RCC West and Central Africa

Collaboration for Climate Action

MINEPDED

An Assessment of the Potential and Feasibility of Implementation of Carbon Pricing Instruments/Approaches in Cameroon

– Report –

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Disclaimer

This report has been prepared as part of the country support under the Collaborative Instruments for Ambitious Climate Action (CiACA), implemented by the United Nations Framework Convention on Climate Change (UNFCCC) secretariat with support from the Government of Germany. The report was prepared by an independent consultant and does not necessarily reflect the views of the UNFCCC secretariat, the United Nations, or the Government of Germany.

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ABOUT THIS STUDY

This study is accomplished with financial and technical support from the United Nations Framework Convention on Climate Change (UNFCCC) secretariat under the Collaborative Instruments for Ambitious Climate Action (CiACA) Initiative. The CiACA project was announced during COP22 in Marrakesh, with the objective to support developing Parties in the development of carbon pricing approaches for implementing their NDCs under the Paris Agreement while fostering collaboration. The initiative is purely on a voluntary basis and does not create obligations for jurisdictions supported or for its donors. It is currently funded from voluntary contributions provided by the Government of Germany through the Federal Ministry for Economic Affairs and Climate Action (BMWK).

CiACA is implemented by the UNFCCC through its Regional Collaboration Centres (RCCs). Jurisdictions and developing countries like Cameroon, interested in better understanding and/or developing instruments for carbon pricing/markets could benefit from support at different levels to: identify the options available and how these fit with their own circumstances and objectives; to elaborate concrete proposals to establish instruments, adopt the instruments at the national level; and implement the instruments on the ground.

The CiACA project offers support to jurisdictions, in accordance with their needs, for considering and developing carbon pricing instruments. Nevertheless, a thorough study needs to be undertaken to ascertain the potential, interest and feasibility for applying carbon pricing approaches in the domestic context. In this regard, the Regional Collaboration Center for West and Central Africa (RCC WACA), with technical backstopping from Bonn is providing support to Cameroon through the CiACA initiative.

This study was conceptualized, coordinated and prepared by Dr NGWOME Gideon FOSOH, a Senior International Legal Consultant. Valuable research assistance was provided by WABO Yannick Aurelian, a Consultant supporting the Ministry of Environment, Nature Protection and Sustainable Development, Cameroon and by PISMO Robert, research engineer at the same institution. General guidance was provided by the CiACA team of the UNFCCC RCC WACA, in particular, its Regional Lead, Walters TUBUA, as well as by Bernard AYITTAH, a Carbon Pricing and Article 6 Expert at RCC WACA and Philippe MISSI MISSI, NDC and LT-LEDS Specialist/Expert at the same institution.

LIST OF ABBREVIATIONS/ACRONYMS

AEZ	Agro-ecological zones
AFOLU	Agriculture, Forestry and Other Land-Uses
BAU	Business-as-usual
BTRs	Biennial Transparency Reports
BUR	Biennial Update Report
CDM	Clean Development Mechanism
CEMAC	Economic and Monetary Community of Central African States
CER	Certified emission reduction
CH_4	Methane
CiACA	Collaborative Instruments for Ambitious Climate Action
CO_2	Carbon dioxide
CO_2e	Carbon dioxide and its equivalents
COP	Conference of the Parties to the United Nations Framework Convention on Climate Change
CPIs	Carbon pricing instruments
CSOs	Civil society organizations
DGT	Directorate General of Taxation
DNAs	Designated National Authorities
ERCs	Emissions reduction credits.
ETS(s)	Emissions trading system(s)
EU ETS	European Union Emissions Trading System
FCPF	Forest Carbon Partnership Facility

GDP	Gross Domestic Product
GHG(s)	Greenhouse gas(es)
HFCs	Hydrofluorocarbons
HYSACAM	Hygiene and Sanitation Company Cameroon
IEC	Information, Education and Communication
IGES	Inventaire des gaz à effet de serre (greenhouse gas inventory)
IMF	International Monetary Fund
IPPU	Industrial Processes and Product Use
IPs	Indigenous peoples
ITMOs	Internationally Transferred Mitigation Outcomes
LT-LEDS	Long-Term Low greenhouse gas Emission Development Strategies
MINADER	Ministry of Agriculture and Rural Development
MINEE	Ministry of Water and Energy
MINEPAT	Ministry of Economy, Planning and Regional Development
MINEPDED	Ministry of Environment, Nature Protection and Sustainable Development
MINEPIA	Ministry of Livestock, Fisheries and Animal Industries
MINFI	Ministry of Finance
MINFOF	Ministry of Forests and Wildlife
MINMIDT	Ministry of Mines, Industry and Technological Development
MRV	Monitoring, reporting and verification
N_2O	Nitrous Oxide
NCs	National Communications
NDC(s)	Nationally Determined Contribution(s)
NDS30	National Development Strategy 2020-2030 (For structural transformation and inclusive development)

NRSC	National REDD+ Steering Committee
ONACC	National Observatory on Climate Change
PACM	Paris Agreement Crediting Mechanism
PFCs	Perfluorocarbons
RCC	Regional Collaboration Centre
REDD+	Reducing Emissions from Deforestation and Forest Degradation and the role of Conservation, Sustainable Management of Forests and Enhancement of Forest Carbon Stocks in Developing Countries.
R-PIN	Readiness Plan Idea Note
R-PP	REDD+ Readiness Preparation Proposal
SDMESC	Sub-Directorate for Ecological and Climate Monitoring
SESA	Strategic Environmental and Social Assessment
SNI-GES	National Greenhouse Gas Inventory System/Système National d'Inventaire des Gaz à Effet de Serre
SWOT	Strengths, weaknesses, opportunities and threats
TS	Technical Secretariat
UNFCCC	United Nations Framework Convention Climate Change, 1992
viz	As follow

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EXECUTIVE SUMMARY FOR POLICY-MAKERS

Advancing climate change agenda in Cameroon has been slow partly due to inadequate finance to implement climate mitigation and adaptation actions. Climate finance in Cameroon is yet to be effectively integrated in the public financial and investment management framework, including in fiscal planning. Owing to inadequate international climate finance, the country is required to scale up internal funding or finance derived from within the country. This requires that Cameroon implements robust financial instruments in order to generate the necessary finance needed to fund its climate mitigation and adaptation actions. Examples of the robust financial instruments are carbon pricing instruments (CPIs) such as carbon tax, emissions trading system (ETS) and offset mechanism, which the Government of Cameroon has shown some intention to introduce in public finance and public investments that will bring new financing for climate action. In effect, Cameroon is presently considering exploring CPIs to reduce GHG emissions, incentivize investment in climate-friendly solutions, mobilize financial resources for funding climate mitigation and adaptation actions and to contribute to the achievement of its Nationally Determined Contributions (NDCs), contribute to the State budget and the Long-term Low-carbon Development Strategies (LT-LEDS). The CiACA study enables an assessment of the potential and feasibility for the adoption of carbon pricing approaches in Cameroon. The assessment considers the specific national context of Cameroon for a possible design and implementation of CPIs. The analysis of the national context reveals both opportunities and gaps that can inform the Government of Cameroon on what needs to be done to get the country ready for the introduction of CPIs.

A number of countries are already implementing CPIs while a growing number of countries are in the process of developing CPIs as one of the tools to support the implementation of their NDCs and reap the attendant benefits. Other countries, including Cameroon are undertaking national feasibility studies in order to assess the potential of implementing CPIs, with the main objective of supporting national climate mitigation commitments of reducing GHG emissions and helping achieve their NDC targets with the overall aim of limiting further impacts of climate change. In the Cameroonian context, carbon pricing fits into and addresses the challenge of mobilizing finance for implementing Cameroon's NDC both in terms of mitigation and adaptation that requires at least USD 57,640 million, or FCA 28,713 billion[1]..

The assessment confirms the potential for the operationalization of CPIs in Cameroon, which adoption could unlock several opportunities and result in a number of benefits. The opportunities and benefits which a price signal on GHG emissions could trigger as a result of implementation

[1] République du Cameroun, Nationally Determined Contribution (NDC) – Updated in 2021 and submitted on 11 October 2021, p. 1, https://unfccc.int/sites/default/files/NDC/2022-06/CDN%20r%C3%A9vis%C3%A9e%20CMR%20finale%20sept%202021.pdf.

of CPIs in Cameroon include, but not limited to: addressing the challenge of mobilizing finance for the implementation of Cameroon's NDC both in terms of mitigation and adaptation; source of revenue, incentivizing low carbon growth and enhancing environmental protection; generating health benefits especially the reduction of local air pollutants thereby enhancing air quality; enhancing regional and international cooperation in the fight against climate change; and generating development benefits through investment in low-carbon transportation systems and low-carbon energy systems.

Another opportunity that can be drawn from the assessment is that Cameroon's national policy, legislative and regulatory framework is supportive of the introduction of CPIs, albeit inadequately as a few policy documents and regulatory and legislative texts directly or expressly and indirectly or implicitly envisage the introduction of CPIs in Cameroon. Carbon tax has been particularly envisaged within the framework of environmental tax for the purpose of strengthening of environmental taxation, in line with Cameroon's international commitments, and specifically as a climate governance tool or measure to discourage forest conversion and to reduce GHGs in the context of REDD+ implementation in Cameroon. As for ETS, no policy, legislative and regulatory instrument has made any express reference to it. Reference to it can only be implied from the provisions of some policy and legislative instruments that contemplate the use of environmental fines – a category of non-tax source of revenue which is levied on natural or moral persons who cause damage to the environment. Thus, a comprehensive regulatory framework would need to be established from scratch for the purposes of setting-up and operationalizing CPIs in Cameroon. Also, institutional support for the design and operationalization of CPIs in Cameroon exists but the relevant institutions need to be strengthened through role definition and capacity building for example. Regarding the institutional framework for the operationalization of CPIs, efforts have been made through the adoption of the Climate Agenda, which defines an institutional framework of administrative stakeholders involved in climate change policies and response. This will help to avoid duplication of mandates among concerned government agencies as it clearly defines roles and responsibilities across Ministerial Departments and designs appropriate coordination processes, which is crucial for the design and implementation of CPIs in Cameroon.

Stakeholder engagement and communication are essential elements for the success of CPIs. Although there is some degree of political support for CPIs in Cameroon, there is fear that the level of acceptance among business entities and the general public may be low. This conclusion is drawn from research conducted and inquiries made and feedbacks received during the stakeholder consultation and capacity building workshop on carbon pricing in Cameroon organised in Yaoundé from 24-26 September 2024 as part of this study. The fear of low support is arguably justified by the concern of the declining competitiveness of domestic industries that will eventually be submitted to CPIs *vis-à-vis* international competitors and the general perception that the existing taxation regime is already too onerous for taxpayers. Thus, despite

the potential and feasibility for the introduction of CPIs in Cameroon, major challenges remain regarding the implementation of climate policies in general and Cameroon's readiness for the design and implementation of CPIs. This challenge can be overcome through awareness and education campaigns, stakeholder engagement, gradual introduction, revenue recycling, adjustments for key sectors, encourage innovation, capacity building, tax incentives, international corporation, transparent allocation, periodic reviews, etc. Also, both the central and local governments face resource, technical capacity and technological constraints in implementing climate policies in general. This does not augur well for the country in terms of readiness for the design and implementation of CPIs in Cameroon. There is therefore a need to build key stakeholders' capacity to understand carbon pricing and make informed decisions. This can be achieved through capacity building programs. While there is a growing awareness about CPIs in Cameroon, especially among officials of MINEPDED (Ministry of Environment, Protection of Nature and Sustainable Development), MINFI (Ministry of Finance) and a few civil society organisations (CSOs), further efforts are required to engage other stakeholders, namely, the private sector and sub-national authorities such as Decentralised Territorial Authorities (Regions and Councils).

Although capacities for carrying out GHG inventory (monitoring, reporting and verification (MRV) system and transparency) exist in Cameroon, such capacities are not available at facility/corporate levels and will need to be established in order to enhance the operationalization of CPIs in Cameroon. The relevant Ministerial Department (MINEPDED) that possesses these capacities can ensure the transfer of such capacities to covered entities. There is also the absence of a comprehensive regulatory framework that can guide the design and implementation of carbon pricing tools in Cameroon. A comprehensive regulatory framework would need to be established from scratch for the purposes of setting-up and operationalizing CPIs in Cameroon. Again, there is the absence of a National Climate Change Fund in Cameroon that could be a vehicle to support the collection and distribution of revenues raised through CPIs for specific climate mitigation and adaptation activities. To ensure that revenue from CPIs is invested on climate change adaptation and mitigation activities, there is the imperative to establish a National Climate Change Fund in Cameroon that could be a vehicle to support the collection and distribution of revenue raised through CPIs. Lastly, Cameroon's current low emission levels compared to other countries could limit carbon pricing opportunities. Nevertheless, the country offers opportunities for the implementation of carbon market mechanisms.

Regarding the choice of sectors, activities and GHGs to be covered by CPIs, the energy and IPPU (Industrial Processes and Product Use) sectors are suitable for the introduction of CPIs. Within these two sectors, two specific activities are identified as suitable for both carbon tax and ETS in Cameroon. In the energy sector, gas flaring and oil and gas refinery are activities identified as suitable for both carbon tax and ETS, while the industrial production of cement and aluminium in the IPPU sector is identified as suitable for both carbon tax and ETS. However, the

sector, activity and CPI that are low hanging for Cameroon to start with and which will be the sector, activity and CPI that is recommended for a pilot phase are gas flaring and oil and gas refinery in the energy sector which are recommended for coverage by carbon tax. As to the choice of GHG, CO_2 emissions released from gas flaring and oil and gas refineries could be covered by a carbon tax as emissions from these activities in the energy sector mostly consist of CO_2. This is the gas prioritized for coverage by a carbon tax in Cameroon for a pilot phase.

Although the industrial production of cement and aluminium in the IPPU sector is suitable for inclusion under a carbon tax or an ETS in Cameroon, recommendation for a pilot phase can be deferred because the sector in which these activities belong are ranked as the least emitting source with less than 1% (0.47%) of the total national GHG emissions. It may be considered or progressively introduced in the future if the GHG emissions of the sector increase especially as the country plans to fast-track or accelerate its industrialization process in order to become a newly industrialized country, particularly to establish a high number of cement and aluminum factories by 2025. As to the choice of GHG, CO_2 emissions released during the production of clinker (limestone) for cement production and aluminium production, could be subjected to an ETS in proportion to a default emission 'cap' as emissions from these activities mostly consist of CO_2. This is the gas prioritized for coverage within an ETS in Cameroon in the future. Carbon tax although suitable, is not recommended for the industrial production of cement and aluminium in the IPPU sector for now because the instrument is already recommended for a pilot phase to cover gas flaring and oil and gas refineries in the energy sector.

The AFOLU (agriculture, forestry and other land uses) sectors are not particularly amenable to carbon pricing in light of issues related to the dispersed nature of emissions from these sectors, methodological difficulties in the MRV of emissions, and risks of permanence. On the other hand, the activities of this sector could be considered for potential inclusion in a carbon pricing scheme as a source of offsets. Furthermore, emissions from waste management activities are seldom targeted for carbon pricing, especially in light of the relatively small contribution of these emissions to the national total in Cameroon. However, the sector could also be suitable for carbon offset projects.

If the Government of Cameroon decides to implement any or all of the CPIs, it is recommended that the Government engage as soon as possible in preparatory activities for establishing the instruments by undertaking or conducting readiness activities in at least four phases. A smooth transition of the four phases is represented in figure 6 of this study. Phase I will consist of an awareness raising and stakeholder sensitization stage, which would also serve to detail the scope of follow-up activities for implementation under Phase II. Phase II will consist of a preparedness or readiness and capacity building stage, including the establishment of some institutional structures, such as the functions of carbon tax and ETS regulators and definition of their roles, and the establishment of an emissions registry and a National Climate Change Fund. Phase III

will consist of the conduct of piloting activities. Lastly, Phase IV will consist of the full roll-out or implementation of the CPI(s).

BACKGROUND (OBJECTIVES, METHODOLOGY AND SCOPE OF THIS STUDY)

This study is carried out in the light of the prescriptions of the terms of reference (ToR), which require the following:

I. Objectives

As per the ToR, the overall objective of this study is to investigate and recommend appropriate carbon pricing instruments that can assist in mitigating greenhouse gas (GHG) emissions in Cameroon, foster sustainable development, support the implementation of successive Nationally Determined Contributions (NDCs), as well as contribute to putting the country on a low GHG emission pathway. In the light of the abovementioned objective, the specific objectives of the study to be achieved as outlined in the ToR are to:

- identify and describe key elements of the domestic context which may influence the choice of carbon pricing instrument and its design;
- assess the existing legal and policy framework in the country with respect to carbon pricing and perform a preliminary stocktake of the status-quo of monitoring, reporting and verification (MRV) structure for enabling carbon pricing instruments;
- analyze existing carbon pricing instruments or related instruments already in place in the country if any;
- identify potential opportunities for various carbon pricing based on the country circumstances and context;
- analyze potential options for the use of carbon pricing revenues, including to mitigate potential adverse impacts;
- determine carbon pricing linkages with the NDC and potential/opportunities to meet the mitigation targets for sectors mentioned in the NDC;
- subject to the specific interest of the country, to explore how carbon pricing approaches could support involvement in cooperative climate action as foreseen under Article 6 of the Paris Agreement;
- identify and recommend potential actors/partners as well as climate finance windows and procedures for accessing the various funds that could support the country in a possible design and implementation of carbon pricing; and
- provide an overall assessment of feasibility for carbon pricing for the country and provide recommendations on the possible way forward.

II. Methodology

In line with the ToR, we carried out consultations with relevant government officials as well as other relevant stakeholders during a “Workshop on Capacity Building and Stakeholder Consultation on the Feasibility of Carbon Pricing in Cameroon and Article 6 of Paris Agreement (Carbon Market)”, which took place in Yaoundé, Cameroon, organised by the UNFCCC Regional Collaboration Center for West and Central Africa (RCC WACA), in collaboration with the Ministry of Environment, Protection of Nature and Sustainable Development (MINEPDED) from 24-26 September 2024. The consultations were carried out through interaction with various

national stakeholders, for fact-finding purposes and for collecting their views on (among others, but not restricted to element 1.8 of the scope of the study as per the ToR, which seeks to identify key "Information on the interest to consider cooperative climate action under Article 6 of the Paris Agreement").

The consultations were complemented by desk review of relevant literature (primary and secondary data) pertaining to carbon pricing. In this regard, a presentation of quantitative elements for example, information on GHG emissions; the socio-economic context; planned or existing policies; etc., is made. We also analyse current and planned fiscal and non-fiscal policies or tools affecting GHG emissions by sector.

III. Scope of the Study

This study covers two scopes namely: spatial/geographical scope and substantive/scientific scope. Geographically, the study is limited to the assessment of the potential and feasibility of the design and implementation of carbon pricing instruments/approaches in Cameroon. Substantively, the study identifies key elements in the following areas which may influence the feasibility and the eventual design and implementation of carbon pricing options in Cameroon:

- Present GHG emissions by gas and sector: focus on sectors with high mitigation potential;
- Identify major developments in key sectors notably, the forestry, agriculture, energy and industrial development and opportunities for the implementation of carbon pricing instruments for the purpose of limiting GHG emissions in such sectors ;
- Analyse current and planned policies (fiscal and non-fiscal) or tools in order to determine how they affect GHG emissions;
- Relevant domestic climate change-related legal framework, which include:
  - Elements of domestic policy and legal framework of relevance to carbon pricing.
  - Domestic environmental strategies and goals.
  - Domestic climate change-related institutional arrangements.
- Overview of social and economic factors that are likely to affect, or be affected by the consideration of adoption of carbon pricing instruments;
- Overall development priorities;
- International environment and developments (in particular in relation to GHG emissions and energy) with relevance to Cameroon and commitments (among which, but not restricted to the NDC under the Paris Agreement);
- Information on the interest to consider cooperative climate action under Article 6 of the Paris Agreement.
- Information on the feasibility for carbon pricing for Cameroon and recommendations on the possible way forward.

CHAPTER ONE: INTRODUCTION

I. An Overview of the Republic of Cameroon (Country Profile/Information)[2]

Cameroon, located within the Congo Basin, encompasses ecosystems that represent the African continent, earning the country the title of "Africa in miniature". The country covers an area of 475,650 km², extending 1,500 km from south to north (2-13°N) and 800 km from west to east (9-16°E). With an annual population growth rate of 2.5%, this rate rises to 4.3% in urban areas. Unplanned urbanization is one of the most notable trends in recent years. As a result, the urbanization rate increased from 52% in 2010 to 57% in 2019. Approximately 50% of Cameroon's population resides in informal, often illegal, settlements.

In terms of climate, the country's extensive latitudinal range results in varying rainfall patterns, from deficit monomodal rainfall in the Sahelian agroecological zone (500-800 mm) to abundant monomodal rainfall (1,800-2,800 mm) in the high savannas and plateaus, and bimodal rainfall (1,500-2,000 mm) in the forest zone, reaching significant monomodal rainfall (3,000-8,000 mm) in the coastal zone. Temperature varies across regions, ranging from 19°C to 35°C with temperature amplitudes between 3°C and over 12°C.

Biologically, Cameroon hosts six primary ecosystem types and a diverse range of agro-pastoral production systems. Vegetation is characterized by steppe and Yaéré grasslands in the far north, savannas in the north, Adamawa, and the western highlands, semi-deciduous forests in the central and southern regions, and evergreen forests and mangroves along the coast. The country ranks fourth in Africa for plant diversity and fifth for animal diversity, with 8,300 plant species and 335 mammal species (SPANB II, 2012).

Lying wholly within the tropics where temperatures are generally high throughout the year[3], Cameroon is a geographically diverse country and experiences all the major climates of the African continent. Orohydrographic, pedological, biogeographical or ecological and climatic considerations led IRAD in 2000 to classify the country into five large agroecological zones (AEZ) roughly modeled on the natural regions of Cameroon. Put differently, the diversity of landscapes, geomorphological formations and climatic zones categorise Cameroon into five AEZs that include[4]:

1. **The Sudano-sahelian zone (AEZ I)**, in the north, with savannah vegetation and a semi-arid climate.

[2] For more information, see the second national communication of Cameroon.

[3] Ayonghe S.N., (1999), "Statistical analysis of palaeo climatic changes in Cameroon and projections into the 21st Century; causes of observed trends and predictable effects on biodiversity within the Central African Region in, Conserving and mapping biodiversity in Central Africa; global challenges and local solutions", p. 19.

[4] MINEPDED, (2024), First Updated Biennial Report of Cameroon, p. 16, https://unfccc.int/sites/default/files/resource/BUR1_CMR%20FINAL.pdf?download; Brendan O'Neill, "Zones Agroecologiques de Cameroun", FAO, https://gaez.fao.org/datasets/zones-agroecologiques-de-cameroun/about.

2. **High Guinea or High Savannah zone (AEZ II)**, situated in the centre of the country with Sudano-Guinean savannah vegetation on the Adamaoua plateau – the country's first "water tower", where a large number of the country's major rivers have their sources.
3. **Highlands or Western Highlands zone (AEZ III)**, situated in Western and Northwestern regions, consisting of highland environment with equatorial monsoon climate – 2nd "water tower" of the country.
4. **The Monomodal forest zone or coastal plain (AEZ IV)**, with a coastal and mountainous façade and humid equatorial climate. It is the rainiest area of the country.
5. **The Bimodal forest zone or Southern Cameroonian Plateau (AEZ V)**, situated in the South and East in the middle of humid tropical forests with a particularly dense hydrographic network.

However, this rich biological heritage faces numerous threats, with the most significant being illegal and unsustainable logging, wildlife exploitation, and mining, as well as uncontrolled land use for shifting cultivation and the unsustainable development of agro-industries. The net annual deforestation rate is estimated at 0.6% (FAO, 2020), coupled with a low reforestation rate of 0.1%, suggesting a growing loss of biodiversity.

Deforestation's contribution to climate change and the vulnerability of local and indigenous populations is undeniable. Cameroon has an extensive forest massif, which is increasingly degraded by agro-pastoral activities, mining projects, and infrastructural development, compounded by rapid population growth. According to Worldometer's [5] elaboration of the latest United Nations data[6], the following 2024 estimates of the population of Cameroon are given:

[5] Worldometer, (2024), "Cameroon Population (LIVE)", https://www.worldometers.info/world-population/cameroon-population/.
[6] U.N. Dept. of Economic and Social Affairs , "Population Division. World Population Prospects: The 2024 Revision".

Table 1: Representation of Cameroon's Population Estimate

Total population	Population growth rate	Gender ratio	Age-based population distribution	Population density	Fertility rate	Median age	proportion of populations residing in urban areas	Ratio of total world population	Ranking on the list of countries	Dependency Ratios	Life expectancy at birth	Infant mortality rate	Largest Cities & corresponding population	proportion of vulnerable groups significantly impacted by climate change
29,379,218	2.71%	-male: 15,429,588 -female: 15,536,517	- 0-14 years: 41.5% (male 6,477,438/female 6,364,987) - 15-64 years: 55.3% (male 8,488,522/female 8,638,519) - 65 years and above: 3.2% (male 463,628/female 533,011)	62 people per Km^2 (160 people per m^2), on a total land area of 472,710 Km^2 (182,514 sq. miles)	4.46	- total: 18.9 years - male: 18.6 years - female: 19.2 years	58.9% (17,154,348)	0.36 %	52	- total dependency ratio: 82.3 - youth dependency ratio: 77.3 - elderly dependency ratio: 4.9 - potential support ratio:	- total: 64.2 years - male: 62.3 years - female: 66.1 years	-total: 46.1 deaths/1,000 live births -male: 50.8 deaths/1,000 live births -female: 41.3 deaths/1,000 live births	-Douala (1,338,082) -Yaounde (1,299,369) -Bamenda (420,445) -Bafoussam (373,268) -Maroua (314,122) -Ngaoundere (238,196) -Kumba (225,046)	About 2,000,000 people (9% of Cameroon's pop) Most vulnerable segments are women, youths, children, indigenous people and those in rural communities who account for 75% of workers in the informal agricultural sector.

										20.3				

b. Gross Domestic Product (GDP)

Cameroon's real Gross Domestic Product (GDP) growth was estimated at 4.0% in 2024 and projected to reach on average 4.5% over 2025-2027, driven by improved energy supply and stronger public investment[7]. Inflation is expected to slow down to 3.0% by 2027, and the fiscal deficit is anticipated to remain around 1.0% of GDP in the medium-term, with public debt declining to 36.3% of GDP by 2027. The country's growth will be further supported by strategic investments in infrastructure, notably in the energy and transportation sectors, as well as by diversification into manufacturing and services.

However, these economic gains are intertwined with environmental sustainability. As one of the most biodiverse countries in Africa, Cameroon faces the dual challenge of fostering growth while curbing the ongoing deforestation that threatens its natural capital. The agricultural and forestry sectors, which represent a significant portion of Cameroon's GDP, remain highly vulnerable to unsustainable land use practices. Forests, covering over 40% of the country's land area, continue to be exploited for timber, agriculture, and mining, with deforestation rates of approximately 0.6% annually. This not only undermines biodiversity but also contributes to the country's carbon emissions[8].

II. Information on Climate Change in Cameroon: Observed Climatic Changes, Impacts and Responses

1. Climatic Changes and Impacts in Cameroon

Cameroon is vulnerable to climate change, through its impact on human capital, infrastructures and economic sectors such as agriculture and livestock. Indeed, climate change is a serious threat to the population and the economy of Cameroon. It is expected to result in significant losses in food production outputs, exacerbate food insecurity, poverty and inequality, population displacement and consequential conflict risks[9]. Climate-related losses in food production output would impede export capacity, and may increase imports either to cope with food shortage, sanitation and health needs during crises or to invest in rebuilding after crises. The social and economic impacts would affect human capital accumulation, jeopardize development, and hinder inclusive growth[10]. Climate hazards are becoming more severe in Cameroon. Temperatures rise are increasing and this trend is projected to continue, while there is an increase in the frequency of heavy precipitation. Also, extreme weather events such as drought and flood are increasingly reported across the country – with the number of recorded events doubling in the

[7] World Bank, Cameroon Economic Update June 2024: Fiscal Instruments for Sustainable Forestry (English). Washington, D.C., World Bank Group, p. 5, http://documents.worldbank.org/curated/en/099072324132011679/P18123015a03b8023194f315ebe9ec0ce0a.

[8] Cameroon Deforestation rates & Statistics | GFW consulted on the 27th of January 2025 https://www.globalforestwatch.org/dashboards/country/CMR/?category=land-use

[9] African Dept. of International Monetary Fund., op. cit., p. 30.

[10] Ibid.

past three decades. These impacts are causing both immediate and long-term risks. Climate change is projected to cause a GDP loss between 4 to 10% by 2050, with larger output losses in the most pessimistic scenario and if no adaptation action is taken[11].

The geographical diversity of Cameroon exposes different agro-ecological zones of the country to diverse climate shocks. While all AEZs face specific climate challenges, some are more vulnerable to climate risks. For example, the Soudano-sahelian zone is most vulnerable to climate change and exposed to droughts and desertification[12]. Historically, between 20% and 50% of the Far North's population has been affected by droughts. The Monomodal forest and bimodal forest zones experience heavy rainfalls and floods, which often take lives and damage vital infrastructures. Sea-level rise harms Cameroon's coastline and will continue to cause coastal erosion. South Cameroon is the least affected by climate events, but deforestation and mining activities undermine conservation efforts of the second largest carbon sink of the world – the Congo Basin[13].

Climate change is set to severely impact agriculture in Cameroon, reducing yields, exports, and incomes, and worsening food insecurity. As most agriculture relies on rainfall, changes in precipitation and rising temperatures will harm crop productivity, especially in rural areas where outdated farming methods prevail. Major crops like cassava, maize, and rice have already seen yield reductions, particularly in the north[14]. By 2050, agriculture could lose 6-14% of output due to climate change. Livestock farming, fishing, and aquaculture also face challenges like water scarcity, disease spread, and reduced productivity, especially in the north.

Though Cameroon has abundant surface water, its availability varies regionally, with some areas like the Lake Chad region facing water scarcity. Climate change exacerbates resource competition, particularly in the Extreme North, where conflicts over land and water between farmers, herders, and fishermen are increasing. As of March 2023, over a million people were displaced by climate-related violence, with floods causing over 60% of recent displacements[15].

Climate-induced risks also damage infrastructure, especially roads, with frequent floods and landslides affecting around 274 km of roads yearly. This results in economic losses of approximately US$130 million annually. Furthermore, climate change worsens poverty, particularly in rural areas, where over 55% of the population lives in poverty. Climate-related health issues like heat-related illnesses and the spread of diseases add to these challenges. The growing population increases the strain on resources and contributes to higher emissions, further heightening the country's vulnerability to climate change[16].

[11] Ibid., p. 31.
[12] Ibid., p. 32.
[13] Ibid.
[14] African Dept. of International Monetary Fund., op. cit., pp. 33-35.
[15] Ibid.
[16] Ibid.

2. Responses to Climatic Change in Cameroon

Cameroon places climate change among key challenges in its development strategy. The National Development Strategy 2020-2030 For structural transformation and inclusive development (SND30)[17] identifies mitigation and adaptation to climate change as key objectives to achieve sustainable and inclusive growth. As part of the implementation of the strategy, the authorities plan to:

(i) strengthen actions relating to sustainable management of natural resources; and
(ii) take adequate measures to mitigate GHG emissions from various activities and adapt to the effects of climate change.

In addition, in order to address the consequences of climate change, including floods and landslides in some cities and rural areas, the Government is committed to:

(i) ensure that climate change concerns are taken into account in sectoral strategies and policies, both in terms of formulation and implementation;
(ii) build the capacity of institutions responsible for climate surveillance;
(iii) operationalise the system for monitoring, preventing, and responding to the effects of climate change; etc.

i. Mitigation Actions

Under its 2021 updated NDC, Cameroon commits to reduce GHG emissions by 35% by 2030 relative to the 2010 reference year, including a 23% reduction target, which is conditional on receiving international support in the form of finance, technology transfer, and capacity building and an unconditional target of 12%[18]. The unconditional 12% reduction target is expected to be achieved using internal finance. This requires that the country implements robust financial instruments in order to generate the necessary finance needed to achieve the unconditional reduction target. Examples of such robust financial instruments are carbon pricing tools. The NDC outlines specific sectors and activities targeted for emissions reduction including: energy (transportation included), forestry, agriculture, and waste management. Still in terms of mitigation, Cameroon also commits to promote renewable energy sources such as

[17] Ministry of Economy, Planning and Regional Development, (2020), "National Development Strategy 2020-2030 (For structural transformation and inclusive development) (SND30)", Ministry of Economy, Planning and Regional Development with the participation of development partners, facilitated by UNDP. The SND30 is Cameroon's current national development policy document that sets the country's development vision for 2030, from 2020. This strategy outlines the guidelines that will orientate development efforts to achieve the objectives set out in Vision 2035. The overall objectives pursued by NDS30 are: 1) to establish favourable conditions for economic growth and the accumulation of national wealth and to ensure that the structural changes essential for the industrialization of the country are obtained; 2) improve the living conditions of the populations and their access to basic social services by ensuring a significant reduction in poverty and underemployment; 3) strengthen climate change adaptation and mitigation measures and environmental management to ensure sustainable and inclusive economic growth and social development; and 4) improve governance to strengthen the performance of public action with a view to achieving development objectives.

[18] République du Cameroun, Nationally Determined Contribution (NDC) – Updated in 2021 and submitted on 11 October 2021, pp. 1, 19 and 28, https://unfccc.int/sites/default/files/NDC/2022-06/CDN%20r%C3%A9vis%C3%A9e%20CMR%20finale%20sept%202021.pdf.

hydropower[19], solar, and wind energy. It also aims to improve energy efficiency to reduce emissions from the energy sector. Cameroon also recognizes the importance of climate-smart agriculture practices to reduce emissions and enhance food security, through improved land management, agroforestry, and sustainable farming techniques. The updated or revised NDC focuses on 35 mitigation projects to reduce Cameroon's GHG emissions in all sectors. These projects were proposed by the relevant Sectoral Administrations. According to the NDC, the 35% emissions reduction by sectors corresponds to a total of 42,258.73 Gg CO_2 eq of the country's GHG emissions by 2030[20]. The baseline emissions in 2010 were 34,932.6 Gg CO2 eq. The emission levels corresponding to a 12% reduction (unconditional) is 104,186.99 Gg CO2 eq and a 35% reduction (including conditional) is 76,825.72 in 2030. The projected emission reductions in 2030 under both unconditional and conditional targets is 42,258.78 Gg CO2 eq.

Table 2: Summary of the 2021 Updated NDC of Cameroon

Summary of the elements of Cameroon's 2021 updated NDCs for brief understanding	
Commitment Type	GHG Reduction by Conditional and Unconditional Scenario
Scope and GHGs covered	Entire national territory CO_2, CH_4, N_2O, HFCs, PFCs and SF_6 With the first 3 as main targets
Period covered	2020 - 2030
Reference year (base year)	2010
Level of commitment or reduction of GHG emissions	The level of GHG reduction by 2030 is 35% distributed as follows: ➢ 23% conditional ➢ 12% unconditional
Priority sectors covered	➢ AFAT (Agriculture, forestry and other land uses) ➢ Energy ➢ Waste
Global Warming Potential	➢ Metrics: GWP in accordance with the guidelines of the IPCC Fourth Assessment Report (AR4). The GWP values

[19] Inspired by the NDS30, Cameroon expresses its intention in its NDCs to increase energy supply and improve energy efficiency; to make renewable energy contribute to 25% in the electricity mix by 2035 especially with the development of mini-hydroelectricity.
[20] Updated NDC of Cameroon, p. 13.

(GWP)	used are: CO_2 = 1 (by convention) CH_4 = 25; N_2O = 298; HFCs = 1.5 - 14,800.
Methodologies for estimating emissions	Methodologies: 2006 IPCC Guidelines for Greenhouse Gas Inventories. 2013 Good Practice Guidance, including revised supplementary methods.
Implementation cost	57,640 million USD or 28,713 billion FCFA

ii. Adaptation Actions

Based on the analysis of current and future vulnerabilities, Cameroon envisages multiple projects to enhance its adaptation efforts. In particular, the government envisages improving the resilience of the national healthcare system, infrastructure and agriculture. Key adaptation objectives and projects are outlined in the NDC. Priority areas include promoting climate smart agriculture, building resilient energy and transport infrastructure, diversification of energy supply, disaster risk reduction, and improving population resilience. The National Plan for Climate Change Adaptation (PNACC) highlights four priority adaptation cross-cutting programmes covering knowledge management on climate change in Cameroon; information, education and mobilization of the Cameroonian population to adapt to climate change; integration of adaptation to climate change into national sectoral strategies and policies; and two other programmes covering the two most vulnerable AEZs (the Sudano-Sahelian zone and the monomodal rainfall zone)[21]. Another programme covers the other three AEZs namely, the Guinean high savannah zone, the high plateau zone and the bimodal rainfall zone[22]. The NDC estimates financing needs to support adaptation projects at over US$32 billion until 2030. There are several challenges that hinder adaptation efforts, such as limited access to modern inputs and technologies, inadequate infrastructure and financing constraints[23]. The updated or revised NDC focuses on 21 adaptation projects to strengthen Cameroon's resilience in all sectors. These projects were proposed by the relevant Sectoral Administrations.

[21] National Plan for Climate Change Adaptation (PNACC), p. vi.
[22] Ibid.
[23] African Dept. of International Monetary Fund., op. cit., p. 38.

CHAPTER TWO: GREENHOUSE GAS EMISSIONS PROFILE OF CAMEROON / INFORMATION ON GREENHOUSE GAS EMISSIONS IN CAMEROON

Introduction

This chapter provides information on anthropogenic GHG emissions and removals in Cameroon. The most recent GHG inventory report[24] which presents a comprehensive analysis of anthropogenic GHG emissions and removals trends in Cameroon from 2010 to 2020 provides information on GHG emissions by types (Carbon dioxide (CO_2), Methane (CH_4), Nitrous Oxide (N_2O), Hydrofluorocarbons (HFCs) and Perfluorocarbons (PFCs)) and by sector (Energy, AFOLU (Agriculture, Forestry and Other Land-Uses), Waste Management and Industrial Processes and Product Use (IPPU)). In accordance with Decision 17/CP.8 [25] , GHG emissions/removals must be analysed at the national level by type of gases and by sector. The national balance sheet of GHG emissions and removals for the year 2020 shows that Cameroon remains overall a GHG sink with an absorption capacity of 19,859.76 Gg CO2 eq. Including the AFOLU sector, emissions amounted to 117,724.06 Gg CO2 eq and estimated absorptions at approximately 137,583.06 Gg CO2 eq (-137,583.06 Gg CO2 eq), i.e. a net absorption of 19,859.06 Gg CO2 eq (¬19,859.06 Gg CO2 eq). Table 3 summarises GHG emissions for the 2020 reference year.

Table 3: Summary of GHG emissions for the most recent inventory data (2020)

	Emissions (Gg)			Emissions CO2 Equivalents (Gg)				
Categories	Net CO_2 (1)(2)	CH_4	N_2O	HFCs	PFCs	SF_6	NOx	CO
Total National Emissions and Removals	-64372.91	1231.35	45.3	NA	230.20	NE	176.60	6852.53
1 - Energy	6884.98	83.40	1.297	NE	NE	NE	NE	NE
2 - Industrial processes and product use (IPPU)	153.54	NA, NE	0.000	NE	230.20	NE	NE	NE
3 - Agriculture, Forestry, and other land uses (AFOLU)	-71419.17	895.97	42.956	NO	NO	NO	176.60	6852.53
3.A - Cattle	0.00	435.68	0.349	NO	NO	NO	NE	NA
3.B - Lands	-71463.03	NE	NE	NO	NO	NO	NE	NA
3.B.1 - Forest lands	-137583.63	NA	NA	NO	NO	NO	NA	NA

[24] MINEPDED , (2024), Biennial Update Report (BUR), BUR1, https://unfccc.int/documents/641418.
[25] Guidelines for the preparation of national communications from Parties not included in Annex I to the Convention.

3.B.2 - Cultivated lands	32974.70	NA	NA	NO	NO	NO	NE	NA
3.B.3 - Prairies	32212.43	NA	NA	NO	NO	NO	NA	NA
3.B.4 - Wetlands	0.00	NA	NA	NO	NO	NO	NA	NA
3.B.5 - Establishments	218.83	NA	NA	NO	NO	NO	NA	NA
3.B.6 - Other lands	714.64	NA	NA	NO	NO	NO	NE	NA
3.C - Aggregate sources and non-CO_2 emission sources on land	43.86	460.29	42.607	NO	NO	NO	176.60	6852.53
4 - Waste	7.73	251.98	1.046	NA	NA	NE	NE	NE
5 - Others	714.64	NA	NA	NO	NO	NO	NE	NA
Total emissions and absorptions in Gg CO2 eq	-64372.91	30783.75	13499.4		230.20		176.60	6852.53
Difference between Absorptions and Emissions	-19859,76 Gg							

Table 4: Trend assessment

IPCC Category code	IPCC Category	GES	2020 Ex,t (Gg CO2 eq)	| Ex,t | (Gg CO2 eq)	Lx,t	Cumulative Total of Column F
3.B.1.a	Remaining forest land Forest land	CO_2	-137583,6	137583,6	0,54	0,54
3.B.2.b	Land converted to cropland	CO_2	32974,7	32974,7	0,13	0,67
3.B.3.b	Land converted to grassland	CO_2	32212,4	32212,4	0,13	0,79
3.A.1	Enteric fermentation	CH_4	10342,4	10342,4	0,04	0,83
3.C.1	Biomass combustion	CH_4	9392,6	9392,6	0,04	0,87
3.C.4	Direct N_2O emissions from managed lands	N_2O	6867,0	6867,0	0,03	0,90
3.C.1	Biomass combustion	N_2O	4157,3	4157,3	0,02	0,91
4.D	Wastewater treatment and discharge	CH_4	3493,4	3493,4	0,01	0,93
1.A.3.b	Road transport	CO_2	3130,4	3130,4	0,01	0,94

4.A	Solid waste disposal	CH_4	2798,0	2798,0	0,01	0,95
Total of all sectors		GES	-19859,57	255307,69	1	

I. Greenhouse Gases emissions by gas type between 2010 and 2020

Three main GHGs were directly emitted in Cameroon between 2010 and 2020 and a negligible emission of PFCs. CO_2 was dominant with a total of 73,210 Gg CO2 eq emitted or (62.19%), followed by CH_4 with a total of 30,783.87 Gg CO2 eq or (26.15%), and N_2O with a total of 13,449.27 Gg CO2 eq emitted or (11.47%). In addition to these three gases, PFCs emissions were marginal or minor with a total of 230 Gg CO2 eq emitted or (0.20%) from the IPPU sector. (see Figure 1).

Figure 1: GHG emissions by gas type from 2010-2020

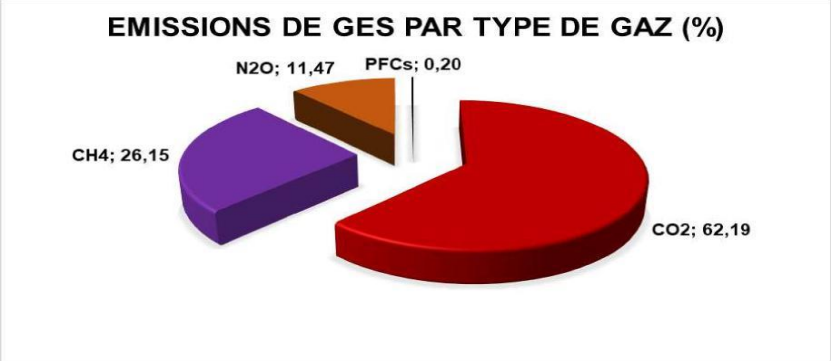
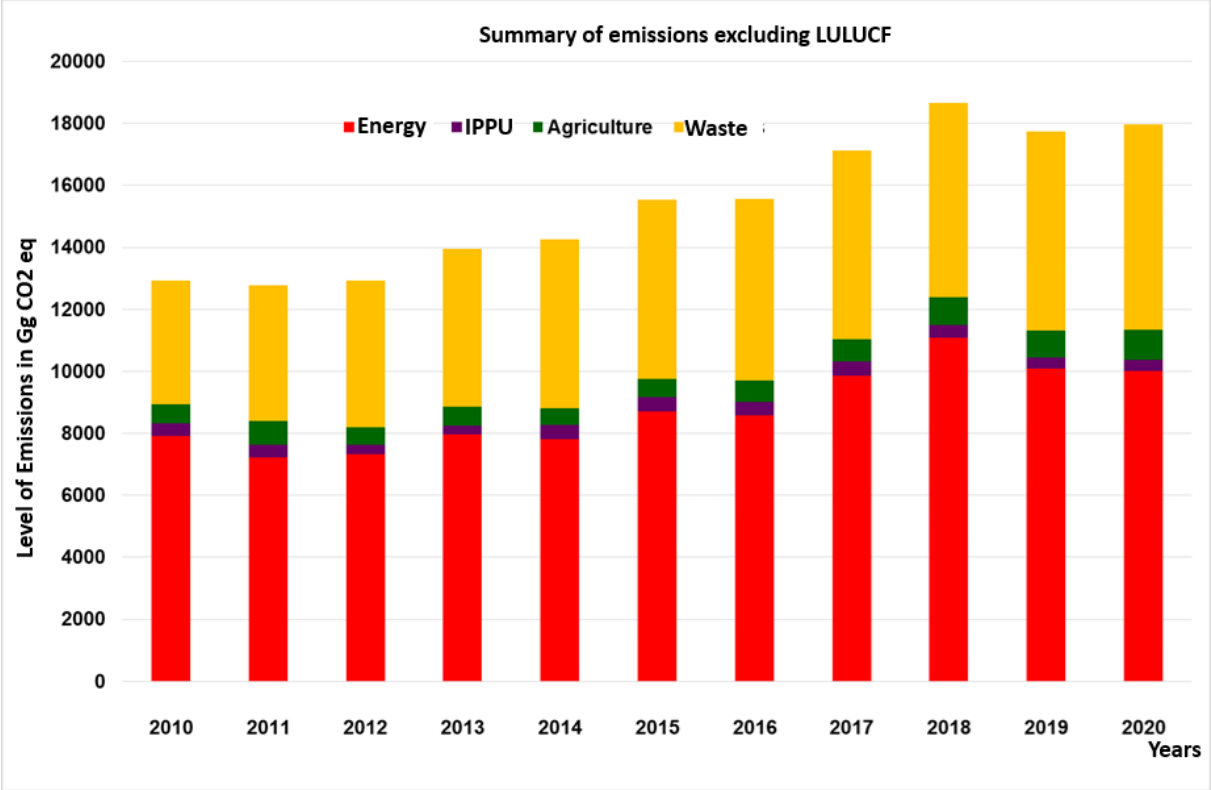


Figure 1 above demonstrates the dominant emission of CO_2 across all sectors, especially in the agriculture sector, followed by the energy, waste and IPPU sectors as shown on figures 2 and 3 below. CH_4 emissions were primarily associated with agriculture and waste, from practices like livestock management and waste decomposition. N_2O, though a smaller component, was significant in agriculture due to fertilizer use. Over the past decade, Cameroon's total emissions reflect the dynamic interplay of growing industrialization, rapid urbanization, and ongoing mitigation efforts. While the industrial sector currently contributes the least to the total emissions, the national trend suggests a future rise in emissions as industrial activities expand and urban areas grow, highlighting the need for enhanced mitigation strategies to balance development and environmental sustainability. (See figure 2)

Figure 2: Trends of Cameroon's GHG Emissions



Source: MINEPDED, (2024), Biennial Update Report (BUR), BUR1, https://unfccc.int/documents/641418.

This distinction is crucial for informing carbon pricing policies, as it allows Cameroon to prioritize the most impactful emission types and sources while recognizing areas where regulatory or pricing mechanisms may have limited immediate value due to minimal emission levels. Overall, the report serves as a crucial resource for understanding Cameroon's GHG emission dynamics over the last decade, from 2010 "reference year" against which emissions are is measured, to 2020. It emphasizes the need for targeted mitigation strategies, especially in high-impact sectors like energy and agriculture, to align with global climate goals. The data not only aids in tracking progress but also informs policymakers about areas requiring immediate attention to reduce environmental impact and achieve sustainable development.

II. Main Sectors and Sources of Greenhouse Gas Emissions in Cameroon

Major GHG emissions sectors and sources according to Cameroon's 2021 updated NDC[26] include:

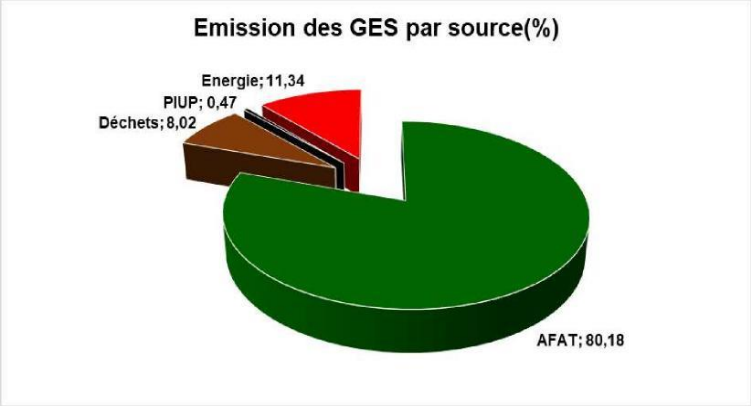
- **AFOLU** (agricultural, forestry and other land-use) activities accounting for 69% of total national emissions.

[26] Updated NDC of Cameroon, p. 11.

- **Energy** development especially the burning of fossil fuels for energy production and use especially in road transportation, accounting for 18% of total national emissions,
- **Waste** management accounting for 12% of total national emissions
- **Industrial processes** especially the industrial production of cement and aluminium accounting for 1% (0.47%) of total national emissions.

However, the latest GHG inventory report[27] classifies emissions by key sectors or sources and highlights the quantities of major GHGs emitted by each sector. (see Figure 3).

Figure 3: GHG emissions by sector/source from 2010-2020



1. Agriculture, Forestry and other Land Use (AFOLU) sector

The 2020 GHG inventory report ranks the agriculture sub-sector of the AFOLU sector as the largest source of GHG emissions with 94,154.17 Gg CO2 eq emitted out of 117,443.14 Gg CO2 eq, or 80.17% of total national emissions, with CH_4 as the prevalent gas due to livestock emissions and rice cultivation, excluding the forestry and other land use sub-sectors. The forestry sector is identified as a crucial carbon sink, with substantial CO_2 removals attributed to forest biomass and soil carbon, which offset a portion of emissions from other sector. These specific insights underline the importance of preserving natural sinks while addressing emissions in dominant sectors. However, the country's 2021 updated NDC ranks the agriculture sub-sector of the AFOLU sector as the largest source of GHG emissions with 24,074.61 Gg CO2 eq. The emissions from the agriculture sector originate from four main sources: enteric fermentation of ruminants in the form of methane, the release of nitrous oxide from the utilization of chemical fertilizer in soils, manure management, and rice cultivation.

As per the projections of Cameroon's updated NDC, the sector's contribution is expected to remain significant by 2030, as the country plans to develop its agriculture potentials. However, although agriculture has been and remains the pillar of the country's ambition for

[27] MINEPDED , (2024), Biennial Update Report (BUR), BUR1, https://unfccc.int/documents/641418.

emergence, the Government plans to limit its carbon impact. In this respect, the share of the sector's GHG emissions reduction in 2030 is projected at 6,808.48 Gg CO2 eq in quantity which is equivalent to 16.1% of the total reduction and 5.7% of the sector's reduction.

2. Energy sector

The energy sector is identified by the 2020 GHG inventory report as the second emitting sector, with CO_2 as the dominant gas and accounting for 11.34% of total national emissions.

Cameroon has a potential rich energy mix. In this regard, the country is endowed with abundant reserves of both non-renewable and renewable energy resources. Principal non-renewable energy resources with which the country is blessed include fossil fuels (crude oil, natural gas and coal), while renewable energy resources include hydropower, biomass, solar, wind and geothermal[28]. As part of Cameroon's development vision, the energy sector generally aims to promote renewable energy in order to respond effectively to domestic energy demand and export to neighbouring countries, by having a total installed capacity of 5,000 MW in 2030[29]. Cameroon's energy sector development policies are organized around the long-term energy sector development plan[30], the project to extend the electricity network,[31] and Cameroon's Vision to attain emergence by 2035[32]. Although Cameroon is blessed with abundant reserves of energy resources, such resources are yet to be effectively valorised[33]. Regarding the development of non-renewable energy, Cameroon has developed its fossil fuels notably, hydrocarbons (oil and gas) to power the transport sector and for export[34]. Hydrocarbons

[28] Yemeli Wenceslas Koholé et al., (2022), "A holistic overview of Cameroon renewable energy sources: potentials, achievements, challenges and perspectives", International Journal of Ambient Energy, Vol. 43(1), p. 7308, https://doi.org/10.1080/01430750.2022.2068065; Dieudonné Kaoga Kidmo et al., (2021), "Status of Renewable Energy in Cameroon", Renewable Energy and Environmental Sustainability, Vol. 6(2), p. 1, https://doi.org/10.1051/rees/2021001; Henry Abanda, (2012), "Renewable energy sources in Cameroon: Potentials, benefits and enabling environment", Renewable and Sustainable Energy Reviews, Vol. 16(7), p. 4557, DOI:10.1016/j.rser.2012.04.011; CENTURION, (2022), "Renewable Energy Plans in Cameroon", https://centurionlg.com/2022/02/07/renewable-energy-plans-in-cameroon-2/.

[29] Cameroon's National Development Strategy 2020-2030, p. 9 ; Plan National d'Adaptation aux Changements Climatiques du Cameroun, 24 June 2015, p. 70, https://www4.unfccc.int/sites/NAPC/Documents/Parties/PNACC_Cameroun_VF_Valid%c3%a9e_24062015%20-%20FINAL.pdf.

[30] PDSE, (2006), Assistance au Ministère de l'Energie et de l'Eau dans l'élaboration du Plan de Développement à long terme du Secteur de l'Électricité Horizon 2030 (PDSE 2030), Rapport Final Volume 1 : Presentation et conclusions du PDSE Juillet 2006, Cameroon-MINEE, 1(Pdse 2030), pp. 1-43, http://api.commissiemer.nl/docs/cms/o83_008_detb_pdse_2030_rapport_vol.2_demande_verfin_juillet_06.pdf.

[31] AFD, (2009), Cameroon - Project to Strengthen and Extend the Electricity Transmission and Distribution Networks.

[32] MINEPAT, "Cameroon Vision 2035" (Ministere de l'économie, de La Planification et de l'amenagement Du Territoire 2009) <http://extwprlegs1.fao.org/docs/pdf/cmr145894.pdf.

[33] Dieudonné Kaoga Kidmo et al., (2021), "Status of Renewable Energy in Cameroon", Renewable Energy and Environmental Sustainability, Vol. 6(2), p. 9, https://doi.org/10.1051/rees/2021001.

[34] Ministry of Environment, Protection of Nature and Sustainable Development, National Strategy for Reducing Emissions from Deforestation and Forest Degradation, Sustainable Management of Forests, Conservation of Forest and Enhancement of Carbon Stocks, Final Version June, 2018, (hereinafter Cameroon's National REDD+ Strategy), p. 35,

represent more than one third of the country's exports, and their exploitation is associated with gas flaring, contributing to GHG emissions. It is reported that Cameroon is among top 30 countries by volume of gas flaring and has one of the highest intensities of gas flaring in the world[35]. In addition to GHG emissions, flaring gas wastes an important resource that could be used for power generation or other purposes[36]. To deal with the problem of gas flaring, several potential solutions exist, such as capturing and utilizing this gas, and levying carbon tax on companies to reduce such emissions.

Regarding the development of renewable energy, the country relies mainly on hydropower energy for electricity generation[37]. Although the country has developed about 73% of its hydropower energy, there is a persistent power shortage throughout the country especially in the dry seasons when water levels are low[38]. Electricity access is about 65-88% in urban areas and around 14% in rural areas[39]. It is estimated that electricity needs will continue to rise in the coming years to reach 6,000 MW by 2030[40]. 2018 statistics showed that the total energy consumption in Cameroon was 7.41 Mtoe: 74.22% from biomass, 18.48% from fossil fuels and 7.30% from electricity[41]. 6,977 GWh of electricity was produced, and the country's installed electricity generation capacity rose to 1,402 MW of which 56.15% was from hydropower, 43.84% from fossil fuels (17.55% from natural gas and 26.29% from oil) and 0.01% from solar photovoltaic[42].

The biomass energy (charcoal and firewood) although well developed, is not sufficiently integrated into Cameroon's energy grid and legal and policy framework[43]. On the other hand, wind, wave, tidal current and geothermal energies resources have not been harnessed to date and there is no existing energy derived from these sources in Cameroon[44]. Thus, fossil fuels, biomass and hydropower are the three main energy resources that are in use in Cameroon[45], including solar energy to a limited extent.

Cameroon's vision is to double the amount of energy produced from an average energy consumption of 27.7% per unit of GDP in 2005-2007 to 45.0% in 2035[46]. According to Cameroon's National Development Strategy for Structural Transformation and Inclusive

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https://www.undp.org/content/dam/cafi/docs/Cameroon%20documents/STRATEGIE%20NATIONALE%20REDD%20DE%20LA%20R%c3%89PUBLIQUE%20DU%20CAMEROUN%20-%20JUIN2018.pdf.

[35] World Bank, (2023), Global Gas Flaring Tracker Report, World Bank.

[36] African Dept. of International Monetary Fund., op. cit., p. 40.

[37] Ibid.

[38] Erasmus Muh, Sofiane Amara and Fouzi Tabet, (2018), "Sustainable energy policies in Cameroon: A holistic overview", Renewable and Sustainable Energy Reviews, Vol. 82(3), p. 3420, https://doi.org/10.1016/j.rser.2017.10.049.

[39] Ibid.

[40] Ibid.

[41] Dieudonné Kaoga Kidmo et al., (2021), op. cit., p. 1.

[42] Ibid.

[43] Cameroon's National REDD+ Strategy, p. 35.

[44] Dieudonné Kaoga Kidmo et al., (2021), op. cit., pp. 7 and 8.

[45] Ibid., p. 3.

[46] Cameroon's National REDD+ Strategy, p. 35.

Development 2020-2030, the objective of Cameroon's energy industry is to produce energy in abundant quantity in order to satisfy industrialisation and become an energy exporting country[47]. In the energy industry, three orientations are retained which are to: develop the national hydroelectricity potentials; develop alternative energies in order to respond to specific needs such as for cooking, transport, urban electrification, manufacturing industries, etc.; and to reinforce and optimise the use of biomass energy[48]. Generally, apart from petroleum-based energy resources, Cameroon has huge clean or renewable energy resources that can be harnessed to meet the country's energy policy especially in terms of combating climate change. The country is currently developing its renewable energy education, research and technology towards this aim[49]. Above all, Cameroon's roadmap for energy development is aligned with the country's commitment to reduce the carbon footprint of its development as pledged in its updated NDC[50] which sets a target of reducing GHG emissions by 35% relative to the 2010 reference year.

3. Waste management sector

According to the 2020 GHG inventory report – the latest data on GHG emissions in Cameroon, the waste sector ranks the third source, accounting for 8.02% of total national emissions with CH_4 as the dominant gas emitted through organic waste decomposition.

4. Industrial sector

The 2020 GHG inventory report ranks the IPPU sector as the least emitting source with less than 1% (0.47%) of total national GHG emissions. **III. Conclusion**

The above GHG inventory can effectively orient carbon pricing studies in Cameroon by providing baseline data to identify high-emission sectors for targeted interventions. Carbon pricing instruments (CPIs), such as a carbon tax or emissions trading system (ETS), could prioritize sectors with the highest emissions, like energy and agriculture, to incentivize reductions. The identification of natural sinks highlights opportunities for crediting mechanisms, such as payment for ecosystem services, which can reward sustainable land-use practices. By incorporating these GHG emissions dynamics, policymakers can design a carbon pricing strategy that balances economic growth with climate action, aligning with national and international climate commitments.

Although Cameroon is a low GHG emitter[51], the ambitious NDS30 that serves as the country's compass for development by 2030, will lead to an increase in GHG emissions. From the economic standpoint, the development ambition implies a sustained growth. Such a growth will be impossible without investments that will spur economic growth and development. The

[47] Cameroon's National Development Strategy 2020-2030, pp. 6 and 49.
[48] Ibid.; Plan National d'Adaptation aux Changements Climatiques du Cameroun, p. 71.
[49] Dieudonné Kaoga Kidmo et al., (2021), op. cit., p. 9.
[50] Updated NDC of Cameroon, pp. 1, 19 and 28.
[51] Updated NDC of Cameroon, 2021. See also Cameroon's National Development Strategy for structural transformation and inclusive development 2020-2030, 2020, p. 120.

investments that will drive the envisaged development would contribute substantially to further GHG emissions. This speaks volumes of the potentials of the development ambition in contributing to further GHG emissions should the envisaged investments take an unsustainable path in Cameroon. However, the updated NDC[52] provides that the country intends to reduce the carbon footprint of its development without slowing down its growth, by prioritizing mitigation measures and aligning its sectoral policies among other things[53].

[52] Updated NDC of Cameroon, 2021.
[53] Ibid., p. 1.

CHAPTER THREE: CARBON PRICING, TYPES AND RATIONALE FOR THEIR IMPLEMENTATION

Introduction

To slow the pace of global warming, many developed and developing countries have set targets to achieve sizable emission reductions by 2030 in their NDC submissions to UNFCCC Secretariat and national policy documents. It is based on these targets that actions to combat climate change continue to gain momentum. In the meantime, different regions of the world continue to experience increasing weather extremes with consequential environmental and socio-economic impacts in different magnitudes. The ultimate challenge is for countries to decarbonize their economies as early as possible. The choices made by all concerned countries as part of the transition to a low-carbon economy will not only determine the extent of future climate occurrences but will also provide opportunities to unlock climate-friendly investments and build innovative technologies that support the envisaged low-carbon economies. Carbon has emerged as a compensable, taxable and tradable commodity with a lot of complexities surrounding it. International climate change negotiation has added a financial value to GHGs generically referred to as carbon (whether removed or emitted). Payment or compensating for carbon sequestration or removal, taxing carbon emissions, and trading in carbon credit as a commodity has the potential to contribute to climate change mitigation and adaptation and other co-environmental and socio-economic benefits and the overall achievement of countries' NDCs.

Recent years have seen a renewed and growing interest in these policy instruments that put a price on carbon emissions. The most prominent of these policy instruments are carbon pricing instruments (CPIs). Over the past two decades, governments around the world have responded to climate change through various policy initiatives, with carbon pricing at the forefront. The 2021 updated NDC of Cameroon implicitly mention carbon pricing tools as part of the country's search for new sources of revenue that could contribute to financing the activities of the NDC by making reference to the use of appropriate tax instruments such as environmental taxation[54].

I. What is Carbon Pricing? / Understanding Carbon Pricing

Carbon pricing is a cost-effective method to reduce GHG emissions by putting a price on carbon, which helps internalize the external costs caused by climate change resulting from carbon emissions. It provides an economic signal to emitters, allowing them to either reduce emissions or pay for their impact. This market-driven approach aligns with Article 6 of the Paris Agreement, which promotes cooperative approaches to carbon pricing, including emissions trading systems (ETS) and carbon markets, to encourage emissions reductions across countries. By using carbon pricing mechanisms like carbon taxes or ETSs, governments can generate

[54] Updated NDC of Cameroon, 2021, pp. 50 and 51.

revenue while stimulating clean technology, market innovation, and the transition to a low-carbon economy. This flexibility helps achieve environmental goals at the lowest cost, making carbon pricing a key tool for governments in their climate policies.

II. Types of Carbon Pricing Instruments (CPIs)

The three types of CPIs implemented globally are carbon tax, emissions trading system (ETS) and offset mechanism.

A carbon tax directly levies a fee on carbon emissions, encouraging emitters to reduce emissions or adopt more efficient processes. The effectiveness of a carbon tax depends on setting a sufficiently high rate to incentivize change without discouraging investment. It can be applied to specific sectors or GHGs, rather than the entire economy.

An ETS, or cap-and-trade system, sets an emissions cap for companies, creating a market for carbon trading. Under an ETS, 'allowances' are allocated to entities or companies. Companies that emit below their allowances or allocations can sell their excess allowances, while those exceeding their allowances or allocations must purchase additional allowances or offset credits to comply. An ETS therefore offers flexibility and financial incentives for emission reductions. An ETS can be implemented at both national and regional levels, like the European Union Emissions Trading System (EU ETS), which sets collective emissions targets across participating countries.

An offset mechanism is a system where an entity can compensate for their GHG emissions by financially supporting projects that reduce or remove emissions elsewhere, essentially "offsetting" their own emissions. This is often through the purchase of carbon credits by companies or individuals looking to achieve carbon neutrality.

III. Environmental Law Principle underpinning carbon pricing Instruments

A key Environmental Law Principle that underlies CPIs is the "polluter-pays" principle provided for in relevant international legal instruments[55] and national legal instruments[56]. The polluter-pays principle is the foundational principle for instituting and levying carbon tax and ETS for the purpose of fighting climate change. Going by the spirit if this principle, CPIs allows emitters of GHGs to decide for themselves whether to discontinue or reduce their emissions or to continue emitting and pay for the costs of emitting in tax or as a fine accordingly. As the embodiment of this principle, carbon tax and ETS require emitters to pay for the emissions they fail to avoid and the cost of reducing emissions, thereby reflecting the polluter-pay principle in approach and in spirit.

[55] Principle 16 of Rio Declaration.
[56] Section 9(c) of the 1996 Framework Law on Environmental Management.

IV. Rationale/Objective and Benefits of Implementing Carbon Pricing by Countries

Today, countries are increasingly embracing carbon pricing tools as part of larger reform efforts to meet multiple environmental and socio-economic goals. Clarity in policy objectives is crucial to ensure that investor confidence and citizen support is maintained throughout the implementation process.

1. Support domestic mitigation commitments pledged in NDCs and deliver cost-effective climate mitigation

CPIs are being implemented as means to support decarbonization and incentivize low-carbon growth. Thus, the principal objective of CPIs is to support national mitigation commitments of reducing GHG emissions and help achieve NDCs targets with the overall aim of limiting further climate change. In the Cameroonian context, carbon pricing fits into and addresses the challenge of mobilizing finance for implementing Cameroon's NDC both in terms of mitigation and adaptation that requires at least 57,640 million USD or 28,713 billion FCFA. The policy objectives of CPI have changed over time to include environmental and socio-economic co-benefits. According to the IPCC AR6 Working Group III (WGIII) report (IPCC 2022), carbon pricing instruments (CPIs) are considered a highly useful tool for mitigating climate change, as they provide a market-based mechanism to incentivize emissions reductions by directly associating a cost with GHG emissions, making low-carbon options more economically attractive and thereby driving the transition to a decarbonized economy[57]. The report highlights potential of CPIs to generate significant revenue for further climate action and can be particularly effective when designed with distributional and fairness considerations in mind to address concerns about potential impacts on vulnerable populations[58].

2. Co-benefits

In addition to the principal objective, CPIs have many co-benefits viz: additional source of revenue for the Government and companies, climate change adaptation and mitigation, incentivize low carbon growth and enhance the protection of the environment, generate health benefits, enhance regional and international cooperation in the fight against climate change, generate development benefits, etc.

V. Differences between Carbon Pricing Instruments and Other Climate Financing Mechanisms

While climate finance mechanisms such as the Clean Development Mechanism (CDM) and REDD+ provide the means for the implementation of climate projects, CPIs provide the

[57] Intergovernmental Panel on Climate Change (IPCC), 2022. Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. [P.R. Shukla, J. Skea, R. Slade, A. Al Khourdajie, R. van Diemen, D. McCollum, M. Pathak, S. Some, P. Vyas, R. Fradera, M. Belkacemi, A. Hasija, G. Lisboa, S. Luz, J. Malley (eds.)]. Cambridge University Press.
[58] Ibid.

incentive to mobilize the most “cost-effective” climate mitigation options. CPIs can be a source of climate finance with ETS through the auctioning of allowances and with carbon tax through the tax levied. Revenues raised from CPIs can be used for adaptation and/or mitigation activities (e.g. in the form of grants, subsidies, loans, loan guarantees, equity investment, payment for results-based finance, etc.). A domestic or national climate fund could be set-up as both a recipient and distributor of carbon pricing revenues. Carbon pricing can unlock additional sources of climate finance.

CHAPTER FOUR: AN ASSESSMENT OF THE NATIONAL CONTEXT: LEGAL AND INSTITUTIONAL SUPPORTS FOR THE DESIGN AND IMPLEMENTATION OF CARBON PRICING INSTRUMENTS IN CAMEROON

Introduction

This chapter makes an assessment of the governance framework (policy, legislative, institutional and political frameworks) that may influence a possible national consideration for operationalising CPIs in Cameroon. The updated NDC projects GHG emissions to increase by 71% by 2030 compared to 2010 base year[59]. As a result, Cameroon commits to a long-term national objective of reducing GHG emissions up to 35% by 2030, against the 2010 base year. The reduction commitment is divided into an unconditional emissions reduction target of 12% and a conditional target of 23%. The 23% is conditional on support from the international community in the form of financing, capacity building and technology transfer.

Cameroon therefore intends to reduce the carbon footprint of its development without slowing down its growth, by favouring mitigation options that will produce co-benefits; strengthening the country's resilience to climate change; aligning its sector policies and strengthening its implementation mechanisms to facilitate the achievement of these objectives; and mobilising all relevant means to this end including funding, technology transfer and capacity building[60]. The 12% unconditional reduction pledge is expected to be achieve using internal funding or finance derived from within the country[61]. This requires that the country implements robust financial instruments in order to generate the necessary finance needed to achieve the unconditional reduction target. Examples of such robust financial instruments are CPIs (such as carbon tax and ETS). Although Cameroon has not yet adopted any of the carbon pricing approaches, the Government has demonstrated a strong intention to introduce CPIs in public finance and public investments that will bring new financing for climate action. In addition to direct regulation or non-market-based tools, CPIs have been envisaged within the framework of environmental tax in a number of policy, legislative and regulatory instruments, including political support.

I. National Policy, Legislative and Regulatory Supports for Carbon Pricing Instruments in Cameroon

One must quickly note that Cameroon presently has no specific climate change legislation that provides policy guidelines for the introduction of CPIs in the country. In the absence of a specific national climate change legislation that lends policy support to the introduction of CPIs in Cameroon, some policy instruments and legislative and regulatory texts provide such policy support. The policy support elements contained in the legal texts could be

[59] Ibid., p. 12.
[60] See generally the updated NDC of Cameroon, pp. 1, 19 and 28.
[61] Updated NDC of Cameroon, p. 12.

entry points for CPIs in Cameroon and are also in the form of explicit reference to CPIs and implicit reference to CPIs.

Table 5: Representation of the assessment/analysis of Cameroon's policy, legislative and regulatory frameworks and their support for carbon pricing instruments

Policy, Legislative and Regulatory Instruments	Policy Support Elements/Anchor Points for CPIs	Type of CPIs Support
Updated NDC, 2021	Does not directly make reference to carbon tax but makes reference to the use of appropriate tax instruments notably, 'taxes', 'duties', 'obligations', 'levies', 'environmental taxation', in the following words: (pp. 50-51) *"…the country will explore the possibilities of generating new revenues that can contribute to the financing of the activities of this NDC, for example by using appropriate fiscal instruments (taxes, duties, obligations, levies, environmental taxation, etc.)*." (p. 50) *"…Achieving this goal, as well as achieving the ambitions expressed above with regard to domestic public finance...Reference is made here, for example, to regulations on environmental taxation and other innovative financing…"* (p. 51)	Implicit reference to CPI in the form of a **carbon tax**. The use of appropriate tax instruments as referred to in the NDC, could translate to **carbon tax**.
	Does not directly make reference to ETS but contemplates the possibility of using other tax tools such as incentive tax tools, subsidies, tax breaks, guarantees, etc. to encourage private investments compatible with the objectives of the NDC in the following words: "*The possibility of using other fiscal tools (subsidies, tax breaks, guarantees, etc.) to attract private investment compatible with the objectives of the NDC could also be considered*." (p. 50)	Implicit reference to CPI in the form of **ETS**. 'incentive tax tool's, 'subsidies', 'tax breaks', 'guarantees', etc. as referred to in the NDC, could translate to **ETS**.
National REDD+ Strategy, 2018	Specifically recommends the implementation of carbon tax as a measure to discourage forest conversion and to reduce GHGs in the context of REDD+ implementation in Cameroon. (p. 69)	Explicit reference to **carbon tax**.
National Plan for Climate Change Adaptation (PNACC), 2015	Provides no policy support for CPIs.	-
The Climate Agenda, 2024	The Climate Agenda indirectly makes reference to CPIs by requiring MINEPDED in conjunction with the Minister of Finance and other administrations concerned (including those of forests, energy and transport) to propose relevant measures with a view to establish a regulatory and institutional framework adapted to the monetization of carbon credits. (Article 5(1))	Implicit reference to **CPIs**
National Development Strategy 2020–2030	Provides no policy support for CPIs.	-
Circular No. 2023/001 of 30 August 2023 relating	Prescribes the strengthening of environmental taxation, in line with Cameroon's international commitments by specifically envisaging the review of the scope of the	

to the preparation of the State budget for the 2024 financial year	special tax on petroleum products (STPP) on certain fuels such as liquefied natural gas (premium grade petrol; gas-oil; and industrial natural gas, excluding gas purchased by electricity generation companies intended for the public and gas intended for local production of liquefied petroleum gas), for a possible introduction of a carbon tax in Cameroon.	Explicit reference to **carbon tax**.
Law N° 2011/025 of 14 December 2011 On The Development Of Associated Gas	Promotes the valorization of flared or released gas, reduce GHG emissions, and protect the environment. This involves creating attractive conditions for oil companies to develop associated gas, fostering its recovery for commercial purposes, and minimizing environmental damage	Implicit reference to **carbon tax**.
Law No. 2009/019 of 15 December 2009 on Local Fiscal System	The hygiene and sanitation tax levied and collected by councils on foodstuffs and commercial and industrial buildings can inspire the design and implementation of carbon tax in Cameroon. (Section 62)	Implicit reference to **carbon tax**.
Law No. 2023/019 of 19 December 2023 to institute the Finance Law of the Republic of Cameroon for the 2024 Financial Year	Provides for a financial mechanism that can inspire the design and implementation of an ETS in Cameroon by providing for environmental fines – a category of non-tax source of revenue which is levied on natural or moral persons who cause damage to the environment. (Section 27(4)(a))	Implicit entry point for an **ETS**.
"Draft amendment" to Law No. 96/12 of 5 August 1996 relating to the Framework Law on Environmental Management	Chapter VI of Title III dedicated to the fight against climate change explicitly makes provision for the levying of carbon tax on those responsible for industrial, artisanal and commercial pollution. (Article 130(1))	Explicitly provides for the levying of **carbon tax.**
	Provides for reduction in custom tariffs for industrial enterprises which import equipment enabling them to eliminate GHGs, in particular carbon dioxide, chlorofluorocarbons, in their manufacturing process or in their products, or to reduce any form of pollution. This constitutes an entry point for a domestic offset mechanism. (Article 133(1))	Implicit reference to **a domestic offset mechanism**.
	Provides for the institution of compulsory levies for the protection of the environment, human, plant and animal health, which in particular aim at ensuring among other things, resilience to climate change. This is also an implicit entry point for an ETS. (Article 133(1))	Implicit reference to **ETS** within the framework of 'environmental tax' and 'incentive measures'
Law No. 96/12 of 5 August 1996 relating to the Framework Law on Environmental Management	Provides for the "polluter-pays" principle according to which rational environmental and natural resource management are based on ... the pollute and pay principle according to which charges resulting from measures aimed at preventing, reducing and fighting against pollution and the rehabilitation of polluted areas shall be borne by the polluter. (Article 9(c))	Implicit reference to **carbon tax** and **ETS**.
National Energy Efficiency Policy, Strategy and Action Plan in the Electricity Sector, 2014	Provides no policy support for CPIs	-

From the foregoing, it is clear that a number of policy documents on climate change and legal texts dealing with other subject matters in Cameroon are supportive of CPIs. In effect, the above policy documents and legal texts clearly lay a foundation for the introduction of CPIs as well as other flexible carbon financing mechanisms that can support compliance obligations (e.g. in the form of an offset mechanism). Internalizing the cost of pollution through the levying of carbon tax and implementing ETS in line with the "polluter-pays" principle is crucial for regulating GHG emissions, thereby enhancing efforts towards meeting Cameroon's GHG reduction commitments under the Paris Agreement and contributing to the achievement of the country's NDC.

II. International legal basis of carbon pricing to which Cameroon adheres

Cameroon signed[62] and ratified[63] the Paris Agreement, 2015 – the only international climate legal instrument that indirectly lays the foundation for the development of carbon pricing mechanisms. The relevant provision of the Paris Agreement that indirectly provides the basis for the development of CPIs is Article 6, which details how countries can cooperate to achieve their GHG emission reduction targets, as set out in their NDCs. While the majority of climate mitigation action is expected to take place within countries' jurisdictions, Article 6 recognizes that these efforts can be effectively complemented through cooperation among governments and others to cut emissions and support credible carbon offset projects.

Article 6.2 of the Paris Agreement establishes the potential of trading emission reduction credits—referred to as internationally transferred mitigation outcomes (ITMOs)—across borders, between nations or jurisdictions. This can encourage the linking of carbon pricing approaches across countries and jurisdictions resulting in the reduction of emissions by a magnitude greater than what is possible solely domestically or nationally.

Paragraph 136 of the first 21st Conference of Parties (COP21) Decision (1/CP.21 Adoption of the Paris Agreement): recognizes the important role of providing incentives for emission reduction activities, including tools such as domestic policies and carbon pricing.

Above all, Cameroon has ratified and is implementing key international climate agreements notably, the UNFCCC, 1992 and its enabling instruments (the Kyoto Protocol, 1997 and the Paris Agreement, 2015) that operationalize the Framework Convention by committing Parties, especially industrialised countries and economies in transition to limit and reduce GHG emissions in accordance with agreed individual targets. This demonstrates Cameroon's commitment to build a low-carbon and climate-resilient economy as required by the international climate change regime. This commitment can translate into the implementation of CPIs in order to meet its carbon emission reduction pledge as underscored by its 2021 updated NDCs.

[62] Cameroon signed the Paris Agreement on Climate Change on 22 April 2016.
[63] Cameroon ratified the Paris Agreement on Climate Change on 29 July 2016 through Law No. 2016/008 of 12 July 2016.

III. Political Supports for Carbon Pricing Instruments in Cameroon

Political Supports for the introduction of CPIs in Cameroon also exist. In this regard, on 25 October 2022, the Minister of Finance chaired a workshop in Yaoundé, to raise awareness among public sector stakeholders, of the carbon market to improve its contribution to the State budget; and to carry out a situational analysis and suggest measures or solutions to address the deficiencies and shortcomings in Cameroon's efforts to access the carbon market[64].

Political Supports for the introduction of CPIs in Cameroon is also afforded by the Workshop on Capacity Building and Stakeholder Consultation on the Feasibility of Carbon Pricing in Cameroon and Article 6 of Paris Agreement (Carbon Market), which took place in Yaoundé, organized by the UNFCCC Regional Collaboration Center for West and Central Africa (RCC WACA), in collaboration with the Ministry of Environment, Protection of Nature and Sustainable Development (MINEPDED) from 24-26 September 2024. The workshop aimed to engage Cameroonian stakeholders and strengthen their capacities in using economic instruments like carbon pricing, which offer opportunities to reduce emissions in alignment with the Paris Agreement. Participants included representatives from key sectoral administrations, technical and financial partners, the private sector, urban communities, experts, researchers, and civil society organizations.

IV. Institutional Support and Stakeholders Analysis for the Design and Implementation of Carbon Pricing Instruments in Cameroon

Cameroon is a Decentralized Unitary State[65] consisting of State Administration and Local Administrations [66] . State administration is deployed throughout the national territory of Cameroon and flows directly from the executive power, structured into central administrations and deconcentrated administrations. Central administrations are located at the level of the political capital – Yaoundé. Organs of the central administrations include the Presidency headed by the President of the Republic, the Prime Minister's Office headed by the Prime Minister and Ministries headed by Ministers. Their competences extend over the entire national territory through extended services called territorial deconcentrated administrations (regions, divisions and sub-divisions) and external services of Ministries (Regional, Divisional and Sub-Divisional Delegations of Ministries). There are two types of decentralised administration in Cameroon: territorial decentralisation represented by decentralised territorial authorities (regions and councils) and technical decentralisation (specialised administrations) represented by administrative public establishments and public interest groups.

[64] Mbodiam B.R., 2023. "Environment: Cameroon mulls over the introduction of a carbon tax in FY2024". Available at https://www.businessincameroon.com/environment/0109-13385-environment-cameroon-mulls-over-the-introduction-of-a-carbon-tax-in-fy2024.

[65] Article 1(2) of Law No. 96/06 of 18 January 1996 to amend the Constitution of 2 June 1972, amended and supplemented by Law No. 2008/001 of 14 April 2008 (herein after the Constitution of Cameroon).

[66] Article 55(1) of the Constitution of Cameroon and Article 2(1) of Law No. 2019/024 of 24 December 2019 instituting the General Code of Regional and Local Council.

Regarding Cameroon's institutional arrangements for overseeing domestic and international climate change issues, the central role is given to MINEPDED and its agency – ONACC. MINEPDED acts through its UNFCCC Focal Point. In this respect, MINEPDED supervises ONACC's activities and is responsible for the overall co-ordination of climate change activities and policies in Cameroon. Specifically, MINEPDED in liaison with other concerned Administrations prepares and submits Cameroon's NDC and other UNFCCC-relevant reports to the UNFCCC's Secretariat; represents Cameroon in global, regional and bilateral climate change negotiations; and prepares and publish climate change policy document and other climate related reports. MINEPDED therefore oversees climate change measures, notification and verification (MNV) in Cameroon.

There are key institutions and/or stakeholders that are concerned or would be involved with the design and implementation of CPIs in Cameroon. The table below captures the relevant stakeholders and briefly highlights their initial responsibility and their potential role in the context of designing and implementing carbon pricing in Cameroon.

Table 6: Representation of the institutional and stakeholders analysis (key highlight of initial responsibility of various institutions/stakeholders and potential role/responsibility in the design and implementation of CPIs in Cameroon)

Institutions/Stakeholders	Initial Functions/Responsibilities	Potential Role/Responsibility in the Design and Implementation of CPIs in Cameroon
MINEPDED and its Sub-Directorate for Ecological and Climate Monitoring (SDMESC)	- Coordinate activities on issues related to the environment and national focal Ministry in matters of climate change (National Focal Point to the UNFCCC, Designated National Authorities (DNAs) for the CDM under the Kyoto Protocol and for the Article 6.4 Mechanism under the Paris Agreement DNAs play a crucial role in overseeing carbon market mechanisms under both the Kyoto Protocol's CDM and the Paris Agreement's Article 6.4 Mechanism. Under the CDM, DNAs were responsible for approving projects, issuing Letters of Approval (LoA) to confirm alignment with national sustainable development goals, liaising with the CDM Executive Board, and ensuring projects contributed to economic, environmental, and social benefits. Under Article 6.4, DNAs have a similar but expanded role, including approving projects in line with Nationally Determined Contributions (NDCs), issuing LoAs, and managing corresponding adjustments to prevent double counting of emission reductions. Their function ensures	As the focal Ministry in matters of climate change, MINEPDED will ensure: - The overall design and implementation of CPIs; - Alignment of CPIs with national policies and NDC; - Implementation oversight; - Inter-ministerial coordination; etc. - Its SDMESC will play a critical role in carrying out MRV activities.

	national oversight, compliance, and alignment of carbon market activities with domestic climate policies. -The overseer Ministerial Department for monitoring the respect of environmental and social commitments and meting out administrative sanctions to project implementers violating environmental standards. - The implementation and monitoring of Cameroon's climate initiatives is primarily assumed by MINEPDED that coordinates national efforts and monitors progress.	
MINFI and its relevant sub departments – Directorate General of Taxation (DGT) and National Treasury	Responsible for managing the finances of the State, including managing, controlling, and monitoring state revenues and expenditures; tax administration. Specifically, the DGT is responsible for tax administration by assessing, collecting, and accounting for tax and other revenues accruing to the State.	-Ensure that CPIs align with Cameroon's policies and principles on tax administration and public finance. - Specifically, the DGT would play an active role in coordinating efforts as regards carbon tax by acting as the public body in charge of recovering carbon tax revenue. - The National Treasury could act as a recipient and distributor of funds raised through CPIs.
MINFOF	MINFOF is responsible for elaborating and implementing national policies in matters of forestry and wildlife and thus charged with: the management of protected areas and conservation concessions in the national domain; undertake forest regeneration and reforestation; forest inventories, monitoring among other things.	Although the forestry sector is associated with GHG emissions, the role of MINFOF in the design and implementation of CPIs in Cameroon is not crucial because the forestry sector is not particularly amenable to carbon pricing in light of issues related to the dispersed nature of emissions from this sector, methodological difficulties in the MRV of emissions, and risks of carbon leakage. Nevertheless, this sector could be considered for potential inclusion in a carbon pricing scheme as a source of offsets. In this regard, the role of MINFOF in carbon pricing would consist of carrying out inventories and monitoring carbon offset projects in the forestry sector within the framework of implementing CPIs. More so, its experience in forest inventories and monitoring can inform MRV aspects of GHGs within the framework of implementation of CPIs in Cameroon.
MINMIDT	Elaboration and implementation of mining and industrial policies and the development of strategies for industrial and technological development in the different sectors of the national economy.	Partake in the design and implementation of CPIs in order to ensure synergies with industrial development policies that drive GHG emissions.
MINEPAT	Developing, monitoring and coordination of Government's economic policy; elaboration of norms and rules of regional planning and monitoring their application.	Ensure alignment of CPIs with the planning and development policies of Cameroon.
National Observatory on Climate Change	- Follows up the evolution of climate change and alerts the Government of	Support MINEPDED in designing and implementing CPIs, particularly in the technical

(ONACC)	the ecological, sanitary and environmental threats that may be caused by it. - Collects information on climate change and publishes bulletins of alert on climate change; - Establishes climate indicators for monitoring environmental policy; - Carries out prospective analyses to provide a vision on climate change, weather and climate data to all sectors concerned and develops annual climate reports; - Educates on and promote studies on the indicators, impacts and risks of climate change; - Collects, analyses and provides policy makers, national and international organisations information on climate change in Cameroon; - Initiates activities to promote awareness on climate change; - Proposes to the government, mitigation measures for GHG reduction as well as measures to adapt to the adverse effects and risks of climate change; -Serves as an instrument for cooperation with other regional and international observatories operating in the climate sector; -Facilitates payment for ecosystem services provided by forests through the management, conservation and restoration of ecosystems; -Strengthening the capacity of institutions and bodies responsible for collecting data on climate change to create a nation-wide, reliable network for collecting and transmitting the data.	and operational components of CPIs. - In this regard, ONACC could function as a "regulator" and the technical body for the design and implementation of CPIs. - Carry out MRV.
Decentralised Territorial Authorities (Regions and Councils)	Ensure the development of their territorial areas in various domains, including environmental protection, especially pollution control.	Sub-national or local actors in the implementation of CPIs with potential roles: - implementing carbon offset projects. - benefiting from revenue generated by CPI in the form of royalty or tax transfer.
Parliament	Legislative power, which is in charge of law-making in well-identified domains, including environmental protection as per Article 26(2) of the Constitution.	Enact legislation(s) for the introduction of carbon tax or an ETS in Cameroon.
Private Sector/Businesses/Corporate Actors	Business and investment promoters.	- Corporate GHG emitters or entities to be covered by carbon tax and/or ETS. - Will be involved in the MRV of emissions. - Piloting the implementation of the selected CPIs.
Academia/Research	- Conduct research on various aspects	- Conduct research on the design and

Institutions	in different governance contexts. - Provide advisory services (such as advising the Government to establish governance framework for various initiatives)	implementation elements of CPIs in Cameroon. - Play a key role in: providing advisory services (such as advising the Government to establish governance framework for CPIs); providing accurate and verifiable data for MRV systems; developing methodologies adapted to local contexts; technology providers (such as carbon credit registries); conduct research on low-carbon technologies and innovation to facilitate transition to low-emission economies.
Civil Society Organizations (NGOs, Associations)	- Independent environmental 'watch dogs' and 'whistle-blowers' on questions pertaining to the protection of the environment. - Epitome of moral authority and as a bastion of societal values. - Advocate for environmental protection, mobilize to influence the actions of policy-makers, implementers and businesses as they relate to the environment. - Participate in environmental and social protection, especially the protection of vulnerable groups in the context of climate governance, in shaping the design, implementation and monitoring processes; articulating views, serving as the voice of constructive debate and action, initiating environmental and social protection standards by way of proposing new norms, strategies, institutions, etc., which can deliver best results.	- Crucial role in consultations, design and monitoring the implementation of CPIs with major concerns being to ensure that businesses, citizens and households, especially vulnerable groups or low-income earners do not shoulder the burden of CPIs; - Ensures that the Government puts in place measures to mitigate the socio-economic costs associated with introduction of CPIs in Cameroon by ensuring that consumers or end-users are not over-charged by companies passing on the financial burden of CPIs to consumers.
Other Stakeholders	Think Tanks	Offer research and policy support aimed at the operationalization of CPIs.
	Consultants	Methodology development especially as regard MRV and offer or provide advisory services (such as advising the Government to create institutional infrastructure)
	Audit firms	Ensuring environmental integrity, and verify data in order to ensure transparency and credibility of emission reductions.

V. Cameroon's Experience with Market-Based Approaches and Climate Finance that can Inform Carbon Pricing Tools

Market-based approaches such as the CDM and REDD+ initiatives exist in Cameroon. However, Cameroon has limited experience as far as market-based approaches and climate finance are concerned. With regards to the CDM, while detail information on all the CDM projects in Cameroon cannot be provided because of limited space, examples, along with key

information about them have been documented and stored in the UNFCCC's CDM database[67]. The UNFCCC's CDM database records five CDM projects that were implemented in Cameroon all of which stopped at certain points due to carbon market prices fluctuation and other reasons. The five CDM projects recorded in the UNFCCC's CDM database include:

i. **Project 10291 : NURU Light – Cameroon**, implemented in the Energy sector (renewable - / non-renewable sources)[68]
ii. **Protection of Cameroon estuary mangroves through improved smoke houses**[69]
iii. **Project 4175 : Douala Landfill gas recovery and flaring project**, implemented in the waste sector (waste handling and disposal)[70]
iv. **Project 2992 : Nkolfoulou Landfill Gas Recovery Project**, implemented in the waste sector (Waste handling and disposal)[71]
v. **Project title: PoA 8696 : Côte d'Ivoire and Cameroon Efficient Cookstoves Program**, implement in the energy sector (Energy demand)[72]

With regards to REDD+, the government of Cameroon expressed interest in participating in it through a number of national processes such as the Readiness Plan Idea Note (R-PIN) and the REDD+ Readiness Preparation Proposal (R-PP), culminating in the adoption of the National REDD+ Strategy that has attracted interest from different actors in the forest sector. Embedded within MINEPDED, the National REDD+ Steering Committee leads REDD+ development in Cameroon and oversees REDD+ projects implementation with support from NGOs. REDD+ initiatives are being implemented in Cameroon at both local and regional levels, with efforts focused on establishing performance-based payment mechanisms. While the country has developed key REDD+ framework, including the National REDD+ Steering Committee, the National REDD+ Strategy and the Forest Reference Emission Level (FREL)[73], large-scale result-based payments are still in the process of being fully operationalized. A number of REDD+ projects have been documented[74], highlighting on-going efforts in forest conservation, sustainable land use, and emission reduction.

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67 https://cdm.unfccc.int/search?q=CDM+projects+in+cameroon#gsc.tab=0&gsc.q=CDM%20projects%20in%20cameroon&gsc.page=1.

68 Web address: https://cdm.unfccc.int/Projects/DB/LRQA%20Ltd1460725491.75/view.

69 https://cdm.unfccc.int/Projects/Validation/DB/GTXKS2V273EIILOXJ6M623RYD46V8K/view.html.

70 Web address: https://cdm.unfccc.int/Projects/DB/DNV-CUK1291282478.06/view.

71 https://cdm.unfccc.int/Projects/DB/AENOR1253608497.71/view?cp=1.

72 https://cdm.unfccc.int/ProgrammeOfActivities/poa_db/QJMD342IU90AW65LNY78XVBSHGOT1E/view.

73 Pirker J., Mosnier A., Nana T., Dees M., Momo A., Muys B., Kraxner F. & Siwe R., (2019), "Determining a Carbon Reference Level for a High-Forest-Low-Deforestation Country", Forests, Vol. 10(12), 1095, doi:10.3390/f10121095.

74 See Ministry of Environment, Protection of Nature and Sustainable Development, (2019), Self-Assessment of the REDD+ Readiness Phase by Stakeholders, Report, REDD+ Technical Secretariat, available at https://www.forestcarbonpartnership.org/system/files/documents/Cameroon%20R-Package%20%20%20review_25-2-19.pdf. See also REDD+ Technical Secretariat, "Cameroon's Forest Investment Plan", available at https://www.cif.org/sites/default/files/meeting-documents/cameroons_forest_ip.pdf.

VI. SWOT Analysis of Policy, Legislative, and Institution/Stakeholders to Demonstrate Cameroon's Potentials for the Implementation of Carbon Pricing Instruments

A full awareness of the national context or of the potential and feasibility of the introduction of CPIs in Cameroon through the SWOT (strengths, weaknesses, opportunities and threats) analysis helps in both strategic planning and decision-making. Therefore, as part of the analysis of the national context, this section presents a SWOT analysis of the policy, legislative, and institutional frameworks for CPIs in Cameroon by highlighting the strengths, weaknesses, opportunities and threats that exist for a possible introduction of CPIs in relation to the specific national circumstances of Cameroon.

1. Strengths

- Climate change recognised as a national priority in national legislations, policies, plans and strategies.
- The existence of a national climate policy and legislative framework, including on climate mitigation, which although weak or inadequate, is supportive of the introduction of CPIs especially carbon tax.
- Direct policy guidance on emissions sources that could directly attract CPIs, namely certain fossil fuels such as liquefied natural gas (premium grade petrol; gas-oil; and industrial natural gas, excluding gas purchased by electricity generation companies intended for the public and gas intended for local production of liquefied petroleum gas) that is recommended as suitable for carbon tax.
- The existence of taxes and charges that put a price on negative externalities (e.g. the STPP and the hygiene and sanitation tax), indicating there is already some experience in the adoption of "polluter pays" principles in Cameroon.
- Positive experience obtained from the implementation of CDM and REDD+ activities in Cameroon, which suggests the existence of low-cost mitigation opportunities as well as some level of familiarity with market-based mechanisms.
- High level of interest among major Ministerial Department namely: MINFI and MINEPDED on carbon pricing or carbon market to improve its contribution to the State budget and to raise revenue for the implementation of Cameroon's NDC, suggesting there is a strong political and institutional support among Governmental institutions for the introduction of CPIs in Cameroon.
- Strong interest from civil society organizations to accompany or support the government of Cameroon in preparing the national environment for the introduction of carbon market mechanisms and the enhancement of their effectiveness as demonstrated during the "Workshop on Capacity Building and Stakeholder Consultation on the Feasibility of Carbon Pricing in Cameroon and Article 6 of Paris Agreement (Carbon Market)", which took place in Yaoundé.

2. Weaknesses

- Carbon pricing is not recognised as a priority in Cameroon as there is weak or inadequate policy and legislative support for it.
- Limited awareness, especially among businesses and the general public, about climate change and the need to curb GHG emissions in Cameroon in general, and about CPIs in particular.
- Limited capacities and resources for the development and implementation of CPIs in Cameroon.
- Lack of an institutional and legal framework for the implementation of CPIs, particularly if an ETS becomes one of the selected instrument(s) in Cameroon.
- Limited availability of recent or up-to-date data on GHG emissions at the facilities level in Cameroon, which is of key relevance to the design and implementation of CPIs.
- Limited capacities and experience by companies/facilities in Cameroon in the reporting of emissions (MRV), which is an important component for the development of CPIs.
- Facilities lack the capacity to carry out MRV of GHG emissions and may rely on international firms to do MRV, which can be costly and undermine country ownership. However, Cameroon has an MRV framework for carry out MRV of GHG emissions at the national level which can be used at the facility levels in the context of CPIs

3. Opportunities

- The implementation of CPIs in Cameroon could trigger low GHG emission reduction opportunities while at the same time generating benefits in several other areas ("co-benefits), such as a reduction in the emission of air pollutants, increase in the share of renewable energies, etc.
- The re-emergence of global carbon markets within the scope of Article 6 of the Paris Agreement, and the perspective of establishing cooperative actions with the carbon pricing systems of other jurisdictions.
- The potential for regional cooperation on CPIs, namely in the Central Africa Sub-Region.
- As revenue generation mechanisms, CPIs could be the tools for raising additional public finance for the Government of Cameroon and therefore, contribute to the State budget.
- The existence of the ONACC that could be enhanced to carry out MRV within the framework of implementation of CPIs.
- The instrumental role played by Decentralised Territorial Authorities (Regions and Councils) in the implementation of environmental-related policy and regulation, profiling them as ideal stakeholders for the implementation of carbon-friendly investments and carbon offset projects that result in the reduction of GHG emissions, which would be sold to facilities intending to offset their emissions in order to reduce their tax liability or to use for compliance under an ETS.

- The gradual liberalization of the energy sector in Cameroon to allow investment in renewable sources of energy and the reduction of subsidies paid by the State on petroleum products, which could create an entry point for CPIs on fossil fuel companies.
- The existence of industry clusters in Cameroon – e.g. fossil fuel industry and cement and aluminium production industries, which could be potential candidates for CPIs, for example as a means to foster energy efficiency and technological innovation.
- Increasing pressure on industries exposed to international markets, such as the EU market, for the reporting of deforestation-free products and the adoption of measures to reduce carbon footprints can encourage the introduction of CPIs in Cameroon.
- The adoption of CPIs would send a clear signal that Cameroon is fully committed to combating climate change, giving the country more visibility in international arena and potentially supporting the country in better accessing climate financing opportunities.

4. Threats

- The limited and inadequate understanding of CPIs among many stakeholders (including government agencies, businesses and the general public), potentially leading to misconceptions about these instruments and limited buy-ins, especially regarding the distributional effects or socio-economic costs associated with introduction of CPIs in Cameroon.
- Expected resistance of industries and other interest groups to the introduction of CPIs, given the novelty of the mechanisms and the perspective of an additional cost that needs to be borne by the industries in question.
- General perception of the limited "fiscal space" for introducing additional charges on businesses or on the average citizen as a result of either a carbon tax or an ETS.
- The ambitious economic growth goals and the urgency of making quick progress in certain development indicators – e.g. provision of jobs, poverty eradication and enhancement of livelihoods in Cameroon may overshadow the potential for exploring low-carbon instruments such as CPIs. Although the climate crisis is an emergency that requires immediate response, jobs, poverty eradication, and enhancement of livelihoods and economic growth of the country are more pressing socio-economic problems that require urgent responses than climate change. This is especially so because CPIs are not identified as priorities in Cameroon's NDC and also because the Paris Agreement allows Developing country Parties to implement it in keeping with equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.
- Challenges in the enforcement of regulations and legislations, especially on environment and pollution control issues could jeopardize the effectiveness of CPIs in the event that the Government of Cameroon adopts them.

- Absence of a National Climate Change Fund in Cameroon that could be a vehicle to support the collection and distribution of revenues raised through CPIs for specific climate mitigation and adaptation activities.

An aspect standing out from the SWOT analysis concerns the sheer number of strengths and opportunities for the adoption of CPIs in Cameroon. In effect, the potential for exploring some of these opportunities should form the basis for the Government of Cameroon to consider taking further steps towards the introduction of CPIs. It may be noted, on the other hand, that some of the most noteworthy weaknesses and challenges associated with the possible introduction of CPIs in Cameroon have to do with the novelty of the concepts, in particular the negative overtones associated with the imposition of a price on GHG emissions. In this respect, the SWOT analysis underscores the importance of engaging in dialogue, further capacity building, appropriately communicating and sensitizing stakeholders about the actual implications of carbon pricing, in particular its benefits and costs in Cameroon. From the above assessment, one may conclude that policy, regulatory, legislative, institutional and political supports for the design and implementation of CPIs exist in Cameroon, albeit timidly. Indeed, policies, regulatory, legislative and institutional frameworks, including political support constitute indispensable springboards for the design and implementation of CPIs.
Below is a structured **SWOT matrix** summarizing the analysis, followed by a **visual representation** of the strategic options (**SO, ST, WO, and WT strategies**).

Table 7: SWOT Matrix for the Introduction of CPIs in Cameroon

Strengths (S)	**Weaknesses (W)**
- Existing policy, regulatory, legislative, and institutional frameworks to address climate change (though limited). - Numerous opportunities for CPI adoption as highlighted in the opportunity box below. - Government willingness to explore climate policies. - International climate commitments and potential support.	- Novelty of carbon pricing concepts in Cameroon. - Absence of a legal framework for CPIsNegative perceptions of imposing a price on GHG emissions. - Limited awareness and capacity regarding CPIs. - Need for extensive stakeholder engagement and sensitization. - Despite existence of capacities for carrying out GHG inventory (MRV system) in Cameroon, such capacities are not available at facility levels.
Opportunities (O)	**Threats (T)**
- Potential for economic incentives and revenue generation through CPIs. - International climate finance and carbon market mechanisms. - Possibility of leveraging CPIs to attract foreign investment. - Potential regional collaboration	- Political and public resistance to carbon pricing policies. - Risk of CPI implementation leading to economic disruptions if not well-designed. - Institutional inertia and lack of coordination. - Potential competitiveness concerns for industries.

Table 8: Strategic Options (SO, ST, WO, WT Strategies)

Strategy Type	Description
SO (Strength-Opportunity)	Leverage existing policy and institutional frameworks to explore international funding and carbon markets for CPI implementation. Strengthen government commitment to CPIs by highlighting economic incentives and alignment with global trends.
ST (Strength-Threat)	Use regulatory and institutional frameworks to mitigate political resistance by designing CPIs that minimize economic disruption. Engage in regional cooperation to align carbon pricing with trade policies and industry concerns.
WO (Weakness-Opportunity)	Invest in stakeholder capacity building and awareness campaigns to address the novelty and misconceptions surrounding CPIs. Develop clear communication strategies on CPI benefits to attract investments.
WT (Weakness-Threat)	Strengthen inter-institutional coordination to improve CPI design and implementation. Conduct pilot projects to demonstrate the benefits and address concerns before full-scale adoption.

CHAPTER FIVE: KEY DESIGN ELEMENTS OF CARBON PRICING INSTRUMENTS, APPROACHES AND FEASIBILITY FOR THEIR IMPLEMENTATION IN CAMEROON

Introduction

This chapter discusses the caveats or key design and implementation elements of CPIs and explores the feasibility of introducing them in Cameroon in order to enable the Government to be informed and facilitate its decision on the necessary steps to proceed to the next phase of consideration. The purpose of the implementation is to mobilize resources internally for the implementation of Cameroon's NDCs and reap the associated environmental and socio-economic co-benefits. The analysis is based on the two main carbon pricing approaches notably, carbon tax and ETS. There are some key design and implementation elements that are general to all the CPIs and some that are specific to each of the CPIs. This chapter also discusses Cameroon's interest in considering cooperative climate action under Article 6 of Paris Agreement and the role of carbon pricing instruments in supporting the country's involvement in the cooperative approaches. The chapter further analyses Cameroon's readiness status for the introduction of CPIs. Lastly, the chapter national approaches to the implementation of CPIs with a focus on the Cameroonian context.

This analysis takes into account the specific circumstances of Cameroon, in particular the fact that the country is considered in 2020 as a GHG sink with a sequestration capacity twice that of its emissions[75]. Cameroon's emissions contribute only about 0.25 percent of the total global emissions[76]. The analysis in this chapter also considers the fact that the introduction of CPI(s) should not put at risk broader national economic, social and environmental policy objectives and the international competitiveness of domestic industries. In effect, one of the underlying premises of the implementation of any of the CPIs is to support and reinforce these objectives to the extent possible. The chapter starts with a discussion of the key considerations, opportunities and challenges for the design and implementation of carbon tax in Cameroon (Section 5.I), followed by an assessment of the key considerations, opportunities and challenges for the design and implementation of ETS (Section 5.II), Cameroon's interest in considering cooperative approaches under Article 6 of Paris Agreement and the role of CPIs in supporting the country's involvement in the cooperative approaches (Section 5.III) and wraps-up with Cameroon's readiness status for the introduction of CPIs (Section 5.IV).

[75] 2021 Updated NDC of Cameroon, p. 29. The 2021 Updated NDC of Cameroon is informed by the 2020 GHG inventory report – the latest data on GHG emissions in Cameroon.
[76] African Dept. of International Monetary Fund., op. cit., p. 36.

I. Key Considerations, Opportunities and Challenges with the Design and Implementation of Carbon Tax in Cameroon

The design and implementation of carbon tax requires a number of key supporting elements that serve as the backbone of its operation. There also exist some opportunities and challenges for the design and implementation of carbon tax in Cameroon.

1. Key Considerations for the Design and Implementation of Carbon Tax in Cameroon

a. Scope and Coverage (choice of coverage sector(s)/activit(ies), GHG(s) to be covered by carbon tax and criteria for choosing coverage sector(s)/activit(ies) and GHG(s))

The first key element to be addressed by the government of Cameroon if it decides to introduce carbon tax is the scope of application of the tax which covers or consists of two things namely: the choice of coverage sectors/activities and the choice of GHG(s) to be covered. There is also the criteria for choosing the coverage sector(s)/activity(ies) and GHG(s).

The choice of coverage sector(s)/activity(ies) answers the concern of *which economic sectors and/or activity(ies) should be targeted by carbon tax in Cameroon?* E.g., carbon taxes on fossil fuel exploitation and use and industrial production of cement and aluminium.

In deciding on the potential economic sector(s) and/or activity(ies), the government can be guided by its National Development Strategy and the latest GHG inventory that clearly identify the country's emitting sector(s) and activity(ies) that can be potential candidates for a carbon tax. They include the following in order of magnitude:

- AFOLU (agriculture, forestry and other land use) sector
- Energy sector
- Waste management sector
- Industrial and Product Use sector

As to the criteria for choosing coverage sector(s)/activity(ies) and GHG(s), statistics show that CO_2 is the highest emitted GHG in Cameroon and that the Agriculture sub sector of the AFOLU sector and the energy sector account for the highest CO_2 emissions. The 2021 updated NDC also identifies three major sectors that emit highest GHGs notably, the energy, AFOLU and waste management sectors. However, the AFOLU and waste management sectors may not be proper candidates for carbon tax because more studies still have to be done in the sectors (GHG inventories in the sector is still in Tier 1). Again carbon tax may not work in the AFOLU sector because of at least two reasons.

- Firstly, most economic activities in the sector are mostly informal as most of the actors who are considered to be micro or small in size, operate outside the formal reach of the law. Hence, they may not respond to the fiscal policy. Informal activities are usually defined in terms of lack of compliance with government regulations, in particular regarding registration, payment of taxes and social contributions, and labour regulations.

- Secondly, the AFOLU sector is characterized by scattered or dotted sources of emissions which are difficult to control and monitored.

The waste sector on the other hand emits mostly Methane which is very negligible or insignificant and therefore, cannot amount to taxable GHG. Moreover, taxing both CO_2 and Methane emissions could cripple the economy as both gases constitute the principal gases driven by major activities that contribute to the economic growth of the country. In deciding on the GHGs to be covered by carbon tax in Cameroon, the government can replicate the examples of countries that are already implementing carbon tax. Majority of the countries limit the implementation of carbon tax to CO_2 emissions only. The World Bank's State and Trends of Carbon Pricing 2024[77] only considers carbon taxes applied to CO_2 emissions and does not consider taxes on other GHGs such as CH_4 or N_2O.

The energy sector may attract carbon tax, especially the burning of fossil fuels for energy production. The IPPU sector, especially the industrial production of products such as cement and aluminium may also attract carbon tax. The share of GHG emissions by the IPPU sector is 0.47% of the total national emissions according to National IGES TCN Report, 2020 – the latest data on GHG emissions in Cameroon. Though the IPPU sector is the lowest emitting sector, according to the national context of Cameroon, the emissions will increase in the future according to the trend of total emissions considering the high number of cement and aluminum factories to go operational by 2025[78].

The government of Cameroon will also need to decide whether there will be exemptions for covered sectors/activities or facilities or whether it will be an economy-wide carbon tax. An economy-wide carbon tax is a tax on GHG emissions that equally applies to businesses and end-users alike that has been in effect since 2008 in the Province of British Columbia, Canada, and which is considered a 'textbook example of a broad-based, economy-wide, carbon tax[79]. The tax is paid by all businesses and individuals purchasing or using fuel in that province; and charged "downstream", i.e. at the point of purchase by end-users[80]. If there will be exemptions, it means some classes of emitters will not be targeted or covered by the tax.

b. Point of regulation/taxation – At which stage of the value chain of a product/service/activity to levy carbon tax

The concern of point of regulation deals with the stage of the value chain of a product/service/activity at which carbon tax can be levied. The government of Cameroon will need to decide on the point of taxation. Whether it will be "upstream" (e.g., on gas flaring during

[77] See World Bank, (2024), "State and Trends of Carbon Pricing: 2024", Washington, D.C., World Bank Group, http://documents.worldbank.org/curated/en/099081624122529330. See also Hannah Ritchie and Pablo Rosado, (2022), "Which countries have put a price on carbon?", published online at OurWorldinData.org, retrieved from: https://ourworldindata.org/carbon-pricing.

[78] See Ministry of Environment, Protection of Nature and Sustainable Development, 2015, "Second National Communication on Climate Change", p. 23.

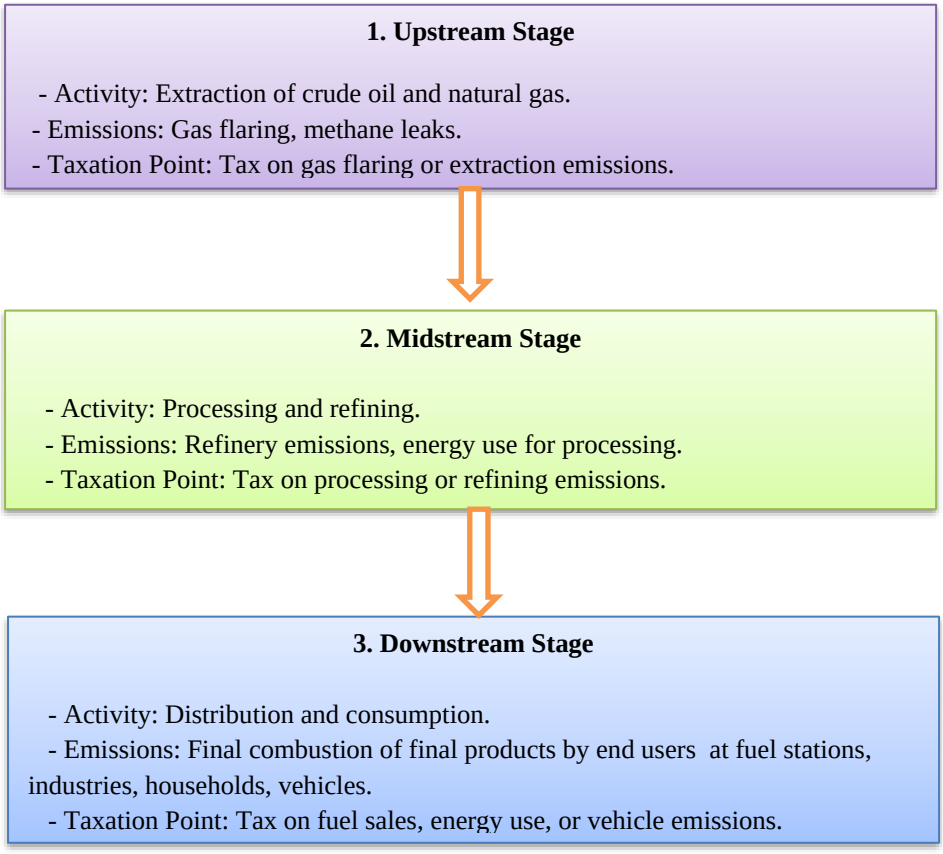
[79] Partnership for Market Readiness (PMR), (2017), op. cit.

[80] Ibid.

the extraction of crude oil, and on CO_2 emissions during the calcination of limestone to produce clinker, CO_2 emissions from chemical processes) or "midstream" (e.g., on oil and gas processing facilities, and on CO_2 emissions from heating using fuels, electricity related CO_2 emissions during grinding of clinker and other materials into cement powder, CO_2 emissions from transportation of limestone from quarry sites to cement factories) or "downstream" (e.g., on petrol and gas pump stations or filling points, on energy-using industries, households, or vehicles; and on CO_2 emissions from transportation of cement from factory and cement consumption in the construction sector) as presented on the flowcharts in figures 4 and 5. In any case, it is important that carbon tax should be applied after emissions have occurred[81]. To guarantee effectiveness, legislation could empower the tax authority to cut at source after self-declaration supported by footprints inventories. This approach could work well although there is no evidence that it is in practice anywhere in the world at the moment.

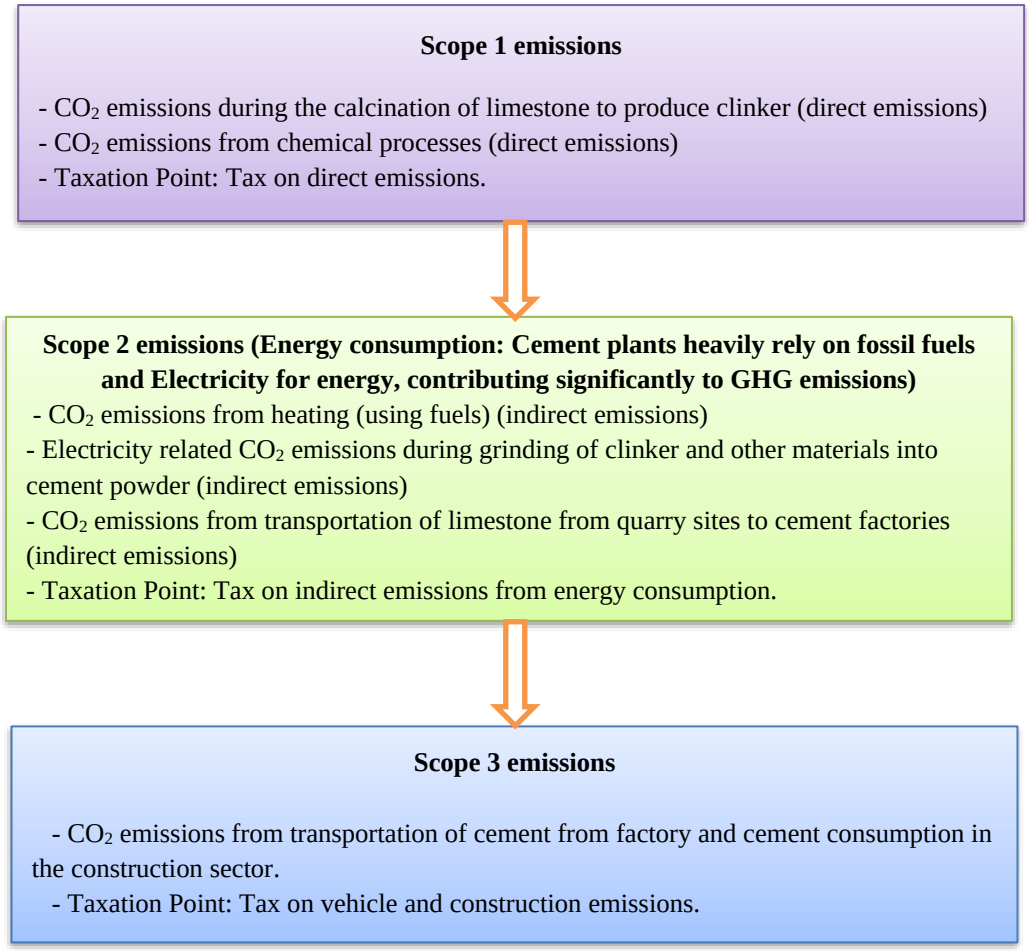
Below - are flowcharts that visualize the points in the value chain of petroleum and cement products where GHG emissions occur and the potential points at which a carbon tax could be levied.

Figure 4: A flowchart representation of the points in the value chain of Petroleum products where GHG emissions occur and the potential points at which a carbon tax could be levied



[81] Ngwome G.F., op. cit., p. 90.

Figure 5: Flowchart representation of the points in the value chain of cement products where GHG emissions occur and the potential points at which a carbon tax could be levied



c. Tax rate, justification for the rate and a multi-phased approach

If the government of Cameroon decides to introduce carbon tax, it will have to fix the rate or the amount to be levied on a ton of carbon emitted. The tax rate can increase yearly by a certain percent or remain stable. As to the justification, the rate of carbon tax matters for it to be effective. It needs to be balanced to incentivize carbon-emitting activities, and not too high to discourage investments. While many economists and policy makers find CPIs such as carbon tax to be the most efficient tool to curb emissions, they also point out that the instruments themselves need to be designed in ways that the prices are not too high to discourage investments or too low to encourage certain major polluters to emit/pollute and pay.

The tax rate can take a multi-phased approach. Here, the government of Cameroon can replicate international good practice and adopt a multi-phased approach to carbon tax in which the tax rate increases over time. This will require the government to fix or set the tax rate for a period of time after which the rate should be reviewed and increased overtime in order to prevent

companies from taking advantage of a low rate and then decide to pollute and pay. A multi-phased approach to carbon tax in Cameroon is also needed to reduce economic and social shocks that can result from the introduction of carbon tax.

While a precise, country-by-country comparison of carbon tax rates tied directly to GDP is difficult to find, only 1% of global emissions are priced high enough to meet the Paris Agreement's temperature target in 2024. The figure below paints a picture of how carbon pricing varies in different countries around the world in 2024[82].

d. Ensuring alignment with other national policies and objectives (both climate and non-climate policies and objectives)

It is important that the government ensures the alignment of carbon tax with other national policies and objectives (both climate and non-climate policies and objectives). Thus, a potential carbon tax in Cameroon should enhance or contribute to the achievement of the country's NDCs, National REDD+ Strategy, NPCCA, National Energy Efficiency Policy, Strategy and Action Plan in the Electricity Sector and all potential future policy documents such as NDC 3.0. (revised NDC), LT-LEDS and the National Climate Plan which are underway.

e. Cost-effectiveness and efficiency

Cost-effectiveness and efficiency means that the cost of implementation or administration of carbon tax should not exceed the revenue derived from it. Thus, if the government of Cameroon decides to introduce a carbon tax, it would do well to ensure that the cost of administration of the tax does not exceed the revenue derived from it. The government can ensure cost-effectiveness and efficiency by simplify the administration, thereby minimising costs by building on existing policies and institutions.

f. Distributional effects or socio-economic costs associated with carbon tax

Another major concern about the implementation of carbon tax is the distributional effects or socio-economic costs associated with the introduction of carbon tax. That is, the socio-economic impacts that the introduction of carbon tax will produce on citizens and households and the overall national economic growth and development. This concern is particularly raised within the context of the South African Carbon tax system[83] which may not be different in the case of Cameroon if the government decides to eventually introduce carbon tax in the country. Will citizens and households shoulder the burden of carbon tax? What would be the ripple impacts of carbon tax on citizens, households and industries, especially vulnerable groups or low-income earners and what measures can be put in place to mitigate or how would the Government ensure that consumers or end-users are not over-charged by emitters passing on the

[82] See https://www.visualcapitalist.com/sp/visualized-the-price-of-carbon-around-the-world-in-2024/.

[83] See National Treasury, Republic of South Africa, (2013), "Carbon Tax Policy Paper", p. 15, available at http://www.treasury.gov.za/public%20comments/Carbon%20Tax%20Policy%20Paper%202013.pdf, (accessed on 25 October 2024).

financial burden of carbon tax to them? Low-income earners spend a greater proportion of their income on basic needs such as petroleum products and, as a result, will bear a greater burden if the Cameroonian Government levies carbon tax on oil and gas. The tax could create the risk of oil and gas companies transferring the cost indirectly to consumers by way of increases in the prices of goods and services destined for households and small and medium size enterprises.

The introduction of carbon tax may also lead to local business closures and other economic hardships for businesses and citizens. Carbon tax can discourage further investment, apart from investments in cleaner technologies and in consequence, retard economic growth and development. The Government of Cameroon will therefore have to ensure that consumers or end-users are not over-charged by companies passing on the financial burden of carbon tax to them. This means that the implementation of carbon tax could be accompanied by social protection measures or safeguards to ensure the protection of consumers, especially the poor as higher income earners will not be much affected. Social protection measures will contribute to building resilience to climate risks. An example of social protection measures here is the reduction of personal income taxes to ensure that carbon tax is revenue-neutral and does not disproportionately affect consumers of products offered by GHG emitting companies.

To address this concern, legislation could make provisions that allow for the tax to be implemented at a moderate rate and in a phased approach that provide for a transitional tax period in order not to add economic costs on businesses and social costs on consumers as a result of increase in the prices of products on which carbon tax is levied[84]. This approach is present in the South African carbon tax regime.[85] To further address the risk of placing a carbon tax burden on workers with fixed income especially low-income earners and investors of carbon-intensive activities, a carbon tax could be accompanied by a general reduction of some taxes (such as personal income taxes) to ensure that the tax is revenue-neutral and does not disproportionately affect consumers of products offered by the major GHG emitters[86]. This method has been adopted and tested successfully in British Columbia in which there are personal income tax reductions such as the Low-Income Climate Action Tax Credit, which reduces the first two personal income tax rates by 5%[87]. This way, the government is able to reduce GHG emissions while maintaining economic growth and social welfare. However, it has been noted that while 'such tax shifts may be appropriate for high income countries with high levels of income tax, they may be less relevant – and less advisable – for developing countries with comparatively low overall tax-to-GDP ratios and low levels of income taxation[88].' This hypothesis has not yet been tested in less income countries where carbon tax applies.

[84] Ngwome G.F., op. cit., p. 91.
[85] National Treasury, Republic of South Africa, op. cit., p. 10.
[86] United Nations, (2021), "United Nations Handbook on Carbon Taxation for Developing Countries", United Nations, New York, USA, pp. 158 and 194, available at https://desapublications.un.org/file/918/download (accessed on 25 October 2024).
[87] Partnership for Market Readiness (PMR), (2017), op. cit., p. 120; Duff D.G., (2008), "Carbon Taxation in British Columbia", Vermont Journal of Environmental Law, Vol. 10:1, p. 99.
[88] United Nations, op. cit., p. 158.

g. Competitiveness

The concern of competitiveness has to do with the impact of carbon tax on local industries. The implementation of carbon tax in Cameroon could stifle the competitiveness of local industries *vis-à-vis* their international peers as it will put domestic intensive-carbon emission industries, such as those in energy or cement/concrete and aluminium production at a competitive disadvantage *vis-à-vis* international competitors that do not face an equivalent tax. This can impact on the overall economic growth and development of the country.

h. Is there need for border carbon tax?

In order to resolve the problem of the competiveness of domestic businesses *vis-à-vis* foreign competitors, the imposition of a border carbon tax will be able to shield Cameroon's local industries and businesses by making them competitive against goods from countries with weaker or no carbon tax. This can motivate them to adhere to carbon tax. In this respect, a border carbon tax can be levied on imported goods from countries with no or weaker emissions regulations. In other words, a border carbon tax is a levy on imported goods that have not been carbon-taxed at source. It can help make local industries and businesses competitive against businesses in countries with weaker or no carbon tax. For example, importers of petroleum products into Cameroon can be made to pay border carbon tax at the point of importation of such products (provided the they have not been carbon-taxed at the point of refining), which will increase its costs and its market price. This will consequently reduce the competitiveness of petroleum products refined in Cameroon, compared to petroleum products from other countries that are not refined in more carbon-efficient refineries. For border carbon tax to be effective, there is the need for traceability and cooperation among countries in order to identify the product origin and whether it was carbon taxed or not. This will enhance the importation of clean technology.

i. Transition period/framework

Carbon tax transition period is a timeframe that is set to allow covered domestic industries to adapt to the tax. The transition period is needed to reduce economic or social shocks that can result from the introduction of carbon tax in Cameroon. As proposed by the Draft Explanatory Memorandum for the South Africa Carbon Tax Bill[89], targeted emitters could be accorded tax-free allowances in the implementation of carbon tax in order 'to provide for a smooth transition to a low carbon economy and to take into account international competitiveness.' Such allowances include[90]: basic allowance[91], fugitive emissions allowance[92],

[89] See Draft Explanatory Memorandum for the South Africa Carbon Tax Bill, 2015, p. 21.
[90] Ibid., pp. 5, 22-25 and Draft South Africa Carbon Tax Bill, p. 1, 7-13.
[91] A basic tax-free allowance of a certain percentage for fuel combustion emissions and a certain percentage for process emissions (GHG emissions "other than combustion emissions occurring as a result of intentional or unintentional reactions between substances or their transformation …").

trade exposure allowance[93], performance allowance[94], carbon budget allowance[95], and offset allowance[96].

j. Avoiding the risk of carbon leakage

High costs incurred by facilities as a result of carbon tax could cause businesses in Cameroon to shift production to countries with less stringent emission reductions policies. Thus, avoiding the risk of carbon leakage refers to avoiding a situation where for reason of high costs incurred by facilities as a result of carbon tax, businesses would shift production to countries with less stringent emission reductions policies. If the government of Cameroon decides to implement carbon tax, it will have to ensure that the rate of carbon tax is not too high in order to avoid the risk of carbon leakage. However, research shows that carbon leakage is not an economically significant obstacle for countries that are implementing carbon tax as such countries have higher overall export intensity than the global average, suggesting that carbon leakage is not a significant concern for export-oriented economies[97]. Research also shows that carbon pricing is adopted by high and middle income countries which are more focused on services, so that the carbon-intensity of their exports is likely to be low. Unfortunately, Cameroon is not a high or middle income country that is more focused on services.

k. Reliability and environmental integrity (environmentally-friendly)

The concern of reliability and environmental integrity seeks to ensure that carbon tax measurably reduces or should be able to reduce practices that harm the environment. Since environmental protection especially reduction of pollution is one of the identified co-benefits of CPIs such as carbon tax, it goes without saying that carbon tax would be an environmentally-friendly climate policy tool.

l. Institutional framework and stakeholder and their respective roles in the design and implementation of carbon tax in Cameroon

Institutional framework and stakeholder consultation addresses the concern of the relevant institutions and stakeholders concerned with the design and implementation of carbon

[92] Fugitive emissions allowance is an additional percentage allowance for sectors with fugitive emissions ("emissions that occur from the release of GHG during extraction, processing and delivery of fossil fuels"), including coal mining and oil and gas production.
[93] Trade exposure allowance is an additional percentage allowance for entities exposed to international competition, including those in the petroleum refining, iron and steel, and food processing industries.
[94] Performance allowance is an additional allowance of up to a certain percentage available to entities that have implemented proactive measures to reduce their GHG emissions.
[95] Carbon budget allowance is an additional allowance of up to a certain percentage available to entities that comply with reporting requirements for the purpose of the carbon budgeting process.
[96] Offset allowance is an additional percentage allowance, depending on the industry, for entities that buy carbon offsets to reduce their tax liability.
[97] Satyajit Bose, Allison L. Bridges & Kelsie DeFrancia, (2019), Carbon Pricing as a Policy Instrument to Decarbonize Economies, The Earth Institute's Research Program on Sustainability Policy and Management.

tax; and their respective roles. The implementation of carbon tax in Cameroon will require an institutional framework that consists of relevant institutions and stakeholders. If the government opts for a carbon tax, it will have to clearly identify and define the respective roles of each institution and stakeholder in the design and implementation of the tax in Cameroon. Consultation with the relevant stakeholder is an indispensable step in the design and implementation of carbon tax in Cameroon.

m. Transparency and information disclosure – Need for a Robust Monitoring, Reporting and Verification (MRV) framework/system

Transparency and information disclosure are concern that serve to ensure accuracy, reliable data on GHGs and avoid double counting of emission reductions. An effective carbon tax needs a secure and transparent registry system that ensures changes to data are auditable. This can considerably reduce the potential for the same quantity of carbon emissions to be counted and taxed twice. A key transparency and information disclosure tool that can function as the backbone of carbon tax is an MRV framework for tracking GHG emissions at the facility level. Transparency and information disclosure therefore requires the putting in place of a robust framework or system for carrying out MRV of emissions. MRV refers to the multi-step process to measure, report and verify the amount of GHG emissions at a facility. An MRV system is therefore crucial in measuring, reporting and verification of GHG emissions within the framework of carbon tax.

As to how MRV system works, every emission must determine a "reference level" against which emissions are measured periodically. The assumptions upon which these reference levels are established and the accounting methodologies used to calculate emissions vary by sector[98]. Standard-setters, such as the World Bank, define the requirements that these reference levels and MRV activities must meet to ensure the highest accounting standards for the most trustworthy results. For example, within the forestry and land-use sector, the Forest Carbon Partnership Facility (FCPF) administered by the World Bank has developed a standard for measuring forest-related emissions at the jurisdictional scale, covering entire provinces, regions, or states within countries[99]. Once project or programme activities are on-going, data is collected and processed to calculate emissions achieved against the reference level during the monitoring period. Emission results are then compiled into a report that is subject to third-party verification by an entity accredited per the requirements of the standard being used[100]. Once emissions are verified, the standard-setter certifies them[101]. The entire MRV cycle can take a year or more to complete[102].

[98] World Bank Group, (2022), "What You Need to Know About the Measurement, Reporting, and Verification (MRV) of Carbon Credits", https://www.worldbank.org/en/news/feature/2022/07/27/what-you-need-to-know-about-the-measurement-reporting-and-verification-mrv-of-carbon-credits.
[99] Ibid.
[100] Ibid.
[101] Ibid.
[102] Ibid.

As part of the implementation of the Paris Agreement and with the help of the Belgian government NDC support initiative, MINEPDED set up Cameroon's National Greenhouse Gas Inventory System known in French as "*Système National d'Inventaire des Gaz à Effet de Serre"* (SNI-GES) in 2017. The SNI-GES is an MRV tool that enables Cameroon to carry out transparent and reliable GHG inventories, which are used for Cameroon's Biennial Update Report (BUR), Biennial Transparency Reports (BTRs) and National Communications (NCs) on Climate Change. The role of the SNI-GES is to collect, analyze and report data on GHG emissions. It makes it possible to monitor and quantify GHG emissions from different sources, such as industry, waste, agriculture, energy, etc. The SNI-GES is made up of a team specialized in inventories, which is responsible for carrying out emissions calculations using expert staff and data provided by sectoral administrations or other stakeholders. This centralized model is also based on the establishment of a National Inventory Working Group made up of various administrations, academics and civil society, whose mission is to provide national guidance on the inventory system, to validate the inventory methodologies before their implementation, to validate the final results and reports before their transmission to the UNFCCC Secretariat. It meets once a year when the need arises. To make the work of the said system transparent, it has been equipped with a digital platform on which the results are made public that needs to be enhanced.

The preparation of a GHG inventory or carbon footprint is a first step to quantify GHG emissions occurring at facility levels. Although capacities for carrying out GHG inventory (MRV system) exist in Cameroon, such capacities are not available at facilities levels and need to be established in order to enhance the operationalization of CPIs such as carbon tax in Cameroon. Cameroon therefore has an MRV framework for tracking emissions at the national level which can be used at the facility level in the context of carbon tax. However, for the effective design and implementation of an MRV system at the facility level for the purposes of a carbon tax in Cameroon, it is recommended that global good-practices are considered and adapted to the specific circumstances of Cameroon. An MRV system in Cameroon will include the following:

a. An Authorized Agency that will be in charge of overseeing MRV.
b. Entity to carry out monitoring according to an approved monitoring plan for monitoring emissions.
c. Measurement systems (emission computation method(s), equipment, tools and devices)
d. Entity to submit an emission report to the Authorized Agency.
e. Form and content of emission report to be submitted to the Authorized Agency.
f. Verification of emission report at the request of the Authorized Agency, by an independent reviewer (verification team) appointed by an accredited external auditor. The independent reviewer must work with a verification plan developed by them.
g. Accreditation of the external auditor and conditions for his suspension and revocation by the Authorized Agency in charge of overseeing MRV.
h. Approval of the emissions report by the Authorized Agency.

n. Linkage between carbon tax revenue and NDC implementation: How would the government use revenue from carbon tax?

The linkage between carbon tax revenue and NDC implementation raises the concern of how the government will channel revenue from carbon tax into NDC implementation. Revenue from carbon tax can be used in various ways, depending on the intended goal and result. Revenue from carbon tax can serve or enhance both the implementation of Cameroon's NDC in terms of climate adaptation and mitigation actions as in British Columbia[103] and the long-term low-carbon development strategies of Cameroon. In terms of mitigation, revenue derived from carbon tax can be used to finance green projects in the fields of transportation, advancing clean or low-carbon technologies such as renewable energy or power sources and energy efficiency[104], reforestation, afforestation, landscape restoration, etc. In terms of adaptation, revenue derived from carbon tax can be used to finance climate resilient projects in highly affected zones, especially in the Northern regions of Cameroon that are more vulnerable to climate change and its associated impacts. Revenue from carbon tax can also be returned to consumers in the form of dividends or used to achieve broader national development objectives. In order to ensure that revenue from carbon tax is invested on climate change adaptation and mitigation activities, it is imperative to establish a National Climate Change Fund in which part of the revenue from carbon tax can be deposited and later disbursed for investment in climate change actions.

o. Inclusiveness and fairness

Inclusiveness and fairness raises the concern of whether all emitting sectors in Cameroon will be subjected to carbon tax or whether there will be exemptions; and whether all emitting entities in each sector will be subjected to carbon tax or whether there will be exemptions. This concern is addressed under this chapter in sub section I.1.a above.

p. Stability and predictability

The concern of stability and predictability is that an effective carbon tax should be stable in order to send a clear, consistent, and strong signal to facilities, which can rely on it to take measures to cut or reduce their emissions.

In all, there are a number of caveats that must be kept in mind if the Government of Cameroon decides to implement a carbon tax in the country. Taking these caveats into consideration has crucial implications not only for the social and political acceptability of the tax, but also for administrative considerations and the overall effectiveness of the tax in reducing GHGs[105] and contributing to the achievement of Cameroon's NDC. In addition to the key design and implementation elements analysed above, the introduction of a carbon tax in any jurisdiction

[103] Duff D.G., (2008), op. cit., p. 100.
[104] Increased use of these technologies helps to reduce GHG emissions.
[105] Ngwome G.F., op. cit., p. 91.

including Cameroon, needs to be framed within a broader socio-economic, fiscal and environmental context. Such contexts provide some opportunities and challenges associated with the design and implementation of carbon tax in the country. It is therefore important to identify the opportunities and challenges quickly and briefly.

2. Opportunities for the design and implementation of carbon tax in Cameroon

The opportunities for the design and implementation of carbon tax in Cameroon include:

a. Existence of policy and legislative supports for the introduction of carbon tax in Cameroon

The policy and legislative supports are afforded by the following policy and legislative instruments:

- Cameroon's National REDD+ Strategy, 2018 recommends the implementation of carbon tax as a measure to discourage forest conversion and to reduce GHGs in the context of REDD+ implementation in Cameroon on page 69 of the English version of the document.
- The updated NDC of Cameroon, 2021 envisages environmental taxation as part of efforts in generating new revenues that could contribute to financing the activities of the NDC on pages 50 and 51.
- Circular No. 2023/001 of 30 August 2023 relating to the preparation of the State budget for the 2024 financial year, specifically envisaged the review of the scope of the STPP on certain fuels such as liquefied natural gas, for a possible introduction of a carbon tax in Cameroon.
- The draft amendment to the Framework Law on Environmental Management proposes a carbon tax for industrial, artisanal, and commercial pollution, and a reduction in custom tariffs for industrial enterprises importing equipment to eliminate GHG emissions in Article 130(1).

b. Existence of institutional support for the introduction of carbon tax in Cameroon

The institutional support for the design and implementation of carbon tax in Cameroon is afforded by the various key institutions and stakeholders identified under chapter four of this assessment. The institutional framework for carbon tax is defined in the Climate Agenda that defines key institutions and stakeholders involved climate change policies and responses.

c. Existence of political support for the introduction of carbon tax in Cameroon

Politically, the Minister of Finance, on 25 October 2022, chaired a workshop in Yaoundé, to raise awareness among public sector stakeholders, of the carbon market to improve its contribution to the State budget; and to carry out a situational analysis and suggest measures to address the deficiencies and shortcomings in Cameroon's efforts to access the carbon market.

d. Existence of tax/fiscal tools that can inspire the design and implementation of carbon tax in Cameroon

There exist some fiscal and market mechanisms that can inspire the design and implementation of carbon tax in Cameroon. Thus, carbon tax can be introduced by building upon tax collection systems already existing in Cameroon. Some of the fiscal tools include:

i. Modeling the Special Tax on Petroleum Products (STPP)

There exists a tax that already price externalities in Cameroon. For instance, the STPP[106] currently charged on certain fuels such as liquefied natural gas (premium grade petrol; gas-oil; and industrial natural gas, excluding gas purchased by electricity generation companies intended for the public and gas intended for local production of liquefied petroleum gas)[107] can inspire the crafting and implementation of a carbon tax in Cameroon whereby the charges levied would be based on the carbon emission potential of the petroleum products covered.

ii. Modeling the hygiene and sanitation tax

The hygiene and sanitation tax levied and collected by councils for the control of foodstuffs and commercial and industrial buildings or facilities[108] can also inspire the design and implementation of carbon tax on CO_2 emissions from the industrial production of cement and aluminum in Cameroon.

iii. Environmental fines levied on natural or moral persons

Environmental fines levied on natural or moral persons who cause damage to the environment[109] can also lend help to the design and implementation carbon tax in Cameroon. The damage to the environment can be associated to CO_2 emissions which can then be taxed.

iv. Institutional structures (fiscal and financial)

There is the existence of fiscal and financial institutional structures, that can enable a relatively quick and smooth introduction of a carbon tax in Cameroon (e.g. through the Directorate General of Taxation and the National Treasury of the Ministry of Finance).

e. Other opportunities

- The ease and flexibility of the instrument, which can be swiftly introduced and readjusted based on the results achieved.

[106] Circular No. 2023/001 of 30 August 2023 relating to the preparation of the State budget for the 2024 financial year specifically envisaged the review of the scope of the special tax on petroleum products (STPP) on certain fuels such as liquefied natural gas, for a possible introduction of a carbon tax in Cameroon.
[107] Section 229(1) of the General Tax Code edited on the 1st of January 2023.
[108] Section 62 of Law No. 2009/019 of 15 December 2009 on Local Fiscal System.
[109] Section 27(4)(a) of Law No. 2023/019 of 19 December 2023 to institute the Finance Law of the Republic of Cameroon for the 2024 Financial Year specifically provides for environmental fines on natural or moral persons who cause damage to the environment.

- As a country that has faced budgetary constraints, the introduction of a carbon tax could bring additional revenues to the government.
- Carbon taxes have been introduced by other countries in Africa (e.g., carbon tax on all liquid fossil fuels nationally produced or imported in South Africa) and could serve as references for Cameroon to replicate.

3. Challenges to the design and implementation of carbon tax in Cameroon

The anticipated challenges to the introduction of carbon tax in Cameroon, some of which are already identified in the SWOT analysis presented Chapter 4.VI, include the following:

- Anticipated low support and general resistance to the introduction of carbon tax, as is the case with other taxes, charges or levies in Cameroon. The low support and general resistance would be justified by the popular opinion that there are already too many taxes that are creating hardship for both businesses and individuals. Moreover, carbon tax will attract low support and resistance in the light of Cameroon's historically low volume of GHG emissions per capita and low contribution to climate change *vis-à-vis* those of other countries. The low support and resistance would also be justified on the basis that Cameroon like other Congo Basin countries, relies on its tropical rain forest to fight against climate change through REDD+ implementation and therefore, making carbon tax a less priority for Cameroon.
- Difficulties to establish consensus between different Ministerial Departments and other government bodies on issues of roles and competences, and potential entitlements or benefits in the event of adopting a carbon tax in Cameroon. There is a history of conflict of institutional role, competence and benefits in the country.
- The fear of decline in international competitiveness of domestic industries that will be subjected to carbon tax in Cameroon as it will be considered as an additional tax that could further stifle or imperil the competitiveness of such domestic industries.
- Carbon tax would be considered unfair to or may disproportionally affect workers especially low-income earners and poor households and hinder access to essential goods and services if industries pass on the financial burden of carbon tax to consumers and if the Government fails to implement social protection measures (such as reduction of personal income taxes to ensure that carbon tax is revenue-neutral and does not disproportionately affect consumers of products offered by GHG emitting companies) as a result of the introduction of the carbon tax.
- A general wariness about how revenue raised through carbon will be used by the Government and if such use will be effective, which will be a factor for the acceptability of a carbon tax.

II. Key Considerations, Opportunities and Challenges with the Design and Implementation of Emission Trading System/Cap-and-Trade

An ETS or a cap-and-trade system is one of the two main approaches for pricing GHG emissions. In the context of Cameroon, a CPI in the form of an ETS could be introduced, which of course must fit into national circumstances and trigger the generation of multiple benefits. A number of caveats as discussed below must be kept in mind if the Government of Cameroon decides to introduce an ETS in the country. That said, there exist some opportunities, but also challenges to introducing an ETS in Cameroon as identified under this section.

1. Key Considerations for the Design and Implementation of ETS in Cameroon

The design and implementation of CPIs require a number of supporting elements that can serve as the backbone of their operation. The points that follow under this section discuss the key design and implementation elements of an ETS that policymakers in Cameroon would need to consider in case the Government opts to introduce it for pricing GHG emissions in the country. The key caveats for the design and implementation of an ETS in Cameroon include:

a. Scope of Coverage (choice of coverage sectors/activities, GHG(s) to be covered and criteria for choosing coverage sectors/activities and GHG) for ETS)

A key issue to address when considering the introduction of an ETS is its scope of application which consists of at least two things namely: choice of coverage sectors/activities and choice of GHG but also the criteria for making the choices.

i. choice of coverage sectors/activities and criteria for choosing coverage sector/activities for ETS

The choice of coverage sectors or activities addresses the concern of which sector(s) or activity(ies) in the covered sector(s) should be targeted by an ETS. E.g., ETS on energy-related emissions, IPPU-related emissions, AFOLU emissions and waste management emissions. In deciding on the economic sector(s) to be targeted by an ETS, the government of Cameroon can be guided by the country's latest GHG inventory and NDC that identify the country's major emitting sectors and activities. Three criteria can be considered in making a choice of covered sector(s)/activity(ies). The first criterion is the share of contribution of different economic sectors to national GHG emissions. Since an ETS is, first and foremost, an instrument to support the reduction of GHG emissions, sectors usually prioritised are those accounting for the largest share of national emissions. The second criterion is the cost involved in operationalizing an ETS. Since the operation of an ETS will imply costs to both the regulator and regulated facilities, the most cost-effective emission abatement opportunities tend to be found in sectors accounting for the largest share of national emissions. The third criterion is prioritizing or targeting sectors that have a small number of large emitters over sector consisting of many small and dispersed emission sources. This is because the effectiveness of an ETS strongly hinges on the ability to measure and monitor GHG emissions with a "reasonable" level of accuracy, implying the

setting-up of a system to measure, report and verify (MRV) emissions. It is easier to measure, report and verify the emissions of sectors that are dominated by a small number of large emitters than the emissions of sectors with many small and dispersed emission sources.

With regards to the emissions profile of Cameroon, the country's 2021 updated NDC ranks the agriculture sub-sector of the AFOLU sector as the largest source of GHG emissions with 24,074.61 Gg CO2 eq or 69% of total national emissions according to National IGES TCN Report, 2020. Similarly, the 2020 GHG inventory report ranks the agriculture sub-sector of the AFOLU sector as the largest source of GHG emissions with 94,154.17 Gg CO2 eq emitted out of 117,443.14 Gg CO2 eq, or 80.17% of total sector emissions, with CH_4 as the prevalent gas due to livestock emissions and rice cultivation, excluding the forestry and other land use sub-sectors. As per the projections of Cameroon's updated NDC, the sub-sector's contribution is expected to remain significant by 2030, as the country plans to develop its agriculture potentials. However, although agriculture has been and remains the pillar of the country's ambition for emergence, the Government plans to limit its carbon impact. The above should make the agriculture sector candidates for inclusion within the scope of an ETS in Cameroon. Nonetheless, a more granular analysis is required in order to adequately ascertain the sector's adequacy for coverage by an ETS. However, with respect to emissions from the agriculture sector, they originate from four main sources: enteric fermentation of ruminants in the form of methane, the release of nitrous oxide from the utilization of chemical fertilizer in soils, manure management, and rice cultivation. In spite of their important contribution to national GHG emissions, this sector does not rank as the most amenable for inclusion within the scope of an ETS. This is due to a number of reasons, in particular: i) the fact that majority of these emissions originate from many small and diffuse sources, implying high costs with the MRV of emissions; ii) inadequate capacity for measuring emissions from small and dispersed farms; and iii) the risk of a "non-permanent" mitigation effect in soil sequestration projects or initiatives. Concurrent with this, to date no ETS systems exist that have included agriculture within their scope. The only exception to note is New Zealand where the inclusion of emissions from the agriculture sector under an ETS has been under consideration for years.

With regard to forestry and other land use sub-sectors of the AFOLU sector, they are not recommended as a priority for inclusion within an ETS in Cameroon, in particular due to the following reasons: i) their relatively small contribution to national emissions ii) issues associated with carbon leakage[110] and permanence[111]; iii) the administrative complexity of the sector with regards to the monitoring of emissions, which requires a comprehensive monitoring system throughout the lifetime of a forest; and the fact that the forestry sector is identified as a crucial carbon sink, with substantial CO_2 removals attributed to forest biomass and soil carbon, which offset a portion of emissions from other sectors. In effect, forestry and other land use sub-sectors

[110] Carbon leakage occurs when tree plantation or the forest protection activity is (partly) "counteracted" by another activity elsewhere which results in extra emissions.

[111] Permanence is the case, for example, when a forest planted or protected over a certain period of time is the subject of clearance at some point in the future.

rarely have been included under an ETS. The only noteworthy exception is the New Zealand ETS.

In the case of energy-related emissions, the energy sector occupies the second position after agriculture and accounts for 18% of total national emissions according to the 2021 updated NDC of Cameroon. The energy sector is also identified as the second emitting sector by the 2020 GHG inventory report, accounting for 11.34% of total national emissions with CO_2 as the dominant gas. Although it is hoped that the share of clean energies will increase in the coming years, fossil fuels and fuelwood will continue to meet most of Cameroon's energy needs in the future. Large emitters in the energy sector in Cameroon are therefore oil and gas companies, rendering them "suitable" candidates for a potential inclusion within an ETS. However, a more granular analysis is required in order to adequately ascertain the sector's adequacy for coverage by an ETS.

According to the 2020 GHG inventory report – the latest data on GHG emissions in Cameroon, the waste sector ranks the third source, accounting for 8.02% of total emissions with CH_4 as the dominant gas emitted through organic waste decomposition. According to the 2021 updated NDC of Cameroon, the waste management sector is also the third GHG emission source in the country and accounts for 12% of total national GHG emissions. Emissions from this sector have rarely been covered by an ETS. Reasons for this include the fact they tend to be relatively small in relation to the national totals, and also due to methodological issues associated with the quantification of these emissions, in particular in relation to the decomposition of methane in landfill sites, which occurs over a long period of time. During this period, technologies or procedures to handle waste may change, and therefore emission factors may not adequately capture the emissions actually taking place. In view of this, the sector is not recommended as priority for inclusion under an ETS in Cameroon. On the other hand, the sector could be a source of offset projects.

The IPPU sector comes last with less 1% of total national emissions according to the 2021 updated NDC. The 2020 GHG inventory report also ranks the IPPU sector as the least emitting source with less than 1% (0.47%) of the total national GHG emissions. The less than 1% of the total national emissions mostly occur in mineral and aluminum production industries. With regards to the potential inclusion of the IPPU sector within the scope of an ETS, some of these industries such as cement and aluminum production factories could be candidates for inclusion under an ETS in Cameroon, especially in cases where these facilities also contribute to energy-related emissions. CO_2 emissions released during the production of clinker (limestone) for cement production and aluminum production could be subjected to an ETS in proportion to a default emission 'cap' as proposed by the International Monetary Fund (IMF)[112].

[112] International Monetary Fund (IMF), (2019), "Fiscal Monitor: How to Mitigate Climate Change", International Monetary Fund, Washington, p. 24.

As noted earlier, Cameroon has developed its fossil fuels notably, oil and gas partly to power the transport sector[113]. This means that the transport sector is also a significant source of GHG emissions (see table 4). However, most ETS implemented worldwide do not cover the transport sector. In this regard, the motorized road transportation sector cannot be made a candidate for inclusion within the scope of an ETS in Cameroon. This is due to the fact that it is difficult to measure the emissions of this sector as most road transporters mostly operate informally outside the reach of the law, and hence, would not respond to the economic policy. Moreover, the emissions of each individual transporter may not amount to a ton of carbon per year for which a 'cap' under an ETS will not be set. Even if a 'cap' were to be set below a ton of carbon, it could result to road transporters passing the cost to users who are found in lower income categories compared to domestic air travel whose users are found in higher income categories.

The above analysis pertains to "large" GHG emitters and, as such, do not include other sources that contribute to GHG emissions, but which consist of more dispersed emission sources and for which data was not found. This category encompasses energy-related emissions from activities as diverse as energy consumption in households, institutional buildings, small commercial and industrial activities, small-scale agriculture, forestry, motorized road transportation, grazing, etc. It is difficult to measure the emissions of these energy consumers who mostly operate informally outside the reach of the law, and who are dispersed across different economic sectors and hence, would not respond to the economic policy. In the absence of more granular data, it is uncertain the extent to which these sectors could be brought under the umbrella of an ETS.

ii. Choice of GHG coverage and criteria for choosing the GHG for ETS

As noted in the point above, priority activities for inclusion within an ETS in Cameroon are oil and gas facilities in the energy sector and cement and aluminum production factories in the IPPU sector. As to the choice of GHG, CO_2 emissions released during the production of clinker (limestone) for cement production, from aluminum production, from gas flaring and from oil and gas refinery, could be subjected to an ETS in proportion to a default emission 'cap' as emissions from these sectors/activities mostly consist of CO_2. This is the gas prioritized for coverage within an ETS 'cap' in Cameroon.

NB: In deciding on the GHGs to be covered by ETS, the government of Cameroon can replicate the examples of countries that are already implementing ETS as indicated under Chap 5.I.1.a.

b. Emissions scope

For facilities covered under an ETS and for the purposes of carbon footprint monitoring and reporting, the accounting boundaries can be set according to three 'emissions scopes' viz: i) Scope 1 emissions pertain to direct emissions from a facility; ii) Scope 2 emissions are those

[113] Cameroon's National REDD+ Strategy, 2018, p. 35.

indirectly released by the facility through purchased energy iii) Scope 3 emissions correspond to all indirect emissions that occur in the value chain of the facility's activities, including both upstream and downstream emissions, and which are not included under scope 2 emissions[114]. As the recommended sectors and/or activities for ETS coverage in Cameroon are oil and gas activities in the energy sector and cement and aluminum production in the IPPU sector, these would correspond to Scope 1 pertaining to direct emissions from the covered facilities. The inclusion of Scope 2 emissions could be considered in case the ETS is expanded to include fossil fuel energy consumers, which would be the case for example of motorized road transport sector. However, the coverage of both direct and indirect emissions would imply the risk of double counting, consisting of pricing the same GHG unit twice, both at the point of generation and consumption. There are a few examples of ETS where this has been the case. For instance, the Korean ETS has implemented compliance obligations for both direct emissions at the point of electricity generation and indirect emissions at the point of electricity consumption[115]. From a regulatory standpoint, this was to ensure that the signal introduced by the carbon price is factored in both at the levels of production and consumption. Overall, the inclusion of indirect emissions in an ETS involves a high complexity in design given the risk of double counting. Therefore, it is recommended that a domestic ETS in Cameroon should only focus on direct emissions.

c. Point of regulation

The point of regulation for the sectors/activities recommended for inclusion under an ETS in Cameroon is at the point where GHG emissions take place, i.e. at the plant/installation or facility level. This would imply setting up an MRV system at the facility level as a way of assuring, with limited uncertainty, that 1 ton of CO_2e emitted corresponds to 1 ton of CO_2e reported, i.e. requiring one emission allowance to be surrendered for compliance. Aspects related to the MRV system are further elaborated in (g) below.

d. Setting emission 'cap'

A 'cap' is a threshold at which something is set. Setting a 'cap' under an ETS deals with deciding on a threshold or the maximum level of emissions for a given activity or industry per year. The 'cap', expressed in allowances, limits the total amount of carbon that can be emitted by covered entities in a year. An entity that emits below the pre-allocated allowance will be credited (carbon credit) and can sell or trade the extra allowance or unused credit (non-emitted carbon) to an entity that surpasses or emits above the pre-allocated allowance or keeps/banks the emission allowances for future use[116]. Put differently, companies with low emissions that have not

[114] For additional details on emissions scope, see, https://ghgprotocol.org/sites/default/files/standards_supporting/FAQ.pdf

[115] PMR, (2016), "Emissions Trading in Practice: A Handbook on Design and Implementation", Washington, DC, World Bank.

[116] Environmental Defense Fund, "How cap and trade works", available at https://www.edf.org/climate/how-cap-and-trade-works.

exceeded their pre-allocated allowance set by the government can sell their unused emission allowance to larger emitters that have exceeded their pre-allocated allowance. Here, the government buys the unused emission allowance and imposes it as a fine on the entity that surpasses or emits above their pre-allocated allowance. Pre-allocated allowance in an ETS provides an opportunity to large emitters to buy the unused allowances as a way to offset their emissions in order to remain within their pre-allocated allowance, and hence, a reduction of the overall emissions for the year.

In an ETS, the emission cap set by the government is distributed among companies through allowances, which can be allocated in different ways: free allocation or auctioning.

- **Free allocation:** Under free allocation, governments can distribute allowances for free to industries based on different methods viz:
  - **Grandparenting**: Under this method, allowances are allocated to entities based on their historical emissions. Companies that have historically emitted more receive a larger share of allowances for free. This approach is often used to ease the transition for industries that may face significant costs under the ETS.
  - **Benchmarking**: Allowances are allocated based on the performance of entities relative to a predefined benchmark (e.g., emissions per unit of output). This method rewards low-carbon production or more efficient companies and encourages innovation or cleaner production practices.
- **Auctioning:** Under this method, allowances are sold to the highest bidders in descending order of their bids until all available units are allocates. Auctioning ensures that allowances are allocated efficiently and generates revenue for the government, which can be reinvested in climate mitigation projects or used to support vulnerable communities affected by the transition to a low-carbon economy. Thus, companies buy allowances through an auction. This method encourages cost-effective emissions reductions.

How Allocation Methods Impact Emissions Reduction

While free allocation helps industries transition smoothly, it may reduce the incentive for immediate emissions reductions, as companies receive allowances for free. However, benchmarking can encourage efficiency improvements.

Auctioning creates a stronger economic incentive for emissions reductions, as companies must pay for their allowances. It also promotes fairness by ensuring that all entities participate in the market on equal terms.

In practice, ETS systems often use a mix of free allocation and auctioning, with free allowances helping industries' transition, while auctioning ensures market efficiency.

Role of Allowances and Trading

Companies with low emissions that do not exceed their pre-allocated allowances can sell their unused allowances to larger emitters that have exceeded their allowances. This trading mechanism allows high-emitting entities to offset their emissions by purchasing allowances,

ensuring they remain within their allocated limits. The government may also buy unused allowances and impose fines on entities that exceed their allowances, further incentivizing compliance and emissions reductions.

By combining a well-defined cap with effective allocation methods (free allocation or auctioning), an ETS creates a trading or market-driven approach to reducing overall emissions, while providing flexibility for covered entities to manage their carbon footprint.

A number of indicators may be used to establish a threshold/cap in relation to which entities within the covered sector or industry are eligible for inclusion under the ETS. Among ETS systems in operation globally, the most common indicator is the volume of GHG emitted by the facility, typically expressed in tCO2e/year. The higher the threshold/cap, the lower the number of facilities covered but also the lower the administrative costs for the regulator. This would imply an overall lower share of emissions reduction. The choice of threshold/cap strongly depends on the national circumstances and composition of the covered sectors in terms of the existing and planned installations. Due to uncertainties regarding future economic growth in Cameroon, an ETS would need to be based on an adjustable 'cap' based on the expansion of activities that will be covered by the ETS and their corresponding carbon emitted (e.g. oil and gas exploitation and refinery and cement and aluminium production and the tonnes of carbon emitted by these activities). In other words, the threshold/cap would be adjusted to the actual production of entities covered (intensity-based threshold/cap). The stringency of the 'cap' would also be adjusted over time in relation to the level of ambition expected by the ETS.

e. Setting the price of a ton of carbon credit in an ETS in a multi-phased approach

There is equally the concern of setting the price for a ton of carbon credit to be traded in an ETS, whether it will be a fixed (a price that does not changes over time) or fluctuating price (a price that changes over time). It will be a fluctuating price if the price will be determined by demand and supply of carbon credit.

The price can take a multi-phased approach. This means that the government of Cameroon can replicate the examples of countries that are already implementing ETS and adopt a multi-phased approach to ETS in which the price increases over time. This will require the government to set the price for a period of time after which the price should increase overtime in order to prevent industries from taking advantage of a low price and then decide to pollute and pay. A multi-phased approach to ETS is also needed to reduce economic or social shocks that can result from the introduction of ETS with higher carbon credit prices.

f. Avoiding the risk of carbon leakage

High prices imposed by ETS could cause industries to shift investment to sectors not covered by ETS or to shift production to countries with less stringent emission reductions policies. If the Government of Cameroon decides to implement ETS, it will have to ensure that the price charged per ton of carbon is not too high in order to avoid the risk of carbon leakage.

The risk of carbon leakage is also relatively easy to manage through free allocation of allowances for covered entities.

g. Transparency and information disclosure – Need for a Robust Monitoring, Reporting and Verification (MRV) framework/system

Transparency and information disclosure are concerns that serve to ensure accuracy, reliable data on GHGs and avoid double counting of emission reductions. The carbon market needs a secure, transparent and information disclosure system that ensures changes to data are auditable. This can considerably reduce the potential for the same carbon credit to be counted and sold twice. Transparency and information disclosure require the putting in place of a robust framework or system for carrying out MRV which can be adjusted to serve the implementation of ETS. MRV seeks to prove that an activity has actually avoided or removed harmful GHG emissions so that actions can be converted into credits with monetary value. One credit equals one ton of reduced GHG emissions expressed in tons of CO_2 equivalent (tCO2eq). These credits are the basic units traded in international carbon markets and used to fulfil countries' NDCs under the Paris Agreement[117]. MRV system is therefore crucial in calculating Emissions reduction credits (ERCs) and key to unlocking climate finance and showing progress on climate goals in countries.

The same principles of the MRV as discussed in the case of carbon tax under chapter 5.I.1.m, apply to ETS *mutatis mutandis*..

h. Distributional effects or socio-economic costs associated with ETS

Another concern about the implementation of an ETS in Cameroon that the government will have to address is the distributional effects or the socio-economic impacts of ETS on citizens and households and on overall national economic growth and development. What is discussed about this point in the case of carbon tax under Chap 5.I.1.f. applies here. Moreover, the implementation of ETS in a sector entails the development of other sectors wherein informal businesses can be encouraged to invest in carbon offset projects within the framework of ETS implementation.

i. Ensuring alignment with other national policies and objectives (both climate and non-climate related policies and objectives)

If the Government of Cameroon decides to introduce an ETS, it is important that it ensures the alignment of the ETS with other national policies and objectives (both climate and non-climate policies and objectives). Importantly, a potential ETS should enhance or contribute to the achievement of Cameroon's NDC, National REDD+ Strategy, NPCCA, National Energy Efficiency Policy, Strategy and Action Plan in the Electricity Sector and all potential future

[117] World Bank Group, (2022), "What You Need to Know About the Measurement, Reporting, and Verification (MRV) of Carbon Credits", https://www.worldbank.org/en/news/feature/2022/07/27/what-you-need-to-know-about-the-measurement-reporting-and-verification-mrv-of-carbon-credits.

policy documents such as NDC 3.0. (Revised NDC), LT-LEDS and the National Climate Plan which are underway.

j. How would the government derive revenue from ETS and what is the Linkage between ETS revenue and NDC implementation?

To understand how the government of Cameroon can generate revenue from the implementation of an ETS, it is important to make a recap of how it works. The government starts by setting a threshold/cap on emissions permitted across a given sector/industry. The total amount of the cap is split into allowances. The government distributes the allowances to covered facilities, either free of charge or through auction sales. Through such sales, the government can generate revenues. Each allowance permits a facility to emit one ton of CO_2. Each year, the government lowers the number of permits/caps thereby making the permits/caps more expensive. Over time, covered facilities have an incentive to reduce their emissions by investing in clean technologies which are cheaper than buying permits/caps. Facilities are imposed fines if they emit a higher level of emissions than their permits/caps allow them. This implies that an additional source of revenue would be made available to the government. On the other hand, facilities that reduce their emissions or emit below their permitted caps can trade or sell the emission allowances (the unused credits) to facilities that that surpass their caps. Thus, alternatively, the government can generate revenue from the implementation of an ETS by designating a national Body/Authority whose mandate will be to oversee carbon credit sale transactions between buying and selling entities, against commissions from both. The low emitters can also bank the emission allowances for future use[118]. Thus, if Cameroon introduces an ETS, the government can generate revenues from its implementation.

The linkage between ETS revenue and NDC implementation raises the concern of how the government will channel revenue from an ETS into Cameroon's NDC implementation. What is discussed in the case of carbon tax under Chap 5.I.1.n. applies *mutatis mutandis* here.

k. Transition period/framework

A transition period is a timeframe that is set to allow domestic industries to adapt to an ETS. The transition period is needed to reduce economic or social shocks that can result from the introduction of an ETS. Thus, in the initial stages of the development of an ETS in Cameroon, the government could allocate allowances free of charge to covered facilities. This should be consistent with the experiences of most ETSs around the world. As the ETS matures and covered facilities gain experience, auctioning of allowances would be expected to gradually replace the free allocation.

[118] Environmental Defense Fund, op. cit.

l. Cost-effectiveness and efficiency

Cost-effectiveness and efficiency means that the cost of implementation or administration of ETS should not exceed the revenue derived from it. Thus, if the Government of Cameroon decides to introduce an ETS, it would do well to ensure that the cost of implementation does not exceed the revenue to be derived from it.

m. Reliability and environmental integrity (environmentally-friendly)

Reliability and environmental integrity means that an ETS should be able to reduce practices that harm the environment. What is said about carbon tax under Chap 5.I.1.k. applies to ETS *mutatis mutandis*.

n. Institutional framework and stakeholders and their respective roles in the design and implementation of an ETS in Cameroon

What is said about carbon tax under Chap 5.I.1.i. applies to ETS *mutatis mutandis*.

o. Inclusiveness and fairness

Inclusiveness and fairness raises concerns whether all emitting sectors in Cameroon will be subjected to an ETS or whether there will be exemptions; and whether all emitting entities in a covered sector will be subjected to the ETS or whether there will be exemptions. This concern is addressed under this chapter in sub section II.1.a.i above.

p. Stability and predictability

An effective ETS should be stable in order to send a clear, consistent, and strong signal to facilities, which can rely on it to take measures to cut or reduce their emissions.

q. Competitiveness

The concern of competitiveness has to do with the impact of an ETS on domestic industries. The implementation of an ETS in Cameroon could put domestic intensive-carbon emission industries, such as those in energy or cement/concrete and aluminium production at a competitive disadvantage *vis-à-vis* international competitors that do not face an equivalent tax. This can impact on the overall economic growth and development of the country.

r. Flexibility

Since ETSs expose emitters to the external costs of their emissions in the most flexible and least costly way, an ETS in Cameroon should allow flexibility for facilities to tailor their compliance path to their needs. That is, every year, carbon emissions facilities can be incentivised to reduce their emissions below a ‘cap’, which may yield them carbon credits, which they can sell or they can continue to emit above the ‘cap’ and pay for those emissions.

s. Linkage with other ETSs

In the event that Cameroon introduces an ETS, the government could consider the possibility of linking it with other ETSs in the sub region or region for instance. Linkage in a sub region or region occurs when an ETS in country 'A' allows covered facilities to use allowances or credits issued in other ETSs in country 'B' for compliance purposes. ETS linkages have been established in jurisdictions with similar socio-economic development patterns and allowance prices. Among countries of West and Central Africa sub region including Cameroon, the consideration of CPIs is still in their early stages.

In all, there are a number of caveats that must be retained by the Government of Cameroon if it decides to implement an ETS. Deciding on the above caveats has crucial implications not only for the political and socio-economic acceptability of the scheme, but also for administrative convenience and the overall effectiveness of the ETS in reducing GHGs and contributing to the achievement of Cameroon's NDC and broader environmental and socio-economic co-benefits.

2. Opportunities for the introduction of an ETS in Cameroon

Opportunities for the introduction of an ETS in Cameroon include:

- The deployment of cleaner forms of energy and energy efficiency, which hold a significant untapped potential in Cameroon. This justifies the discouraging of fossil fuel through an ETS and accelerating or expanding renewable power generation.
- An ETS can increase the country's attractiveness to international investments in environmentally friendly projects.
- An ETS can generate revenue (for both companies and the Government) from the sale of extra allowances (non-emitted carbon).
- An ETS can empower and enhance gender responsiveness among youths, women and vulnerable groups to invest in carbon offset projects.
- An ETS can help to track GHG emissions at the points where they occur (points of emissions), thereby providing a basis of support to monitor progress in the implementation of Cameroon's NDC goals.
- An ETS can address the emissions of local air pollutants, as these often go hand-in-hands with the emissions of GHGs.
- Possibility of establishing linkages with the CPIs of other jurisdictions and cooperative approaches under Article 6.2 of the Paris Agreement by trading in carbon credits.
- Existence of environmental fines[119], a category of non-tax revenue derived from the environment sector which is levied on natural or moral persons who cause damage to the environment. This can lend help to the design and implementation of ETS in Cameroon.

[119] Section 27(4)(a) of Law No. 2023/019 of 19 December 2023 to institute the Finance Law of the Republic of Cameroon for the 2024 Financial Year.

3. Challenges associated with the introduction of an ETS in Cameroon

Challenges to the implementation of an ETS in Cameroon include:

- Inadequate MRV system/framework (capacities for carrying out GHG inventory (MRV system) exist in Cameroon but are not available at facility levels).
- No existing operational, administrative and legal frameworks (e.g. facility-level MRV system, functional ETS registry, legal frameworks etc.).
- No price certainty due to fluctuation of carbon price over time as the price in an ETS depends on the demand and supply for carbon credits within an economy.

4. The use of carbon credits/offsets under ETSs

Carbon offsets, also known as carbon credits, can be used in ETSs to help companies achieve their emission reduction targets. These credits represent verified emission reductions from projects outside the ETS, allowing companies to "offset" a portion of their emissions within the system. One of the merit of carbon offsets in ETSs is that it provides flexibility for companies to reduce emissions beyond the specific sectors. Companies can purchase and use carbon offsets to partially fulfill their emission reduction obligations under the ETS. Carbon offsets are not meant to replace direct emission reductions but are used as an additional tool to help companies achieve their climate goals. This means that companies can choose the most cost-effective way to reduce emissions, including investing in projects outside the ETS. Thus, another merit is that using carbon offsets can be cost-effective. Carbon offsets can only be allowed in ETSs from approved projects. As another merit, the use of carbon offsets can incentivize emission reductions by creating a financial incentive for companies to invest in projects that reduce or remove GHG emissions. Another merit is that carbon offsets can help support projects that contribute to climate change mitigation, such as reforestation, energy efficiency improvements, and renewable energy projects. However, carbon offset also records some demerits. For instance, carbon offsets have been criticized for being low in price and not always having a significant impact on overall emissions reductions. For example, while carbon offsets were previously allowed from approved projects in the EU ETS, they are no longer permitted due to low prices and limited impact. It is based on this limitation that companies are encouraged to prioritize direct emission reductions within their operations and should use carbon offsets as a supplement rather than a replacement for these efforts.

III. Cameroon's Interest in Considering Cooperative Climate Action under Article 6 of Paris Agreement and the Role of Carbon Pricing Instruments in Supporting its Involvement

Before examining Cameroon's interest in considering cooperative approaches under Article 6 of Paris Agreement and the role of CPIs in supporting the country's involvement, it is important to briefly explain the market opportunities that Article 6 offers. Article 6 of the Paris Agreement lays the foundation for cooperative approaches and contains provisions that allow countries to pursue voluntary cooperation to achieve their emission reduction targets set out in their NDCs. Article 6 therefore provides a framework for countries to cooperate towards the

implementation of their NDCs through the carbon market mechanisms (Articles 6.2 and 6.4) and the non-market mechanisms (Article 6.8).

Article 6.2 governs international cooperation that involves international transfers of mitigation outcomes (ITMOs) from one country to another towards achieving NDC targets. Article 6.2 requires that ITMOs are not counted twice (double counting), to ensure environmental integrity. Decision 2/CMA.3 provides guidance for countries to cooperate in achieving their NDCs through the transfer of mitigation outcomes. Article 6.2 therefore provides a framework for two countries to cooperate in which they conclude a bilateral agreement under which one country invests in emission reduction projects and transfers the reduction and counts it as its own emission reduction. This means that only the investing country can count the emissions reduction. The host country in which the project is implemented cannot count the emission reduction. The successful adoption of the Article 6.2 decision during COP29 in Baku, 2024 lays a foundation for ensuring more consistent and transparent implementation of this category of cooperative approaches. In effect, COP29 reached a decision[120] on Article 6.2, giving a firmer footing to the implementation that is already underway between some countries and giving negotiators a break until 2028. The decision requests more upfront information from countries reporting on their activities.

On its part, Article 6.4 establishes the Paris Agreement Crediting Mechanism (PACM) – a carbon crediting mechanism under the supervision of the CMA[121]. The PACM is a mechanism for trading GHG emission reductions between countries which allows countries to raise climate ambition and implement national action plans more cost effectively. PACM is a centralized mechanism under the purview of the UNFCCC which generates accredited emission reductions (A6.4ERs), while integrating measures to enhance sustainability and environmental integrity. It is similar to the CDM under the Kyoto Protocol in its design, but has new requirements and characteristics compared to the CDM. It can be used by countries to meet their NDCs (subject to authorization status). Article 6.4 therefore provides a framework for cooperation among countries where the UNFCCC acts as a mediator, which monitors and coordinates the transaction between countries. Article 6.4 identifies and encourages opportunities for verifiable emission reductions, attracts funding to implement them, and allows cooperation among countries and other stakeholders (private sector and CSOs) to conduct and benefit from these activities. For example, through the PACM a company in one country can reduce emissions in that country and have those reductions credited, so that it can sell them to another company in another country.

Among many other achievements, COP29 in Baku finally reached global agreement on Article 6.4 of Paris Agreement which governs international carbon markets or carbon trading,

[120] Decision -/CMA.6 on Guidance on cooperative approaches referred to in Article 6, paragraph 2, of the Paris Agreement and in decision 2/CMA.3, https://unfccc.int/sites/default/files/resource/cma2024_L15_adv.pdf.

[121] In the context of the Paris Agreement, CMA stands for the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement, which is the supreme body responsible for overseeing and promoting the effective implementation of the Agreement.

bringing nearly a decade of negotiations to a close. Thus, the rules governing a new international carbon market under Article 6.4 are now more or less complete.

On its part, Article 6.8 focuses on other types of cooperation that contribute to meeting mitigation and adaptation goals, but do not involve transfer of any mitigation outcomes among cooperating Parties. Article 6.8 offers a non-market mechanism where donors simply provide supports or grants to countries to implement carbon emissions reduction projects, by prioritizing technology transfer, climate finance and capacity building. Under Article 6.8, Parties are urged to recognize the importance of integrated, holistic and balanced non-market approaches available to them to assist in the implementation of their NDCs, in the context of sustainable development and poverty eradication, in a coordinated and effective manner, including through, inter alia: mitigation, adaptation, finance, technology transfer and capacity building, as appropriate. Article 6.9 defines a framework for non-market approaches to sustainable development to promote the non-market approaches established in 6.8.

These approaches shall aim to:

- Promote mitigation and adaptation ambition;
- Enhance public and private sector participation in the implementation of NDCs; and
- Enable opportunities for coordination across instruments and relevant institutional arrangements.

The above cooperative approaches provided for under Article 6 of the Paris Agreement can help countries, including Cameroon to achieve and enhance their NDC targets. Article 6 therefore enables international cooperation to tackle climate change and unlock financial support for developing countries through the development of carbon markets[122]. Indeed, Article 6 mechanisms can be a source of climate finance for Cameroon and other developing countries, with a share of the proceeds going towards adaptation funding to build resilience to the impacts of climate change.

In its updated NDC[123], Cameroon has expressed its intention to participate in the voluntary international cooperation mechanisms as encouraged by Article 6 of the Paris Agreement and plans to strengthen its capacities for effective participation in the mechanisms of Article 6. Although Cameroon has shown its intention to voluntarily cooperate under Article 6 to achieve its NDC, the expression of Cameroon's intention to participate in the voluntary market and financial cooperation mechanisms is indirect. Recent progress in Cameroon's interest in considering Cooperative Climate Action under Article 6 of Paris Agreement was made on 25

[122] Carbon markets are carbon pricing mechanisms enabling governments and non-state actors to trade greenhouse gas emission credits. The aims are to achieve climate targets and implement climate actions cost-effectively. There are two types of carbon markets: Compliance and voluntary. In compliance markets such as national or regional emissions trading schemes participants act in response to an obligation established by a regulatory body. In voluntary carbon markets, participants are under no formal obligation to achieve a specific target. Instead, non-state actors such as companies, cities or regions seek to voluntarily offset their emissions, for example, to achieve mitigation targets such as climate neutral, net zero emissions.

[123] Updated NDC of Cameroon, p. 50.

October, 2022, during which the Minister of Finance chaired a workshop in Yaoundé, to raise awareness among public sector stakeholders, of the carbon market to improve its contribution to the State budget; and to carry out a situational analysis and suggest measures or solutions to address the deficiencies and shortcomings in Cameroon's efforts to access the carbon market[124].

Additionally, the 2020 GHG inventory report[125] of Cameroon highlights the important role of forests as carbon sinks, opening pathways for Cameroon to benefit from Article 6.4's PACM. Cameroon's robust forestry sector positions it as a prime candidate for forestry-related carbon credits investments under international carbon markets, allowing the country to sell verified emissions reduction credits achieved through reforestation, afforestation, and reduced deforestation. These credits can be traded internationally, creating financial incentives for sustainable land use and conservation initiatives.

If Cameroon therefore decides to pursue any of the voluntary cooperative approaches offered by Article 6 of the Paris Agreement to achieve the emission reduction targets set out in its NDC, it can do so, through carbon crediting mechanism and domestic offset mechanism. This means that these approaches can play a role in supporting Cameroon's involvement in the cooperative approaches under Article 6 of the Paris Agreement.

IV. Cameroon's Readiness Status for the Introduction of Carbon Pricing Instruments: An Assessment of the Level of Readiness Elements

Based on the analysis of the national context and the different elements required for the design and implementation of CPIs in Cameroon, this section reflects the readiness status of Cameroon for the introduction of CPIs. It presents or outlines a framework under which a set of "readiness" elements are briefly analysed. Thus, Cameroon's readiness status for the introduction of CPIs takes into account 11 (eleven) readiness elements. The readiness elements are assessed at three levels viz: 'high', 'medium' and 'low' as shown on the table below.

Table 9: Representation of Cameroon's readiness status for the introduction of CPIs and an assessment of the level of readiness for each of the readiness elements

No.	Readiness Elements	Brief Descriptions/Observations	Levels of Readiness		
			High	Medium	Low
1	National Policy Framework	Cameroon's national policy framework is supportive of the introduction of CPIs, in particular the 2021 updated NDC and the 2018 REDD+ Strategy.		X	
2	National Legislative and Regulatory Framework	Although a few regulatory and legislative texts directly and indirectly envisage the introduction of CPIs in Cameroon, a comprehensive regulatory framework would need to be established from scratch for the purposes of setting-up and operationalizing CPIs in Cameroon.			X

[124] Mbodiam B.R. op. cit.
[125] MINEPDED , (2024), Biennial Update Report (BUR), BUR1, https://unfccc.int/documents/641418.

3	National Institutional Framework	Institutional support for the design and operationalization of CPIs in Cameroon exists but the relevant institutions need to be strengthened. No National Climate Change Fund that can manage revenues derived from CPIs in Cameron.			X
4	NDC provisions for emissions projection, emissions reduction pledge/commitment and CPIs,	Cameroon's updated NDC has laid out recent climate projection scenarios, which indicate that with measures taken into account, increase in emissions is projected at 104,187 Gg CO2 eq in 2030 – an increase of 66% compared to 2010 (34,933 Gg CO2 eq) and a reduction of 12% compared to the BAU scenario. In this same scenario, but this time with additional measures, the increase in emissions is projected at 76,826 Gg CO2 eq in 2030, an increase of 55% compared to 2010 and a reduction of 35% compared to the BAU scenario, which represents in absolute value 42,259 Gg CO2 eq reduction. These emissions increase and reduction projections can serve as bases that can inform the design and operationalization of CPIs in Cameroon.	X		
5	GHG inventory/MRV framework/system	The preparation of a GHG inventory is a first step to quantify GHG emissions occurring at facility levels. Although capacities for carrying out GHG inventory (MRV system) exist in Cameroon, such capacities are not available at facility levels and need to be established in order to enhance the operationalization of CPIs in Cameroon. Cameroon has an MRV framework for tracking emissions at the national level which can be used at the facility level in the context of CPIs. As part of the implementation of the Paris Agreement and with the help of the Belgian government NDC support initiative, MINEPDED set up Cameroon's National Greenhouse Gas Inventory System known in French as Système National d'Inventaire des Gaz à Effet de Serre (SNI-GES) in 2017. The SNI-GES is an MRV tool that enables Cameroon to carry out transparent and reliable GHG inventories, which are used for Cameroon's Biennial Update Report (BUR), Biennial Transparency Reports (BTRs) and National Communications (NCs) on Climate Change. The role of the SNI-GES is to collect, analyze and report data on GHG emissions. It makes it possible to monitor and quantify GHG emissions from different sources, such as industry, waste, agriculture, energy, etc.		X	
6	GHG Data and Registries	There is no up-to-date data on GHG emissions, including registries in Cameroon, which is essential (e.g. in tracking progress in implementation, definition of			X

		benchmarks, etc.) for the introduction of CPIs			
7	Stakeholder awareness and engagement	Stakeholder engagement and communication are essential elements for the success of CPIs. While there is a growing awareness in Cameroon on these instruments, especially among officials of MINEPDED, MINFI and a few CSOs, further efforts are required to engage other stakeholders, namely, the private sector and industrial associations, and sub-national authorities such as Decentralised Territorial Authorities (Regions and Councils).		X	
8	Existing fiscal and market-based mechanism for inspiration	There exists taxes that already price externalities in Cameroon namely: The STPP currently charged on certain fuels such as liquefied natural gas can inspire the operationalization of a carbon tax in Cameroon whereby the charges levied would be based on the carbon emission potential of the petroleum products covered. This could even entail a replacement of the STPP altogether for a broader carbon tax on such petroleum products. The hygiene and sanitation tax levied and collected by councils for the control of foodstuffs and commercial and industrial buildings can also inspire the design and implementation of carbon tax in the industrial production of cement and aluminium in Cameroon.	X		
9	International political and legal commitments of the country	Cameroon is a signatory and has ratified the bedrock international legal instruments for reducing GHG emissions and combating climate change notably, the UNFCCC, 1992 and the Paris Agreement, 2015 which mirror Cameroon's interest and readiness status for the introduction of CPIs.	X		
10	Experiences with market-based approaches and climate finance that can inform CPIs	Past experiences with the CDM of the Kyoto Protocol and REDD+ provide valuable lessons for operationalizing CPIs in Cameroon.		X	
11	National political and public support	National political supports for the introduction of CPIs in Cameroon exist and is afforded by: A workshop organised on 25 October, 2022 in Yaoundé, chaired by the Minister of Finance, to raise awareness among public sector stakeholders, of the carbon market to improve its contribution to the State budget; and to carry out a situational analysis and suggest measures to address the deficiencies and shortcomings in Cameroon's efforts to access the carbon market. The Workshop on Capacity Building and Stakeholder Consultation on the Feasibility of Carbon Pricing in Cameroon and Article 6 of Paris Agreement (Carbon		X	

		Market), which took place in Yaoundé, organized by the UNFCCC Regional Collaboration Center for West and Central Africa (RCC WACA), in collaboration with MINEPDED from 24-26 September 2024. The workshop aimed to engage Cameroonian stakeholders and strengthen their capacities in using economic instruments like carbon pricing, which offer opportunities to reduce emissions in alignment with the Paris Agreement. Participants included representatives from key sectoral administrations, technical and financial partners, the private sector, urban communities, experts, researchers, and civil society organizations. Following the above Workshop on Capacity Building and Stakeholder Consultation on the Feasibility of Carbon Pricing in Cameroon and Article 6 of Paris Agreement (Carbon Market), representatives of the civil society and the private sector expressed their commitment to collaborating with the Government of Cameroon in designing a carbon pricing instrument suitable to Cameroon's context.			

All in all, it can be concluded that the level of Cameroon's "readiness" for the introduction of carbon pricing is medium. The main gaps relate to regulatory, institutional and technical aspects such as the need to come up with an institutional set-up and develop an MRV framework and that can support the operationalization of CPIs. Capacity building, awareness raising and stakeholder engagement are other areas that would need to be addressed in case carbon pricing is to be introduced in Cameroon.

V. National Approaches to the Implementation of Carbon Pricing Instruments that can be Considered in the Cameroonian Context

The implementation of carbon pricing can take a range of approaches and allows national and sub national/local governments to select the tools that best suit their broader economic, social and environmental policy objectives. So long as a CPI or all the CPIs align with the broader economic, social and environmental policy objectives of countries, national and sub national governments can select to implement either carbon tax exclusively or exclusive implementation of ETS or the implementation of hybrid approaches consisting of the combination of both carbon tax and ETS or the combination of both carbon tax and ETS and other mechanisms or instruments that could be considered in the context of Cameroon. Thus, while most systems in operation around the world fall into the categories of carbon tax or ETS, there are also carbon pricing approaches that blend elements of the two or even combine them with other hybrid approaches. Before examining the national approaches to the implementation of CPIs in Cameroon, it is important to briefly describe the other mechanisms or instruments that can be combined with carbon tax and ETS, which are referred to as hybrid approaches.

Table 10: National hybrid approaches that can be considered in the Cameroonian context

Hybrid approaches (Combination/blending of mechanisms)	Brief Description
[126] **The use of domestic offset in carbon tax and ETS**	**Carbon tax + offset:** Under this hybrid approach, a carbon tax is imposed but entities or facilities can use offsets for achieving compliance to reduce their net emissions which are subject to taxation. Through this hybrid approach, facilities could develop projects that result in the reduction of GHG emissions, thereby generating Carbon Credit Units, which would be sold to facilities intending to offset their emissions. This option allows the achievement of compliance obligations at a lower cost instead of paying the tax while extending the price signal from the carbon tax to other sectors in the form of an incentive for emission reductions. This option can also create a market for emission reduction credits. Colombia and South Africa provide good examples of this approach. Since January 2017 in Colombia, a tax is imposed on all liquid fossil fuels nationally produced or imported. However, 100% of the tax obligation can be met through the purchase of offsets. In South Africa, the carbon offset allowance system provides flexibility to firms to reduce their carbon tax liability by either 5% or 10% of their total GHG emissions. This is achieved by investing in projects that reduce their emissions. This system allows the reduction of GHG emissions in sectors or activities that are not directly covered by the tax. This hybrid approach could be considered in the context of Cameroon as a way of stimulating GHG abatement projects, which could be used to support the achievement of the country's NDC targets.
	ETS + offset: Under this combination, an ETS is applied to specific sectors, while credits for emission reductions achieved outside covered sectors can be generated and used for compliance under the ETS. Through this hybrid approach, facilities could develop projects that result in the reduction of GHG emissions, generate Carbon Credit Units, which would be sold to facilities intending to offset their emissions in an ETS. This combination allows sourcing compliance units at a cost lower than that of the ETS and extends the price signal to other sectors in the form of an incentive for emission reductions. Some jurisdictions which have implemented an ETS allow the use of offsets (e.g., the Korean ETS) This hybrid approach could be considered in the context of Cameroon as a way of stimulating GHG abatement projects, which could be used to support the achievement of the country's NDC targets.
Carbon crediting mechanism or offsets	Under a carbon crediting mechanism, emissions reductions that occur as a result of a project implemented by entities (governments, companies, NGOs, sub-national governments such as Decentralised Territorial Authorities (Regions and Councils) in the case of Cameroon, and other actors), are assigned credits. Entities seeking to offset their emissions can buy the credits. This approach requires a formally recognized third-party verifier to sign off on the emission reduction before it is credited through the issuance of carbon credit certificates.

[126] IETA, Australia: a Direct Action Case Study, 2016, https://www.ieta.org/resources/Resources/Case_Studies_Worlds_Carbon_Markets/2016/Australia_Case_Study_092016.pdf.

carbon tax + ETS combined in different sectors	Under this hybrid approach, specific sectors are covered by an ETS while other sectors outside the ETS scope are covered by a carbon tax. Examples of jurisdictions adopting this hybrid approach are Mexico and Portugal. Both instruments can be linked if revenues from the tax are reinvested in the ETS, for example by purchasing and retiring allowance units from the ETS.
ETS + price control mechanism	An ETS is operated but mechanisms to control the price apply to ensure either a minimum price and/or a price ceiling. This solution increases the investment certainty for curbing emissions by guaranteeing a price range for allowances. The United Kingdom is an example of a jurisdiction that has introduced a carbon price floor.

The table below summarises the different carbon pricing options/approaches that can be implemented in Cameroon. It summarises their potential targeted sectors, main pros/merits, main cons/demerits/challenges, level of political feasibility/acceptance, level of technical feasibility, corporate acceptance, public acceptance, and overall expected impact in terms of GHG emissions reduction. The assessment of political feasibility/acceptance, technical feasibility, corporate acceptance, public acceptance and expected impact are measured in five scales viz: "very low", "low", "medium", "high" and "very high". The bases on which the scales are assigned include: stakeholder consultation during the "Workshop on Capacity Building and Stakeholder Consultation on the Feasibility of Carbon Pricing in Cameroon and Article 6 of Paris Agreement (Carbon Market)", expert judgments, legal and policy support, Government's actions, and intuition. This table summary also constitutes one of the bases for the lessons learnt and recommendations to the Government of Cameroon on the way forward provided in chapter six of this assessment.

NB: Public perceptions can impact the ability of a policy to be adopted, implemented, and sustained over time. The willingness of firms or citizens to accept additional taxation or emissions caps is critical for policy success.

Table 11: The different carbon pricing approaches for consideration by the Government of Cameroon

Carbon Pricing Options/ Approaches	Potential Targeted Sectors	Main Pros/ Merits	Main Cons/ Demerits	Political feasibility/ acceptance	Technical feasibility	Corporate acceptance	Public acceptance	Expected impact in terms of GHG emissions reduction
Carbon Tax	i) Targeted sectors: energy sector (fossil fuel or gas flaring and oil and gas refinery) and industrial sector (industrial production of cement and aluminium). ii) Adjustment of Special Tax on Petroleum Products (STPP) currently charged on certain fuels such as liquefied natural gas to a carbon tax on petroleum-based fuels. iii) Possibility for offset use from sectors not covered by carbon tax (e.g.,agriculture and forestry sectors)	i) Ease of understanding for all stakeholders involved. ii) Already existing structures to initiate the option. iii) Low cost of administration. iv) Generation of revenue. v) Opportunity for achieving Cameroon's NDC targets. vi) Price certainty as the rate of the tax will be fixed for a given period.	i) Risk of low influence in changing end-users behaviors towards low-carbon intensive sources of energy because of associated costs involved. ii) Revenue generated from the tax may be used for purposes other than climate change mitigation or adaptation. iii) Risk of transferring or passing on the financial burden of carbon tax to end-users.	**Very High**	**High**	**Medium**	**Low**	**High**

	iv) Possibility of future expansion to other sectors.							
Economy-wide carbon tax	i) Introduction of an economy-wide carbon tax on petroleum products and cement and aluminium production that puts a price on CO_2 emissions that would apply to all users of fossil fuel (businesses and households) and consumers of cement and aluminium. ii) The point of regulation would be downstream, i.e., at the point of fuel and cement and aluminium purchase.	i) Ease of understanding for all stakeholders involved. ii) Low implementation cost. iii) Can be implemented using existing institutional structures. iv) Generation of revenue because of price certainty. v) Opportunity for achieving Cameroon's NDC targets.	i) General resistance among some government agencies, businesses and the general public to an additional tax. ii) Risk of the poorest being disproportionally affected by the tax unless impact mitigation measures are established. iii) Emission reduction outcomes and the extent of contribution to the achievement of Cameroon's NDC depend on how high the tax rate is set. iv) Difficulties in managing carbon leakage effects.	**Low**	**High**	**Low**	**Very Low**	**High**
Emission Trading System (ETS)	i) Targeted sectors: energy sector (fossil fuel or gas flaring and oil and gas refinery) and industrial sector (industrial production of cement and	i) Certainty in emissions reductions based on the cap defined and opportunity for achieving Cameroon's NDC targets. ii) Opportunity for	i) Need for setting up from scratch of all operational, administrative and legal frameworks (e.g. facility-level MRV system, functional ETS registry, legal frameworks etc.).	**High**	**Medium**	**Medium**	**Medium**	**High**

	aluminium) ii) Possibility for offset use from sectors not covered by the ETS (e.g., agriculture and forestry sectors) iii) Possibility of future expansion to other sectors.	trading emission allowances. iii) Potential for linkages with international carbon markets for purposes of selling mitigation outcomes. iv) Source of revenue to the government once allowances are auctioned. v) Risks related to competitiveness and carbon leakage are relatively easy to manage (e.g. through free allocation of allowances).	ii) Difficulty in understanding by all relevant stakeholders (government institutions, businesses and other stakeholders involved) and strong need for capacity building of all relevant stakeholders. iii) Requires long term for full implementation. iv) High costs of development and implementation. vi) No price certainty due to fluctuation of carbon price over time as the price in an ETS depends on the supply and demand for carbon credits within an economy.					
Hybrid Approaches	**Main Design Features**	**Main Pros/ Merits**	**Main Cons/ Demerits**	**Political feasibility/ acceptance**	**Technical feasibility**	**Corporate acceptance**	**Public acceptance**	**Expected impact in terms of GHG emissions reduction**
A domestic offset mechanism in sectors not covered by carbon tax	i) Targeted sectors: (forestry and agriculture sectors) ii) Possibility of future expansion to other sectors.	i) Provides flexibility to facilities to reduce their carbon tax and ETS liability by a certain percent of their total GHG	i) Emission reduction outcomes and the extent of contribution to the achievement of Cameroon's NDC depend on the	**Very High**	**High**	**High**	**Very High**	**Very High**

and ETS (Carbon tax + offset OR ETS + offset)		emissions. ii) Allows the achievement of compliance obligations at a lower cost instead of paying the tax and/or the cap. iii) Extends the price signal from the carbon tax and ETS to other sectors in the form of an incentive by allowing the reduction of GHG emissions in sectors or activities that are not directly covered by the tax or the cap. iv) Entities can develop projects that result in the reduction of GHG emissions, thereby generating Carbon Credit Units and creating a market for emission reduction credits. v) Stimulates GHG abatement projects, which could be used to support the achievement of Cameroon's NDC targets.	availability and price of Carbon Credit Units. II) Risk of ensuring permanence during the statutorily fixed period.					

		vi) Can build on existing systems such as the CDM. Hence, no need for setting up from scratch of all operational, administrative and legal frameworks (e.g. facility-level MRV system, functional registry, legal frameworks etc.)						
Carbon crediting mechanism or offset	i) Targeted sectors: (forestry and agriculture sectors) ii) Possibility of future expansion to other sectors.	i) Provides opportunities for facilities that exceed their legal emissions levels to reduce their emissions by buying the credit units as a way to offset their actual emissions. ii) Allows the achievement of compliance obligations at a lower cost. iii) Entities can develop projects that result in the reduction of GHG emissions, thereby generating Carbon Credit Units and creating a market for emission	i) Emission reduction outcomes and the extent of contribution to the achievement of Cameroon's NDC depend on the availability and price of Carbon Credit Units, particularly those retained for domestic use, including credits generated and utilized within national compliance schemes, voluntary market transactions, or sector-specific mitigation programs without international transfer. II) Risk of ensuring permanence during the statutorily fixed period.	**Very High**	**High**	**High**	**Very High**	**Very High**

		reduction credits. iv) Stimulates GHG abatement projects, which could be used to support the achievement of Cameroon's NDC targets. v) Can build on existing systems such as the CDM. Hence, no need for setting up from scratch of all operational, administrative and legal frameworks (e.g. facility-level MRV system, functional registry, legal frameworks etc.)						
Carbon tax + ETS combined in different sectors	Targeted sectors: - Energy sector (fossil fuel or gas flaring and oil and gas refinery) for carbon tax. - Industrial sector (industrial production of cement and aluminium) for ETS.	i) Provides flexibility to facilities to reduce their emissions as revenue from carbon tax can be reinvested in the ETS, for example by purchasing and retiring allowance units from the ETS. ii) Opportunity for achieving Cameroon's NDC targets.	i) Risk of transferring or passing on the financial burden of carbon tax or ETS to end-users. ii) No existing structures to initiate ETS, hence, need for setting up from scratch of all operational, administrative and legal frameworks (e.g. facility-level MRV system, functional ETS	**Low**	**Medium**	**High**	**Low**	**High**

		iii) Generation of revenue. iv) Already existing structures to initiate carbon tax (can be implemented using existing institutional structures) but not ETS. v) Price certainty for carbon tax as the rate of the tax will be fixed for a given period.	registry, legal frameworks etc.). iii) General resistance among some government agencies, businesses and the general public to additional taxes. iv) High socio-economic costs on citizenry, reduced investments and consequential low economic growth and development.					
ETS + price control mechanism	i) Targeted sectors: energy sector (fossil fuel or gas flaring and oil and gas refinery) and industrial sector (industrial production of cement and aluminium) ii) Possibility for offset use from sectors not covered by the ETS (e.g., agriculture and forestry sectors) iii) Possibility of future expansion to other sectors.	i) Guaranteeing a price range (minimum price or a price ceiling) for allowances increases investment certainty for curbing emissions. ii) Certainty in emissions reductions based on the cap defined and opportunity for achieving Cameroon's NDC targets. iii) Opportunity to trade emission allowances. iv) Potential for	i) Need for setting up from scratch of all operational, administrative and legal frameworks (e.g. facility-level MRV system, functional ETS registry, legal frameworks etc.). ii) Difficulty in understanding by all relevant stakeholders (government institutions, businesses and other stakeholders involved) and strong need for capacity building of all relevant stakeholders. iii) Requires long term	**High**	**Medium**	**Medium**	**Medium**	**High**

		linkages with international carbon markets for purposes of selling mitigation outcomes. v) Source of revenue to the government once allowances are auctioned. v) Risks related to competitiveness and carbon leakage are relatively easy to manage (e.g. through free allocation of allowances).	for full implementation. iv) High costs of development and implementation.					

CHAPTER SIX: LESSONS LEARNT, RECOMMENDATIONS AND THE WAY FORWARD FOR CAMEROON

I. Lessons Learnt (Opportunities and Gaps)

Cameroon is presently considering exploring CPIs to reduce GHG emissions, incentivize investment in climate-friendly solutions, mobilize financial resources for funding climate mitigation and adaptation actions and to contribute to the achievement of its NDC, contribute to the State budget and the Long-term Low-Emission Development Strategies (LT-LEDS). This study makes an assessment of the potential and feasibility for the adoption of carbon pricing approaches in Cameroon. The assessment considers the specific national context of Cameroon for a possible design and implementation of CPIs. The analysis of the national context reveals both opportunities and gaps that can inform the Government of Cameroon on what needs to be done to get the country ready for the introduction of CPIs.

1. Opportunities

The assessment confirms the potential for the operationalization of CPIs in Cameroon, which adoption could unlock several opportunities and result in a number of benefits. The opportunities and benefits which a price signal on GHG emissions could trigger as a result of implementation of CPIs in Cameroon include but not limited to: addressing the challenge of mobilizing finance for the implementation of Cameroon's NDC both in terms of mitigation and adaptation; additional source of revenue for the Government of Cameroon and businesses, incentivizing low carbon growth and enhancing environmental protection; generating health benefits especially the reduction of local air pollutants such as particulate matter or nitrogen oxides thereby enhancing air quality; enhancing regional and international cooperation in the fight against climate change; and generating development benefits through investment in low-carbon transportation systems and low-carbon energy systems.

Another opportunity that can be drawn from the assessment is that Cameroon's national policy, legislative and regulatory framework is supportive of the introduction of CPIs, albeit timidly or inadequately as a few policy documents and regulatory and legislative texts directly and indirectly envisage the introduction of CPIs in Cameroon. Thus, a comprehensive regulatory framework would need to be established from scratch for the purposes of setting-up and operationalizing CPIs in Cameroon.

Institutional support for the design and operationalization of CPIs in Cameroon exists but the relevant institutions need to be strengthened.

The preparation of a GHG inventory is a first step to quantify GHG emissions occurring at facility levels. Although capacities for carrying out GHG inventory (MRV system) exist in Cameroon, such capacities are not available at facility levels and need to be established in order to enhance the operationalization of CPIs in Cameroon. Cameroon has an MRV framework for tracking emissions at the national level which can be used at the facility level in the context of

CPIs. As part of the implementation of the Paris Agreement and with the help of the Belgian government NDC support initiative, MINEPDED set up Cameroon's SNI-GES in 2017, which is an MRV tool that enables the country to carry out transparent and reliable GHG inventories, which are used for its BUR, BTRs and NCs on Climate Change. The role of the SNI-GES is to collect, analyze and report data on GHG emissions. It makes it possible to monitor and quantify GHG emissions from different sources, such as industry, waste, agriculture, energy, etc.

Stakeholder engagement and communication are essential elements for the success of CPIs. While there is a growing awareness about CPIs in Cameroon, especially among officials of MINEPDED, MINFI and a few CSOs, further efforts are required to engage other stakeholders, namely, the private sector and industrial associations, and sub-national authorities such as Decentralised Territorial Authorities (Regions and Councils).

Cameroon's past experiences with market-based approaches and climate finance notably, with the CDM of the Kyoto Protocol and REDD+ provide valuable lessons and can inform the operationalization of CPIs in Cameroon.

2. Gaps

Despite the opportunities drawn from the assessment, major challenges or gaps remain regarding the implementation of climate policies in general and Cameroon's readiness for the design and implementation of carbon pricing tools.

Despite the potential and feasibility for the introduction of CPIs in Cameroon, there remains a need to build key stakeholders' capacity to understand carbon pricing and make informed decisions. Both the central and local governments face resource, technical capacity and technological constraints in implementing climate policies in general. This does not augur well for the country in terms of readiness for the design and implementation of CPIs in Cameroon. In the context of emissions reduction transactions in Cameroon, challenges to carrying out MRV exist. There is inadequate capacity to carry out MRV operations at facility/corporate levels in Cameroon. These methodological or operational challenges stem from their sophistication and limited capacity to apply them. If the Cameroonian Government decides to implement CPIs, facilities may rely on international firms for MRV services, which can be costly and undermine country ownership. However, as noted earlier, Cameroon has an MRV framework for tracking emissions at the national level which can be used at the facility levels in the context of CPIs.

There is the absence of a comprehensive regulatory framework that can guide the design and implementation of carbon pricing tools in Cameroon.

Regarding the institutional framework for the operationalization of CPIs, efforts have been made through the adoption of the Climate Agenda, which defines an institutional framework of administrative stakeholders involved in climate change policies and responses. This will help to avoid duplication of mandates among concerned government agencies as it clearly defines roles and responsibilities across Ministerial Departments and designs appropriate coordination processes, which is crucial for the design and implementation of CPIs in Cameroon.

There is the absence of a National Climate Change Fund in Cameroon that could be a vehicle to support the collection and distribution of revenues raised through CPIs for specific climate mitigation and adaptation activities.

Cameroon's current low emission levels compared to other countries could limit carbon market opportunities.

II. Key Recommendations

Recommendation 1

GHG emissions from energy (fossil fuel, electricity) production and use and from industrial production of aluminium and cement are recommended as initial priorities for inclusion under the scope of CPIs in Cameroon. The results of the industrial process GHG emissions inventory in view of Cameroon's second National Communication on Climate Change in 2015 showed that CO_2 essentially come from aluminium production, followed by cement production[127]. Although the share of the IPPU sector GHG emissions is the least, accounting for only 0.47% of the total national GHG emissions according to the latest GHG inventory report[128], the industrial production of aluminium and cement will have a significant impact, considering the high number of cement and aluminum factories to go operational by 2025[129]. Emissions from the AFOLU and waste management sectors are not recommended as priorities. However, these sectors could be considered as a source of carbon offsets projects for use as compliance under carbon tax and ETS in the energy and IPPU sectors.

Recommendation 2

To address the regulatory deficiencies and shortcomings, a comprehensive regulatory framework would need to be established from scratch that will guide the design and implementation of carbon pricing tools in Cameroon or for the purposes of setting-up and operationalizing CPIs in Cameroon.

Recommendation 3

Currently, there is no officially adopted national MRV system for carrying out GHG inventories in Cameroon. However, capacity for carrying out MRV exists at the institutional level notably at MINEPDED and ONACC.

The existing capacity for carrying out GHG inventories, or MRV framework for monitoring or tracking emissions at the national level (SNI-GES), was established in 2017, enabling the above-mentioned institutions to carry out transparent and reliable GHG inventories, used for the

[127] See Ministry of Environment, Protection of Nature and Sustainable Development, 2015, "Second National Communication on Climate Change", p. 17.
[128] MINEPDED , (2024), Biennial Update Report (BUR), BUR1, https://unfccc.int/documents/641418.
[129] See Ministry of Environment, Protection of Nature and Sustainable Development, 2015, "Second National Communication on Climate Change", p. 23.

country's BUR/BTR and National Communications on climate change. Meanwhile, as part of the development of the National Communication Plan, and the revision of the NDC, a consultant has been recruited to prepare one for adaptation, mitigation, and finance. While the ToR for this study does not specifically include an MRV system for the implementation of the carbon tax, it is recommended that this aspect be taken into account and considered for integration into the system currently under development. This system could be used for verification within emitting facilities in the context of CPIs.

Although capacity for carrying out GHG inventory (MRV system) exists at the institutional level in Cameroon, this capacity is not always available at the facility levels and must be established to operationalize CPIs in Cameroon.

Thus, any national MRV system that is officially adopted should be adapted and used at facility levels in the energy and industrial sectors for the purpose of implementing carbon tax in Cameroon.

Recommendation 4

The development of a carbon tax based on an already existing fiscal instrument or levy that already price externalities in Cameroon, particularly the STPP currently charged on certain fuels such as liquefied natural gas. This option could be made operational in a relatively quick fashion and with anticipated low-levels of resistance from the public. As the legislation stands, the STPP is a levy payable by companies which distribute taxable products[130] and is not borne by the holders of oil contracts (oil and gas exploitation companies) and oil and gas refineries but by marketers of such products, and is therefore, not a burden on oil and gas exploitation companies. Thus, the recommended carbon tax on fossil fuels here does not mean a replacement of the existing STPP but rather, the latter can inspire and inform that proposed carbon tax which will be borne by oil and gas exploitation companies and oil and gas refineries based on their carbon emissions.

The development of a carbon tax based on the hygiene and sanitation tax being levied and collected by councils for the control of foodstuffs and commercial and industrial buildings, is another option recommended to the government of Cameroon for consideration for a possible implementation on the industrial production of cement and aluminium in Cameroon. This does not mean a replacement of the existing hygiene and sanitation tax but rather, the latter can inspire and inform the proposed carbon tax on the industrial production of cement and aluminium.

Recommendation 5

The establishment of a National Climate Change Fund in Cameroon that could be a vehicle to support the collection and distribution of revenue raised through CPIs for specific climate mitigation and adaptation activities. This is to ensure that revenue from CPIs is invested on climate change adaptation and mitigation activities.

[130] Section 230 of the General Tax Code edited on the 1st of January 2023.

Recommendation 6

A highly recommended hybrid approach is a domestic offset mechanism in sectors not suitable for carbon tax and ETS. Under this hybrid approach, a carbon tax is imposed or an ETS is implemented in different sectors but facilities can use offsets in other sectors for achieving compliance to reduce their net emissions which are subject to taxation or to the 'cap' system. Through this hybrid approach, facilities or entities such as Decentralised Territorial Authorities (Regions and Councils) could develop projects that result in the reduction of GHG emissions, thereby generating Carbon Credit Units, which would be sold to facilities intending to offset their emissions. This option allows the achievement of compliance obligations at a lower cost instead of paying the tax or 'cap' while extending the price signal from the carbon tax and/or ETS to other sectors in the form of incentives for stimulating GHG emission reduction or abatement projects. This option can also create a market for emission reduction credits.

Recommendation 7

It is strongly recommended that Decentralised Territorial Authorities (Regions and Councils)[131] should be encouraged to engage in the process of setting-up the proposed carbon pricing architecture (for example, through their climate plans), as they are expected to be instrumental in fostering carbon tax and ETS implementation by developing carbon removal projects (carbon offset projects) that result in the reduction of GHG emissions, thereby generating Carbon Credit Units, which would be sold to facilities intending to offset their emissions in order to reduce their tax liability or to use for compliance under an ETS.

Recommendation 8: Address social equity and inclusion concerns

There is fear that carbon pricing will affect men and women differently, with vulnerable groups like women, youth, and indigenous populations often experiencing disproportionate impacts. This necessitates the implementation of gender-sensitive measures and approaches that integrate these groups into carbon pricing-related activities and benefits, financed by carbon revenues. Hence, there is the need for developing carbon pricing policies that avoid perpetuating existing systemic inequalities between women and men and that might even help to overcome these inequalities. Whether it is a carbon tax or an ETS, it should be designed in a way that is fair and does not further entrench systemic inequalities. An example of a carbon pricing policy that avoids inequalities between women and men is prioritizing the representation of women in key position of responsibility with the framework of carbon tax in line with the African Union policy on gender, prioritizing women groups and association to invest in carbon offsets projects for the generation of carbon credit units for sale to companies that can them to reduce their tax liability.

[131] Decentralised Territorial Authorities (Regions and Councils) are local government in Cameroon's administrative set up or organisation.

Recommendation 9: Grievance mechanism

There needs to be a well-developed feedback process for purposes of receiving feedback from stakeholders and grievances, if any from affected groups during the pilot and implementation phases.

III. The Way Forward for Cameroon

1. Sector(s), activity (ies) and instrument that are low hanging for Cameroon to start with and which will be the sector, activity (ies) and instrument that is recommended for a pilot phase

From the above analysis, some sectors and specific activities are identified as suitable for both carbon tax and ETS in Cameroon. Gas flaring, oil and gas refinery in the energy sector are activities identified as suitable for both carbon tax and ETS, while the industrial production of cement and aluminium in the IPPU sector are identified as suitable for both carbon tax and ETS. However, the sector, activity and CPI that are low hanging for Cameroon to start with and which will be the sector, activity and CPI that is recommended for a pilot phase gas flaring and oil and gas refinery in the energy sector which are recommended for coverage by carbon tax. The recommendation is based on at least two factors viz:

- The sector (especially fossil fuel production) is ranked as the second emitting source, accounting for 11.34% of total national emissions with CO_2 as the dominant gas.
- There is explicit regulatory reference to the potential implementation of carbon tax in Circular No. 2023/001 relating to the preparation of the State budget for the 2024 financial year. The Circular specifically recommends the review of the scope of the STPP currently charged on certain fuels such as liquefied natural gas (premium grade petrol; gas-oil; and industrial natural gas, excluding gas purchased by electricity generation companies intended for the public and gas intended for local production of liquefied petroleum gas), for a possible introduction of a carbon tax in Cameroon. The STPP can inspire the imposition of a carbon tax on holders of oil contracts (oil and gas exploitation companies) and oil and gas refineries that are not covered by the STPP.
- Existence of Law No. 2011/025 on the valorization of associated gas in Cameroon, which has as primary objective to promote the commercialization of flared or released gas, reduce GHG emissions, and protect the environment. This involves creating attractive conditions for oil companies to develop associated gas, fostering its recovery for commercial purposes, and minimizing environmental damage.

As to the choice of GHG, CO_2 emissions released from gas flaring and oil and gas refineries could be covered by a carbon tax as emissions from these activities in the energy sector mostly consist of CO_2. This is the gas prioritized for coverage by a carbon tax in Cameroon for a pilot phase.

However, oil and gas refineries may not be considered for pilot phase because the lone refinery unit of SONARA was destroyed by fire in late May 2019 and is not operational since then. Following the fire incidence at the only national oil refinery facilities in late May 2019,

Cameroon has exclusively sourced refined petroleum products through imports. Even before the fire incidence, SONARA used to refine only 15% of Cameroon's crude oil due to its heavy nature. The refinery now imports light petroleum products in order to satisfy the local market demands.

2. Sector, activity and instrument recommended to be progressively introduced in the future

In the IPPU sector, the industrial production of cement and aluminium are suitable for inclusion under a carbon tax or an ETS in Cameroon, but to be progressively introduced in the future. Although the industrial production of cement and aluminium in the IPPU sector are suitable for inclusion under a carbon tax or an ETS in Cameroon, they is not recommended for a pilot phase because the sector is ranked as the least emitting source with less than 1% (0.47%) of the total national GHG emissions. It may be considered in the future if the GHG emissions of the sector increase especially as the country plans to fast-track or accelerate its industrialization process in order to become a newly industrialized country. As to the choice of GHG, CO_2 emissions released during the production of clinker (limestone) for cement production and CO_2 released during aluminium production, could be subjected to an ETS in proportion to a default emission 'cap' as emissions from these sectors/activities mostly consist of CO_2. This is the gas prioritized for coverage within an ETS in Cameroon in the future. Carbon tax although suitable, is not recommended for the industrial production of cement and aluminium in the IPPU sector to be progressively introduced in the future because the instrument is already recommended for a pilot phase to cover gas flaring and and oil and gas refineries in the energy sector.

IV. Readiness activities in view of implementation of CPIs in Cameroon

If the Government of Cameroon decides to implement any or all of the CPIs, it is recommended that the Government engage as soon as possible in preparatory activities for establishing the instruments by undertaking or conducting readiness activities in at least four phases viz:

Phase I will consist of an awareness raising and stakeholder sensitization stage, which would also serve to detail the scope of follow-up activities for implementation under Phase II. Phase I will imply that the Government of Cameroon has endorsed this study and is to further explore the potential for carbon pricing approaches, even if not committing to the adoption of any specific instrument in the future. The main goal of this phase would be to build a momentum for carbon pricing approaches by reaching out to a number of key stakeholders, especially potential implementation institutions and targeted emitters. In addition to sharing the findings and recommendations of this study with these stakeholders, the consultations with them could be opportunities to provide basic training on carbon pricing concepts and approaches and the identification of possible candidates for the piloting/implementation of activities in subsequent phases. In effect, the activities recommended under this phase include but not limited to:

- assessment to update the present study by incorporating any new developments or additional data that is obtained;

- consultations with concerned public agencies especially Ministerial Departments;
- consultations with Decentralised Territorial Authorities (Regions and Councils);
- consultations with industries and the private sector;
- assessment of "short-term" options on carbon pricing based on existing taxes, especially the STPP;
- assessment of synergies with other national initiatives related to carbon pricing;
- preparation of a detailed roadmap for the development of CPIs;
- preparation of a communication plan on carbon pricing to clear misconceptions among stakeholders on the new concepts, etc. awareness and sensitization would aim at obtaining a broader support for the introduction of CPIs in Cameroon through a consultative process.

To enhance awareness raising and sensitization, one effective approach could be to collaborate with and build on efforts of existing organisations such as the African Carbon Market Meetings (RAMAC) based in Douala, Cameroon, which represents the main framework for promoting and raising awareness on carbon pricing and carbon markets. RAMAC has as part of their agenda, to carry out a series of conferences and debates on climate policies in general and carbon pricing in particular in Cameroon.

Phase II will consist of a preparedness or readiness and capacity building stage. Activities to be carried out as part of Phase II are expected to include but not restricted to the following:

- preparation of a list/inventory of major emitters in the energy and industrial sectors of Cameroon with the goal of assessing their levels of GHG emissions, determine emissions intensity per subsector (e.g. gas flaring, cement and aluminium manufacturing, etc.) and come up with emissions benchmarks;
- upon completion of the inventory and for the sectors shortlisted for carbon tax and/or ETS inclusion, assess and recommend options for setting tax rate and/or an emissions cap and an approach for allocation of allowances;
- based on economic modelling tools, assess the impacts on the economy of different carbon prices in sectors to be included under carbon tax and/or an ETS;
- assess the risks of carbon leakage associated with the adoption of an ETS, with a focus on the sectors most exposed to international competition and, if required, approaches for minimizing the risks;
- institutional arrangements and specific roles and responsibilities of all stakeholders involved;
- the legal and regulatory instruments that would need to be adopted by the government to operationalise the CPIs, prioritising in particular:
    - an MRV law/regulation that will establish specific monitoring, reporting and verification guidelines (e.g. methodologies for the calculation of emissions, reporting templates, etc.),
    - the set-up of a database for MRV of facilities,

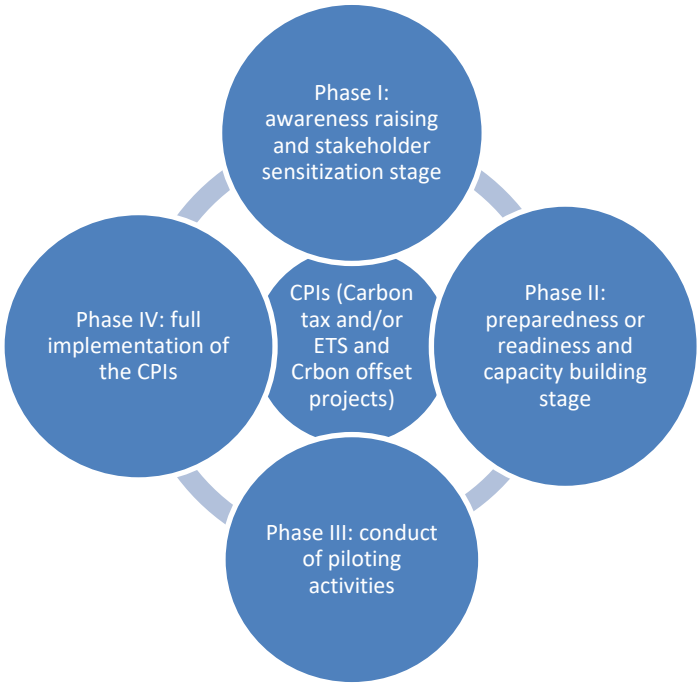
    - the development of a framework for accrediting third party verifiers, and considering the establishment of an "MRV Division" (to which staff would need to be recruited and trained),
    - etc.;
- identification of sectors, sub-sectors and activities that could be eligible as offset suppliers to facilities covered by carbon tax and ETS;
- the setting-up of an emissions registry to track Carbon Credit Units, the achievements of the system, etc.; and
- a training and capacity building programme for stakeholders involved.

A key element of Phase II would be the establishment of the MRV infrastructure and transparency orientation required for CPIs at facility levels. In this regard, it should be noted that this is a component where donor support, both technical and financial, would be required. The outcomes of this phase would also serve as basis for defining in detail the activities to be implemented in Phase III. Importantly, prior to initiating piloting activities under Phase III, some institutional structures would need to be in place, such as the functions of carbon tax and ETS regulators and definition of their roles, and the establishment of an emissions registry under Phase II.

Phase III will consist of the conduct of piloting activities. Piloting activities could consist of completing MRV framework for a number of facilities (which could involve, for example, one year of continuous monitoring of emission), the testing of the emissions registry, and allowance trading. As a final remark, the transition from piloting to full carbon tax and ETS implementation would require the formal adoption of the instruments through laws/regulation, as this would be the means to ensure compliance among covered facilities.

Lastly, **Phase IV** will consist of the full roll-out or implementation of the CPIs.

Figure 6: Steps or a guide to plan and implement the activities of CPIs in Cameroon in clockwise



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