Project design			Methodology for project design
		Open account on GCR & request LOI			
		Commercial Agreement		Commercial Agreement	
	Authorisation approval	Authorisation request		Authorisation approval	
	A6.2 initial report		Validation		Registration
Activity implementation & Transaction		Implementation & monitoring			
			Verification		
	Examination			Examination	
	Issuance				Issuance
	Transfer			Recognition	Transfer

Article 6.2 activity development steps

Stage	CMO [Host Party]	Project Owner	Independent bodies	Receiving Party	International carbon standards
Transactions, payment & reporting	First transfer & cancellation of ITMOs			First transfer & cancellation	First transfer & cancellation
	Notice of ITMOs uses			ITMOs uses	
	CA fees	ITMOs revenues		Payment	
	Annual GHG Inventory			Annual GHG Inventory	
	Corresponding Adjustment			Corresponding Adjustment	
	Annual Information			Annual Information	
	Regular Information			Regular Information	



Mr Daniel Akwetey Lamptey
Principal Programme Officer
Climate Change Unit, EPA

Article 6.4 Mechanisms (A6.4M) roles

CMO [Host Party]	Project Owner	Independent bodies	Article 6.4 Supervisory Body - UNFCCC
Country Approval of Transition request	Request for transition of CDM projects		Receives transition request
NDC & A6.4M			
Letter of Approval link to NDC, Sustainable Development, Renewal of crediting period, Activity eligibility, Baseline & Methodology	Project design		PDD Design template
Authorisation of private and public entities as activity participants			Approval of methodologies
		Validation	Accreditation of DOEs
	Registration request		Registration
	Implementation & monitoring		Monitoring template
		Verification	
Authorisation of A6.4 ERs	Issuance request		Issuance
Accounting of A64 ER Contribution			A6.4 Mechanism Registry
			International Registry
			Share of proceeds (5% for adaptation and admin cost, 2% for OMGE)

Events CMO participated in 2023



Authorisation event of compost project @ COP28



EY's Roundtable on "Accelerating the Implementation of Article 6.2 of the Paris Agreement - how can corporates untap the ITMOs potential @ CO28



GIZ side event on green cooling under Article 6.2 @ COP28

Events CMOs participated in 2023



Pure Event by EY, UNDP and CMO @ COP28



Scaling of ITMOs through Auction event by CTX, EY and GCC @ COP28



CMO participated in West Africa Carbon Market Hub in Abidjan

Events CMOs participated in 2023



Genzero's by-the-fireside event on Article 6 @CO28



Klik Foundation's event "National Frameworks as basis for successful Article 6 Implementation @ COP28



CMO participated in Asia Climate Summit in Japan

Events CMOs participated in 2023



CMO participated in global net-zero connection in South Korea



Malawi delegation visit Hon Minister of Environment on Article 6 operations in Ghana

Events CMOs participated in 2023



Members of CEST Select visited Wahu e-bike production factory in Accra

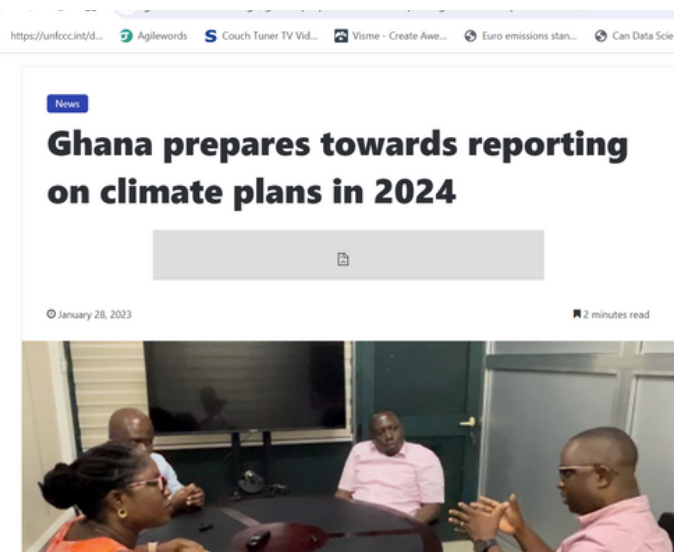
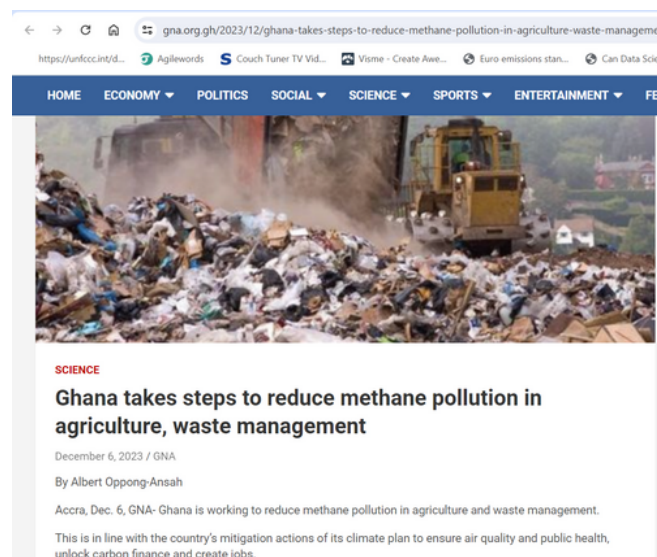
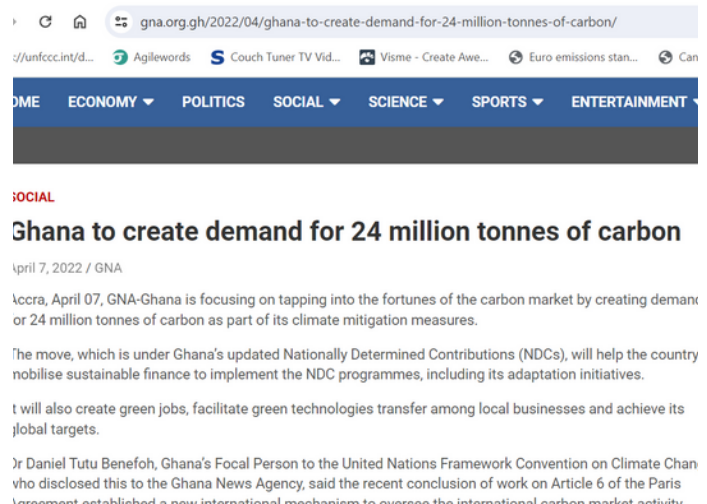
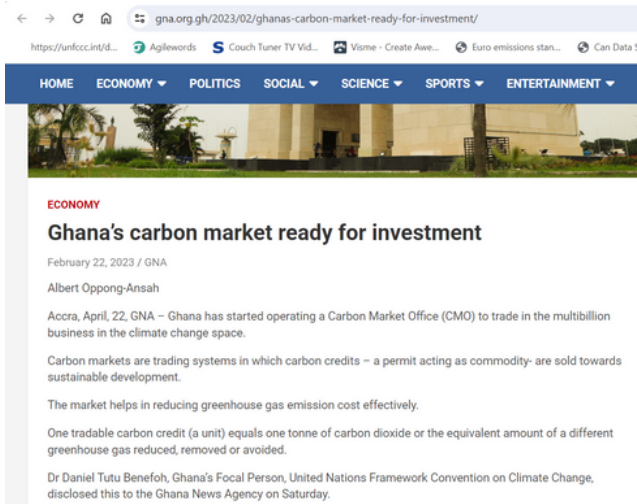


Participated in USAID meeting on climate finance in Tamale



Climate investments and Environmental Sanitation event at COP28

Media publications



Selected media publication on Article 6 implementations in Ghana

List of video links

- <https://youtu.be/u53CeZxE3Ck>
- <https://youtu.be/yQe8Dxg9cZ4>
- <https://youtu.be/ZJuZgPXysjo>
- <https://youtu.be/U3rMSBRKEvc>

List of major webinars CMO participated in 2023

- SB58 Side Event (MEDD, Senegal, and KliK Foundation): Successes and progress on Article 6 implementation. Experiences from pioneer countries.
- Options for roles and the interplay between Article 6 and voluntary carbon markets by climate perspectives.
- UNDP event: operationalising Article 6.2 of the Paris Agreement.
- Emissions Trading in the Paris Era – How it's Done: by Swedish Energy Agency
- DBG WEBINAR SERIES - Climate Finance & Sustainable Investing.
- Lao PDR virtual seminar on forest carbon credits by GGI and OECD.

- Options for addressing the non-permanence of forest-based mitigation" webinar by FAO.
- 23rd Annual IEA-IETA-EPRI Workshop on Greenhouse Gas Emissions Trading



Mr. Albert-Oppong-Ansah
Science, Environment & Energy Journalist
Ghana News Agency
Email: ansahalbert@gmail.com

Article 6 impact story

Local initiative contributing to global goal

Grace Adongo, in the last two months, has saved USD 10.3 from using an improved cookstove. In the past, she spent about USD 7.5 monthly using traditional stove cooking for her family.

“Setting of fire used to be difficult with the local stove, but with the improved one, it's hassle-free. I do not worry about clearing ashes now because the ash pan in the new stove retains it. All I need to do is take it out and dispose of it after cooking,” said Ms Adongo.

Grace, who lives at Kasei, a community in the Ejura Sekyere-Odumase in the Ashanti region of Ghana – West Africa, is making big savings.

She's happy to be using less charcoal, which reduces emissions. That single act is also saving more shea trees in the savannah region, which is Grace's favourite fruit. The story of Grace represents that of many rural and urban homes in Ghana and many least-developed countries.

Sticking to the use of local stoves adds more unwanted gases to the atmosphere, contributing to increasing warming, flooding, drought, and unpredictable rains – climate change.

The local or traditional stoves also produce condensed smoke, causing blackening of kitchen walls and ceilings, posing health risks such as respiratory illnesses, cataracts, and heart problems, among others.



Envirofit wood and charcoal Stove

In Sub-Saharan Africa alone, more than 950 million people rely on wood and charcoal for cooking, estimated to grow to 1.67 billion by 2050, according to the UNFCCC.

ACT Commodities, in collaboration with Environfit and Farmerline with support from the KliK Foundation, is subsidising the cost of an improved cookstove for many women like Grace in rural Ghana.

This is possible due to the KliK Foundation's (KF) funding on the back of Ghana's bilateral agreement with the Government of Switzerland. KF funds projects through the acquisition of emission reductions from these projects.

Mr. Yannick Traeris-Kahriman, the Carbon Procurement Manager at KF, says the company was working with its partners in the next seven years to distribute 180,000 pieces of clean cookstoves to rural areas at a subsidised cost.

“The stove ideally costs more than US\$ 55, but the project will absorb some of the cost so rural folks can purchase it at USD 15 if financed through a micro-loan. This we are convinced will help reduce emission and save forest,” he said.

As part of the project, there will be a revolving fund to support farmers who cannot outright purchase the stove.



Grace Adongo, Farmer at Kasei

Article 6 impact story-2

Modernising artisanal palm oil processing through carbon revenues

MESTI and EPA received support from UNDP under the NDC Support Programme to establish a financial grant scheme for artisanal oil palm processors. Under the grant scheme, artisanal palm processors in 8 communities (Bamnase, Tweapea, Adwafo, Asuom, Kwaebibirem, Achiase, Old Abirim, and Pramkese) in the Eastern Region received funding to finance energy efficiency practices in artisanal palm oil production. The artisanal operators adopted energy-efficient equipment for fruit digestion, oil pressing, and palm oil effluent treatment.

The key benefits of the schemes included a reduction in oil losses, a better working environment, high-quality oil, empowerment of women entrepreneurs, improved health, and increased access to the local market as well as greenhouse emission reductions.



Typical informal artisanal oil palm mill before intervention

carbon
revenues



Energy efficient oil palm processing equipment after the intervention

Scenes from the transformed mill in Adwafo

Sustainable Artisanal Palm Oil Processing (SAPP)

Solidaridad West Africa is designing the SAPP mitigation activity under the Ghana-Switzerland Bilateral Agreement under A6.2 of the PA. The SAPP will utilise:

- palm biomass for process heat needed to sterilise the fruits and cook the press liquor to obtain oil
- palm oil mill effluent (POME) for generating energy through the use of a biogas system which will avoid methane emissions.

The emission reductions from replacing the current use of spent tires and fuel wood with biomass and POME will be monetised. The carbon revenues will be used for modernising the informal artisanal processing mill facilities with an investment contribution, technical advice, and training.



The grant scheme was selected under the UNIDO Global Award recognising the impacts of the Programme in 2023



Women entrepreneurs receiving training in sustainable practices in oil palm processing

LIST OF ABBREVIATIONS

A6IP	Paris Agreement Article 6 Implementation Partnership
AGN	African Group of Negotiators
AWD	Alternative Wetting and Drying
BAU	Business as Usual Scenario
BP	British Petroleum
CA	Corresponding Adjustments
CCAC	Climate and Clean Air Coalition
CDM	Clean Development Mechanism
CM	Carbon Market
CMA	Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement
CMO	Carbon Market Office
COP	Conference of Parties serving as a meeting of Parties to the United Nations Framework Convention on Climate Change
CORSIA	Carbon Offset Reduction Strategy for International Aviation
fNRB	Fraction of Non-Renewable Biomass
G2G	Government-to-Government
G2P	Government-to-Private Sector
GCR	Ghana Carbon Registry
GHG	Greenhouse Gas
GIDA	Ghana Irrigation Development Agency
GMI	Global Methane Initiative
HFC	Hydrofluorocarbon
IA	Implementation Agreement
IETA	International Emissions Trading Association
IRECOP	Integrated Recycling and Compost Plant Limited
ITMO	Internationally Transferred Mitigation Outcome
KPT	Kitchen Performance Test
MADD	Mitigation Activity Design Document
VCM	Voluntary Carbon Market
MESTI	Ministry of Environment, Science, Technology and Innovation
MID	Mitigation Activity Identification Number
MO	Mitigation Outcome
MOFA	Ministry of Food and Agriculture
MtCO ₂ e	Million Tonnes of Carbon Dioxide Equivalent
NDC	Nationally Determined Contribution
PA	Paris Agreement
ROE	Roster of Expert
SEA	Swedish Energy Agency
SECO	State Secretariat for Economic Affairs
SRI	Sustainable Rice Intensification
UNFCCC	United Nations Framework Convention on Climate Change

We thank all stakeholders for their continued support for Article 6 operationalisation in Ghana. We appreciate the Ghana News Agency (GNA) for the excellent collaboration and support in preparing this maiden report.

Mrs Audrey Quarcoo
Director, Corporate Affairs
EPA



CONTACT US

Environmental Protection Agency,
91 Starlet Street, Ministries, Accra,
Ghana

+233(0) 50 130 1435

+233(0) 50 130 1616

www.cmo.epa.gov.gh

cmo@epa.gov.gh