



Ghana's Private Sector Engagement Strategy for the National Adaptation Plan

Environmental Protection Agency

May 2020



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Ghana's Private Sector Engagement Strategy for the National Adaptation Plan

Environment Protection Agency

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Foreword

The role of the private sector in addressing climate change has been very high on the agenda in recent times. This is due to the growing body of evidence pointing to both the risks that climate change poses to the private sector and the importance and feasibility of adaptive measures to increase climate resilience in the private sector. However, the private sector's efforts to address climate change issues in developing countries in general, and Ghana in particular, have mostly been slow and ineffective. Unlike mitigation, private sector success stories in adaptation in Ghana remain very limited.

Recent consultations on climate change adaptation planning with the private sector in Ghana, hosted by the Environmental Protection Agency, revealed a number of challenges that hinder effective private sector engagement in meeting adaptation needs. These include:

1. Low level of awareness
2. Limited capacity
3. Inappropriate public policy
4. Lack of financial resources.

Engaging the private sector is obviously important for several reasons, including encouraging preventive measures that reduce losses caused by climate change, enhancing the effectiveness of public aid by leveraging private investments, and promoting new products and services that can increase adaptation options and reduce their costs.

In Ghana, some of the largest areas for private sector activity and investments coincide with key development sectors, such as infrastructure, agriculture, water resources management, energy, and coastal zone management. These sectors are very vulnerable to climate change; agriculture, for example, and in particular smallholder farms, constitutes a large share of the Ghanaian workforce and economy and largely relies on increasingly variable rainfall. Adaptation in these sectors is therefore closely linked to the resilience of private entities.

The story is not solely about risk mitigation, however. Identifying climate risks may also create business opportunities linked with adaptation interventions. Successful private sector engagement in adaptation will catalyze greater and more frequent investments, which could accelerate the adoption of climate-resilient technologies and approaches in core development sectors (for instance, housing) across Ghana.

I believe that the strategies proposed in this document will provide the needed guidance for the government in engaging the private sector in Ghana's vision of adapting to climate change and will help to move the country forward toward a climate-resilient future.

JOHN A. PWAMANG
ACTING EXECUTIVE DIRECTOR
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Executive Summary

The Government of Ghana has recognized the implications of climate change for its national development. In response, it has taken various actions to support planning for adaptation to climate change through a number of existing policies, strategies, and initiatives. In November 2018, the Environmental Protection Agency (EPA) of Ghana released the country's National Adaptation Plan (NAP) Framework. The NAP Framework outlines the country's vision for the NAP process, establishes the approach Ghana intends to take in the development of its NAP, and lays out a series of next steps to advance the NAP process. The NAP Framework recognizes the private sector as a key actor in Ghana's efforts to adapt to climate change.

In order to enhance adaptation planning, and recognizing the crucial role that the private sector can play in that field, the EPA has led the preparation of Ghana's Private Sector Engagement Strategy on Climate Change Adaptation. It has done so with the support of the International Institute for Sustainable Development (IISD), host to the NAP Global Network Secretariat,

The goal of the NAP private sector engagement strategy is to enhance private sector engagement in climate change action in Ghana. The document considers the role of the private sector in both NAP planning/development and its implementation. It identifies a number of key private sector stakeholders to involve in NAP implementation and lays out how to best engage them. It also considers how strategic alliances can be developed, including through public-private partnerships.

The development of this strategy consisted of a desk review of key documents, bilateral engagement, and multistakeholder validation. The desk review considered national climate and development documents as well as best practices in private sector engagement for national adaptation planning and implementation. Bilateral meetings focused on engagement with business multipliers, including key sectoral and economy-wide associations and federations. The multistakeholder validation workshop in August 2018 convened a range of public and private sector actors from various sectors to review the initial findings and provide feedback and additional insights.

Ghana faces significant climate impacts. Temperatures are projected to increase over the next several decades across all agro-ecological zones of the country. Increased drought frequency and increasingly erratic rainfall will negatively impact infrastructure, hydropower production, food security, and coastal and agricultural livelihoods. Despite the country's recent transition toward an industry- and services-oriented economy, 45% of the workforce still depends on rainfed agriculture. Cocoa, roots, and tuber production are projected to decrease in most parts of the country. Both the marine and inland fisheries industries will be negatively impacted by the changing climate, with consequences for the 2.2 million people relying on the sector for their livelihood. Higher incidence of malaria, diarrhea, and illnesses such as meningitis and measles are expected due to projected increases in mean air temperature and reduced rainfall (Republic of Ghana, 2015), while rising sea levels will impact coastal infrastructure, including human settlements.

The private sector in Ghana is made of diverse industries, which are each vulnerable to the effects of climate change in a variety of ways:

- **Agriculture** is a key economic sector in Ghana. It is also one of the most threatened sectors due to both its reliance on stable precipitation patterns and the vulnerability of crops and livestock to changes in temperature and weather events.
- **Banks and other financial institutions** provide loans and credit lines to enterprises that invest in and run activities in sectors vulnerable to climate change, including agriculture, energy, tourism, real estate, and other infrastructure development. Climate change effects in this sector could mean the deterioration of capital and investment and could hinder loan repayments.
- **The building and construction sectors** are at once vulnerable and important for enhancing resilience. Climate change is expected to affect infrastructure across the country, and these emerging and additional risks to infrastructure have not yet been sufficiently analyzed and integrated into the design of roads, bridges, or houses. Climate change could, in fact, cause growth in the building and construction sector, as investments increase in climate-proofing existing infrastructure or repairing infrastructure damaged by storms, floods, and other climate impacts.
- **The mining sector** in Ghana is one of the most important in Africa, but the significant water and energy resources required for its operations make it vulnerable to changing temperature and rainfall rates. A growing number of households and other commercial and state users are also competing for the water and energy resources available.
- **Micro, small, and medium enterprises (MSMEs)** constitute about 92% of all businesses in Ghana and operate in sectors that are highly vulnerable to climate change.

With this level of vulnerability, the private sector in Ghana must engage in adaptation work along with other stakeholders. This document identifies (i) agriculture, fisheries and forestry, (ii) banks, finance institutions, and insurance, (iii) building and construction, (iv) mining, and (v) MSMEs as key sectors and industries that need to be engaged in adaptation planning. It elaborates on an approach that leads to the prioritization of those sectors and industries.

A series of barriers to private sector adaptation efforts have been identified in Ghana. These barriers and associated enabling factors can be organized into four main categories: finance, information sharing, capacity development, and institutional arrangements. The barriers recognized in the development of this strategy, and potential options for addressing them, can be found in Table A1.

Table A1. Summary of identified barriers to adaptation action and options for private sector actors

Type of barrier	Barrier	Options for addressing
Finance	High interest rates	Concessional finance specifically for adaptation action Blended finance instruments Fiscal incentives: tax breaks, risk guarantees (partial credit guarantees, performance guarantees, political risk guarantees), government procurement contracts
	Short loan tenors/durations	
Information	Awareness of climate challenges and adaptation solutions	Sector-focused trainings Engage key media actors and conduct trainings for reporters Presentations at trade fairs and other sectoral events
Capacity	Lack of capacity to write project concepts and proposals	Trainings on project concepts and proposal development
	Capacity to implement solutions	Bilateral engagement with associations on implementing sectoral solutions Certification of sectoral adaptation practice trainers Sectoral adaptation solution training workshops for businesses
	Lack of financial sector understanding of climate risks	Capacity-building training for finance sector actors and engagement through sustainable banking committees
	Capacity of insurance industry to assess climate risks	Capacity-building training for finance sector actors
Institutional	Lack of regulatory authority	Include relevant private sectors on sectoral committees and include institutional strengthening as a key area of discussion
	Perceived lack of interministerial coordination	Promote coordination among all relevant agencies through ongoing engagement of the National Climate Change Committee Strengthen interministerial coordination as appropriate to prevent conflict between NAP implementation and other ministerial business/communications
	Perceived lack of policy continuity	Develop a periodic, timely, and transparent process for revision of legislative instruments around supporting adaptation

There are a number of efforts underway in Ghana to engage the private sector, both specific to climate change and more broadly in public policy. Public policy provides a useful framework for engagement with the private sector, including the potential development of public–private partnerships (PPPs). The private sector is identified as an important actor in the National Climate Change Adaptation Strategy, the National Climate Change Policy, and the PPP policy, while initiatives such as the Project Development Facility, the Viability Gap Scheme, and the Ghana Infrastructure Fund provide potential vehicles to engage the private sector in climate-resilient development. There is also a series of efforts to engage the private sector in climate change action in mitigation, such as the Nationally Appropriate Mitigation Action private sector platform and Nationally Determined Contribution private sector engagement, among others. Private sector engagement in the NAP process will consider and build on these efforts.

Around the world, many companies have already begun to make substantial investments in climate change adaptation. These investments are being made for three main reasons:

- To manage risks for business continuity and reputation
- To capitalize on new markets and business opportunities
- To comply with policies, regulations, and investor interests.

Different private sector actors in Ghana will have different reasons for investing in climate resilience. Agricultural interests in Ghana are already being impacted by climate change, and this could get worse should crops fail as a result of increasing temperatures and variations in precipitation patterns. This can have impacts on actors throughout the agribusiness value chain. Larger, more visible companies may see threats to their reputation should they fail to clearly demonstrate that they are taking climate change seriously.

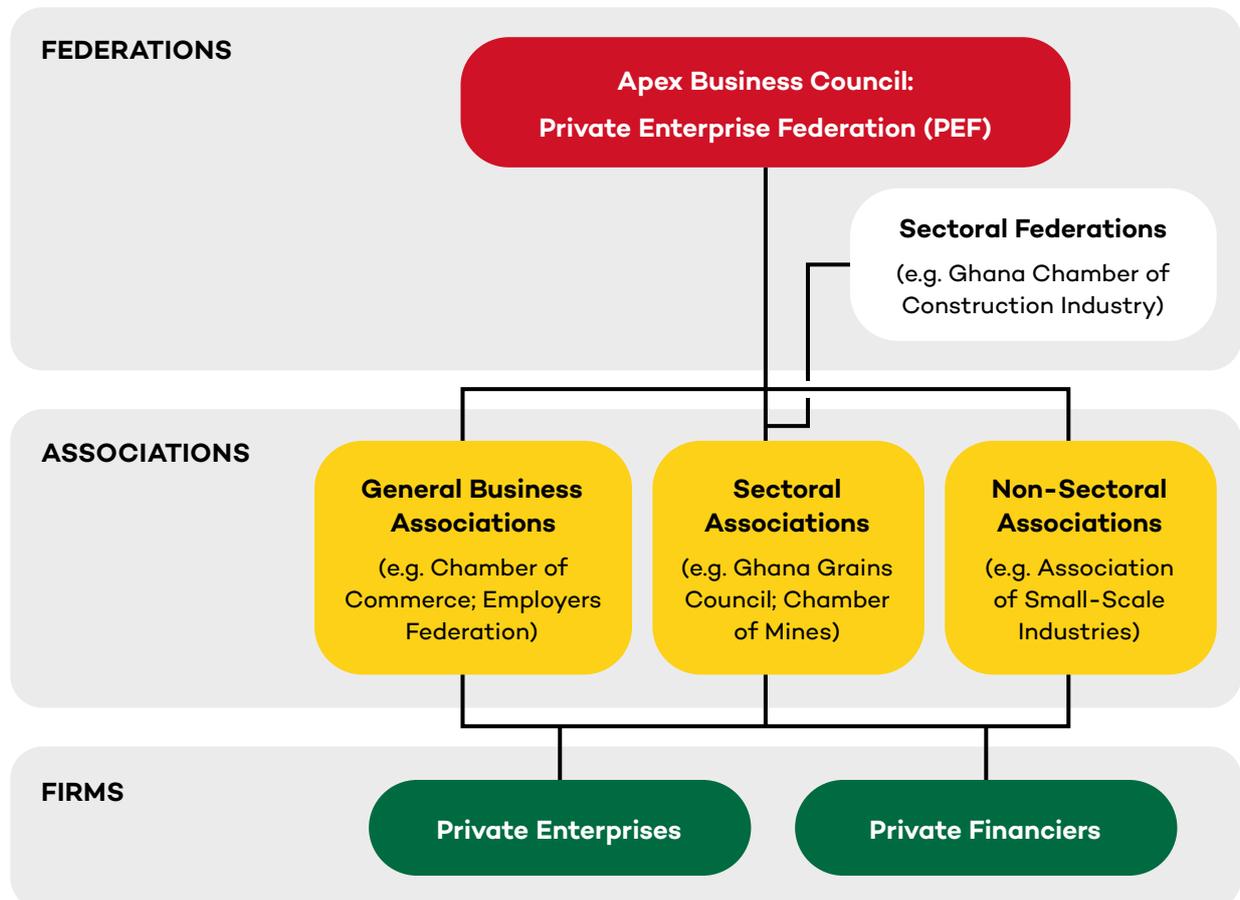
Associations and federations are the principal targets for engagement in this strategy, given their ability to reach their membership and “multiply” the impact of engagement. Several potential roles that each can play are identified. These are laid out in Figure A1.

Ghana has a well-organized private sector, with a large variety of business membership organizations (BMOs). These BMOs provide a potential conduit to a number of private sector actors and can play a wide variety of roles. Many of the large BMOs in Ghana represent the broad interests of the business community, including the Chamber of Commerce and the Employers Federation. There are also sector-focused associations that provide a variety of services for their membership.

Figure A1. Potential roles for private sector organizations in NAP development and implementation



Figure A2. Organization of Ghana's private sector



Several modalities or avenues for engagement with the private sector in Ghana have been identified in this strategy. These include:

- **Incorporation of private sector actors within the cross-sectoral policy groups to be established under the NAP process:** Particular attention should be paid to the Private Enterprise Federation. For more sector-focused decision-making, industry-specific associations should be engaged at the highest level appropriate.
- **Engagement through existing forums with public and private membership:** Private sector engagement should seek to utilize existing structures wherever possible and appropriate. A number of such engagement opportunities exist, including the Agricultural Working Group and the Sustainable Banking Principles Committee, among others.
- **Awareness-raising through industry events:** Different industries periodically host a variety of events. These can provide a key avenue for information sharing related to the NAP process.
- **Purpose-driven training workshops:** In many cases, it may be important to organize workshops to build the capacity of actors and address identified capacity gaps. These should largely be focused on particular sectors and particular regions, as appropriate.

Table A2. Potential roles of key private sector actors in NAP planning and implementation¹

Organization	Sectoral context	Review/ identify measures	Provide capacity building	Implement projects (with funding)	Provide adaptation services	Finance measures (own or external resources)
Association of Bankers						• (members)
Association of Building and Civil Engineering Contractors of Ghana		•	•	•		
Ecobank Ghana Ltd						•
Federation of Associations of Ghanaian Exporters	•	•	•			
Farmers Organizations Network	•	•	•	•		
Ghana Chamber of Mines	•	•	•			
Ghana Grains Council	•	•	•		• (members)	
Ghana Insurers Association			•			
Ghana National Chamber of Commerce			•			
Private Enterprise Federation		•	•			
Ghana Real Estate Developers Association		•	•		• (members)	
Sustainable Banking Committee		•	•			

¹ “Convening” is omitted, as it is common to nearly all of the identified actors.

Building on the nature of Ghana’s private sector landscape, a series of key principles have been developed to guide the engagement of the private sector in NAP planning and implementation. These include:

Figure A3. Principles for private sector engagement in NAP planning and implementation

Engage at the appropriate level for the activity:

Where sector-specific inputs are required, go to the sectoral association. Where there are questions of economy-wide import, discuss with the Private Enterprise Federation and/or Chamber of Commerce.

Engage the industry first, rather than the company:

As noted above, BMOs play an important role in the Ghanaian economy and working with them can help improve the efficiency of engagement.

Utilize existing structures:

Access working groups for climate-related activities or sectoral decision making.

Lead by example:

Leverage Ghana’s public sector’s active participation in industries to pilot and demonstrate the benefits of resilient business behaviour.

Ensure dynamism:

Follow changes within the business landscape, such as the creation of new institutions or changes in the structure of the economy, and adjust this approach accordingly.

This strategy is meant to inform both the development and implementation of the NAP, and some of the recommendations will be aligned with the ongoing development of the NAP (such as the creation of policy working groups). In the interim, there are two key activities that can be undertaken somewhat independently from this process that will complement it.

1. Work with partners to provide tailored, industry-specific awareness-raising and/or capacity building on **climate change impacts** and **adaptation** to those actors whose understanding and knowledge of such concepts are limited.
2. Organize **industry-specific training** for actors who are aware of the current and potential effects of climate change on methodologies, approaches, and tools (including Indigenous Knowledge) to conduct a vulnerability assessment and identify adaptation options.

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Acronyms

BMOs	business membership organizations
BoG	Bank of Ghana
EPA	Environmental Protection Agency
FAGE	Federation of Associations of Ghanaian Exporters
FCG	Forestry Commission of Ghana
FON	Farmers Organizations Network
GAB	Ghana Association of Bankers
GCF	Green Climate Fund
GCIC	Ghana Climate Innovation Center
GDP	gross domestic product
GGC	Ghana Grains Council
GIA	Ghana Insurers Association
GREDA	Ghana Real Estate Developers Association
MESTI	Ministry of Environment, Science, Technology and Innovation
MSME	micro, small and medium-sized enterprise
NAMA	Nationally Appropriate Mitigation Actions
NAP	National Adaptation Plan
NCCAS	National Climate Change Adaptation Strategy
NDC	Nationally Determined Contribution
PDF	Project Development Facility
PEF	Private Enterprise Federation
PPP	public-private partnership
SME	small and medium-sized enterprise
TFCD	Task Force on Climate-Related Financial Disclosures
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
VGS	Viability Gap Scheme

1.0 Introduction

The National Adaptation Plan (NAP) process was established under the Cancun Adaptation Framework, part of the United Nations Framework Convention on Climate Change (UNFCCC) process. It enables parties to the UNFCCC, of which Ghana is one, to formulate and implement NAPs as a means of identifying medium- and long-term adaptation needs and developing and implementing strategies and programs to address those needs (UNFCCC, 2010). It is a continuous, progressive, and iterative process that follows a country-driven, gender-sensitive, participatory, and fully transparent approach. So far, 13 developing countries have prepared and submitted their NAPs to the UNFCCC (UNFCCC NAP Central, n.d.).¹

In November 2018, the Environmental Protection Agency (EPA) of Ghana released the country's NAP Framework (Government of Ghana, 2018). The NAP Framework outlines the country's vision for the NAP process, establishes the approach Ghana intends to take in the development of its NAP, and lays out a series of next steps to advance the NAP process.

Section 3.1 of the NAP Framework focuses on the private sector in Ghana, noting that “a successful NAP process will require leveraging the private sector in climate change adaptation.” It also notes that the private sector can contribute to climate change adaptation in Ghana in two broad ways: i) by minimizing climate impacts to business delivery and markets and ii) by creating markets in technologies and services that are beneficial to adaptation.

The goal of the *NAP Private Sector Engagement Strategy* is to enhance private sector engagement in climate change action in Ghana. The document considers the role of the private sector in both in NAP planning/development and in its implementation. It identifies a number of key private sector stakeholders to involve in NAP implementation and lays out how to best engage them. It also considers how strategic alliances can be developed, including through public–private partnerships (PPPs).

1.1 Approach for Development of the Private Sector Engagement Strategy

This strategy was developed based on a review of relevant national policies and laws of Ghana, a review of international best practices, and extensive stakeholder consultation. A literature review surveyed existing national and international literature to inform the development of the strategy. This review included several key relevant national policy documents: the NAP Framework, Ghana's Nationally Determined Contribution (NDC), the Ghana National Climate Change Policy, the National Climate Change Adaptation Strategy (NCCAS), and the National

¹ There are additional countries that have prepared NAP documents but have not submitted them to the UNFCCC's NAP Central platform.

Policy on Public Private Partnerships (PPPs). National and international assessments highlighted the composition and climate change vulnerability of Ghana’s private sector, and an initial mapping of relevant priority stakeholders was conducted, building on inputs from the EPA and private sector collaborators within the Private Enterprise Federation (PEF). Additionally, information on international best practices within private sector engagement was reviewed, both from sources focused specifically on the development and implementation of NAPs, such as Crawford and Church (2019), and on practices emerging from broader development projects and programs, such as the U.S. Agency for International Development (USAID, 2018).



Building on this work, a series of bilateral consultations were held with several key stakeholders, with a focus on associations, federations, and initiatives where the public and private sectors are currently engaged in related work. Stakeholders were prioritized principally on the basis of two main criteria: (i) their perceived interest in the topic, either demonstrated interest or the expected vulnerability of their sector, and (ii) influence, considering their role within the sector, the coverage of their membership, or their position within the overall business community of Ghana and their ability to effect change. These assessments were revised iteratively, as engagement with the sector helped to identify additional relevant parties or unearthed new information on additional initiatives. These conversations aimed to increase the participants’ awareness of the NAP process and the opportunities associated with it, as well as identify interest and opportunities for the actors’ participation in the development and implementation of the NAP.

The results of these stakeholder consultations were in turn analyzed in light of the types of key roles the private sector actors may play in Ghana’s NAP development and implementation. A series of key actors are considered, as were the appropriate modalities for engagement with these actors. An initial set of guiding principles were elaborated, based on the structure of the private sector in Ghana, to encourage efficient and transparent approaches to private sector engagement in the NAP process.

1.2 Organization of the Strategy

The strategy begins with a brief description of the economic and climate change context of Ghana (Section 2) that considers key private sector enterprises and financiers, including the vulnerabilities of these sectors. The role of micro, small and medium-sized enterprises (MSMEs), which represent a significant part of the Ghanaian economy, is considered as well. This is followed by a short consideration of the sectors that have been the primary focus of this

strategy and the justification of their inclusion within the strategy, concentrating on the areas of key vulnerability among private sector actors.

Following this overview is a short assessment of some of the key barriers and enabling factors for private sector action on climate change in Ghana (Section 3). Key among these are access to finance, awareness of challenges and solutions, and capacity to implement solutions.

Section 4 is a review of the existing efforts in private sector engagement in Ghana. This includes national policies such as the PPP policy and relevant associated financial instruments that have been established or are in the process of being established. This section also reviews a number of nationally and internationally financed efforts to engage with the private sector on climate change mitigation and adaptation, as well as capacity-building efforts.

Section 5 provides a brief explanation of the business case for private sector engagement in adaptation in Ghana and articulates the principles of private sector engagement for NAP development and implementation.

Section 6 addresses the potential roles for private sector actors in the NAP planning and implementation process, drawing from existing literature and conversations with stakeholders. In Section 7, relevant private sector stakeholders in Ghana are discussed, including background information, their place within the private sector ecosystem, their experience in climate change adaptation, and their potential roles in NAP development and implementation, as appropriate. Finally, Section 8 is a discussion of potential modalities for engaging with private sector actors in NAP development and implementation.

2.0 Economic and Climate Context

Ghana is one of the few countries in West Africa with a very positive economic outlook. The economy grew at a rate of 8% in 2017, driven mostly by the mining and oil sectors, making it the second-fastest-growing African economy, trailing only Ethiopia (World Bank, 2019b). While Ghana's prosperity is increasingly tied to the oil markets, it remains one of the largest exporters of gold in the world; cocoa production and exports also remain a significant part of the economy.

Ghana's growth target for 2019 is 7.4%, mainly to be driven by the industrial sector, especially oil, gas, and mining. Industry's growth is expected to improve to 9.7%, and agriculture is expected to grow by 7.3% on the back of the government flagship programs in the sector that aim to enhance performance in the crops sub-sector. Agriculture accounts for about 20% of gross domestic product (GDP) and employs more than half of the workforce, mainly as small landholders (Central Intelligence Agency, 2019). Service sector growth is projected at 6.1%, slightly below the 2018 projection of 6.2%, as the financial sector continues to recover from its recent challenges (World Bank, 2019b).

Despite this growth, Ghana remains vulnerable to climate change effects, posing a threat to future growth. Temperatures in Ghana in the next few decades are projected to increase, with a gradual increase in the average minimum and maximum temperatures in all agro-ecological zones of the country. Temperatures are projected to rise between 1°C and 7°C by 2080, compared with the observed temperatures from 1981 to 2010. In addition, the mean annual rainfall in all agro-ecological zones is projected to decrease by about 10%. Rainfall is also likely to decrease more than 10% in all agro-ecological zones in the major rainfall seasons but is projected to increase in the dry season months by less than 10% over the next 10 to 60 years (Ministry of Environment, Science, Technology and Innovation [MESTI], 2015).

An increasing incidence of drought, higher temperatures, and more erratic rainfall are expected to negatively impact infrastructure, hydropower production, food security, and coastal and agricultural livelihoods. Despite the country's recent transition toward an industry- and services-oriented economy, 45% of the workforce still depends on rainfed agriculture. Cocoa, roots, and tuber production are projected to decrease in most parts of the country. Ghana's Northern Savannah Ecological Zone, where a significant amount of agricultural production occurs and where poverty is most severe, is seen as particularly vulnerable to the impacts of climate change (USAID, 2017).

The fisheries sector contributes 4.5% to GDP and is another important source of income and nutrition, providing livelihoods for as many as 2.2 million people. However, both the marine and inland fisheries industries will be negatively impacted by the changing climate. Rising sea-surface temperatures are projected to increase the variability of marine fish stock, reducing the catch rate. In addition, changes in river flow regimes and saltwater intrusion into freshwater

resources are projected to decrease freshwater fish landings, with the potential to lower incomes in fishing communities (Republic of Ghana, 2015).

Further, populations are expected to suffer a higher incidence of malaria, diarrhea, and illnesses such as meningitis and measles due to projected increases in mean air temperature and reduced rainfall (Republic of Ghana, 2015), while rising sea levels will impact coastal infrastructure, including human settlements. Currently, one quarter of the population lives along the coast in rapidly expanding urban areas like Accra; these densely populated areas are especially vulnerable to flooding and waterborne disease. Drought and reduced rainfall also threaten access to reliable potable drinking water and hydropower supply, which is already considered erratic and insufficient (MESTI, 2013).

The wide-ranging, broad impacts of climate change in Ghana are thus likely to affect the operations of a variety of activities and businesses. As such, planning adaptation efforts in Ghana must consider the private sector in order to ensure the continued well-being of Ghanaians.

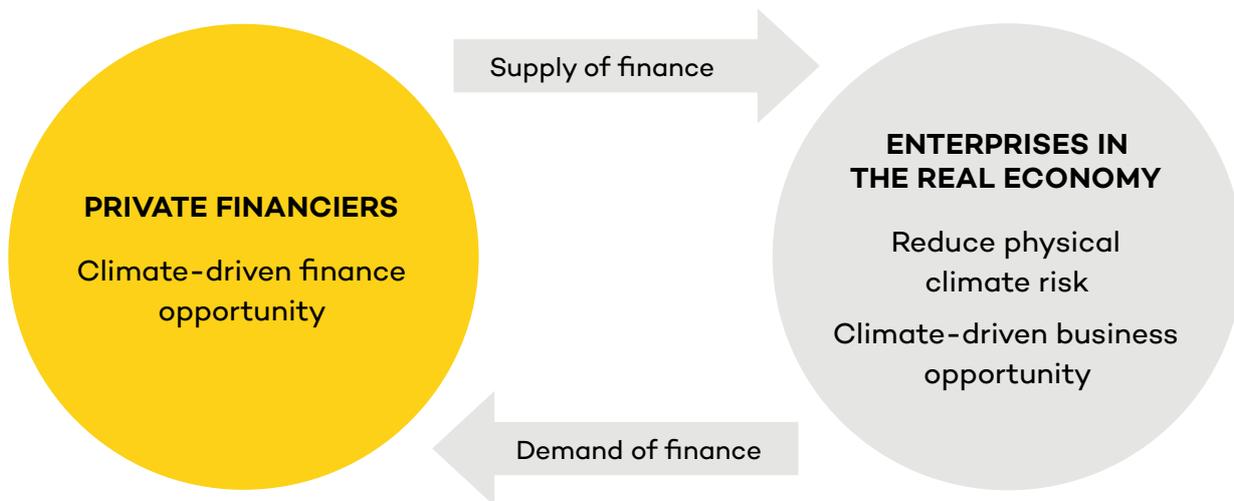
2.1 Private Financiers and Enterprises

In Ghana, the private sector consists of (i) private financiers, including private commercial banks, microfinance institutions, and private insurance companies, and (ii) private enterprises, such as privately owned small-scale enterprises. Private financiers in Ghana are diverse and relatively large compared to the economic development of the country. In the banking sector alone, the Ghana Association of Bankers (GAB), the country's leading voice for the banking sector, currently represents the interests of 34 member banks (GAB, n.d.). The GAB supports and promotes policies and initiatives that balance the interests of banks with the wider public benefit. The insurance industry is also diverse, with 54 members represented in the Ghana Insurers Association (GIA). GIA is made up of 24 life insurance companies, 29 non-life/general insurance companies, four reinsurance companies, and one association member (GIA, n.d.a).

Among private enterprises in Ghana, small and medium-sized enterprises (SMEs) continue to dominate: SMEs contribute 70% of the country's GDP and account for more than 85% of enterprises (African Development Bank, 2020).

Ghana's private financiers provide finance for the operations and activities of enterprises whenever possible through many instruments, including microloans, corporate loans, and project finance. They are the private sector entities that supply financing and can play a role in providing finance for climate change actions, including adaptation projects and measures, through the establishment and/or identification of climate-driven finance opportunities. Figure 1 illustrates the two dimensions of the possible adaptation finance scheme that can exist for private sector actors in Ghana.

Figure 1. Relationship between private financiers and enterprises in adaptation finance



Source: UN Environment Programme (UNEP), UNEP Finance Initiative, Federal Ministry of Economic Cooperation and Development, & Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), 2016.

2.2 Key Industries and their Climate Vulnerabilities

The private sector in Ghana is made of diverse industries, which are vulnerable to the effects of climate change at different levels, as the economy relies heavily on climate-dependent sectors such as agriculture, forestry, and energy. Key sectors and their climate vulnerabilities are highlighted below.

2.2.1 Agribusiness

Agribusiness, including agriculture and downstream processing activities, is the largest sector in Ghana’s economy. Agriculture alone accounts for about 20% of GDP and employs more than half of the workforce (Central Intelligence Agency, 2019). With 35% of exports, it is also Ghana’s main exporter. The sector has been growing at more than 5% annually since 2008. Cocoa remains the main export crop, accounting for 25% of foreign exchange earnings and 81% of agricultural exports, at nearly USD 3 billion in 2016. The second most important export earner in the food category was fruits and nuts (USD 227 million), dominated by bananas, mangoes, cashew nuts, and pineapples, while fresh vegetable exports were in fifth position (USD 35 million) (World Bank, 2017).

Projections have anticipated that the agriculture sector will suffer the most from climate change impacts. It is expected that all geographical zones in Ghana will endure rising temperatures, declining rainfall levels and increased variability, and more frequent and severe extreme weather events, such as flooding and droughts. In addition, the agriculture sector in Ghana is subject to increased crop loss and failure as a result of climate change, as well as shorter growing seasons and loss of arable land (USAID, 2017). Increases in temperature are likely to have further negative consequences on the production of a variety of crops. This is a particular challenge in Ghana due to the fact that much of the country’s agricultural production relies on smallholder agriculture, much of it from rainfed farms. Coastal areas will

face rising sea levels, with impacts affecting particularly the rainfed agriculture sector and causing coastal erosion and saltwater intrusion, putting local communities at risk (MESTI, 2013). Climate change is already affecting the grain subsector in Ghana, primarily due to changes in rainfall patterns. Ghana has historically had two clearly demarcated growing seasons. Following harvest, farmers traditionally would dry their crops under the sun. This would require at least a week of uninterrupted dry conditions. However, in recent years, the arrival of the dry period has become less predictable, which can lead to significant loss of crops as farmers attempt to dry their products. This is exacerbated by the fact that there is currently no crop insurance available in Ghana.

It is anticipated that rural communities will become more vulnerable to poverty as land degradation and desertification accelerate with higher temperatures and increasingly variable rainfall rates. These climate change impacts are also expected to act as a deterrent to investments in agriculture, which is becoming riskier, with less predictability and profitability.

The NCCAS identifies agriculture as one of the country's eight priority areas. Within adaptation, key needs include:

1. Build and strengthen the capacity of local farmers to increase agricultural productivity and awareness of climate issues.
2. Build and strengthen the capacity of extension officers in new farming technologies in order to enhance their support for farmers.
3. Enhance the living standards of vulnerable groups through the acquisition of alternative livelihoods skills.
4. Protect the environment through the promotion of agricultural biodiversity.
5. Promote cultivation of crops and rearing of animals adapted to harsh climatic conditions.
6. Document existing Indigenous Knowledge and best practices.
7. Train trainers to promote post-harvest technologies to minimize losses in farm produce.

2.2.2 Forestry

Agriculture, including forestry, is the backbone of the Ghanaian economy. As a sub-sector, forestry accounts for 6% of Ghana's GDP and 11% of its export earnings: the timber industry is the third most important foreign exchange earner of the country (Food and Agriculture Organization of the United Nations, 2006). It also employs thousands of people. Most of the rural population depends on forests for their survival, with forestry playing a significant role in the provision of food, clothing, shelter, furniture, potable water supply sources, and bushmeat; this translates into livelihoods for over 2.5 million people. The country's forests are also highly valued as sources of natural medicines, which are essential components of health treatments. Unfortunately, Ghana's deforestation rate is one of the highest in Africa; for instance, from 2001 to 2018, Ghana lost 1.09 million ha of tree cover (Global Forest Watch, 2019). Climate change is expected to increase the fragility of the forestry sector through increased fire activity, changes in forest composition, decreases in forest productivity, and the disappearance of habitats and ecosystems.

2.2.3 Finance, Banking and Insurance

The financial sector in Ghana has grown over the past five years, but remains dominated by banks. Total financial sector assets grew from 48% of GDP in 2010 to 68% in 2015. Deposit-oriented banks are the largest players in the sector, with assets equivalent to 47% of GDP in 2015. They accounted for 69% of the total assets, followed by pension funds with 16%, the fund management sector with 12%, and the insurance sector with 3% (World Bank, 2018a). Although the banking sector appears to be sound on average, it is vulnerable to a high (and increasing) number of non-performing loans. The average capital adequacy ratio was at 15% in October 2017, down from 17.1% October 2016, but well above both the regulatory minimum of 10% and the Bank of Ghana's (BoG) recommended level of 13% (World Bank, 2018a).



Banks and other financial institutions provide loans and credit lines to enterprises that invest and run activities in sectors vulnerable to climate change, including agriculture, energy, tourism, real estate, and other infrastructure development. Climate change effects on these sectors can seriously risk deterioration in capital and investment and could hinder loan repayments.

2.2.4 Building and Construction

In Ghana, the construction sector is performing well and contributes substantially to the GDP and to employment within the economy (Owoo & Lambon-Quayefio, 2018). According to the Ghana Statistical Service, between 2009 and 2013, the construction and real estate industries contributed an average of about 14.34% of the country's GDP (Ghana Statistical Service, 2019). Given its labour-intensive nature, the construction sector is a major employer within the economy. Climate change is expected to affect infrastructure across the country, and these emerging and additional risks to infrastructure have not yet been given sufficient consideration when designing roads, bridges, or houses. Climate change could prove to be a cause for growth in the building and construction sector, as increased investments are made in climate-proofing existing infrastructure or in repairing those damaged by storms, floods, and other climate impacts. This should, of course, not be taken as a positive trend for the country.

2.2.5 Mining

The mining sector in Ghana is one of the most important in Africa. Ghana has 23 large-scale mining companies operating in-country, producing, among other things, gold, diamonds, bauxite, and manganese. In addition, there are over 300 registered small-scale mining companies. The sector is vulnerable to climate change, as the industry requires significant water and energy resources for its operations, both of which will be affected by changing temperature and rainfall rates, and which are also in demand from households and other commercial and state users.

Changing climatic conditions will have both direct (operational and performance-based) and indirect (securing of supplies and rising energy costs) impacts on the mining sector (Sharma et al., 2013). These include but are not limited to: water-related impacts (droughts, floods, cyclones, and storms); heat-related impacts (bush fires and heat strokes); and sea-level rise, all of which are projected to increase for Ghana in the coming decades. A combination of these effects may jeopardize the sector's viability by denying the industry—and its personnel—a safe operating landscape, both spatially (through impacts felt across the immediate vicinity of the mining site and areas further downstream) as well as temporally (including sporadic short-term and more permanent long-term changes). In Ghana, mining and mineral exploitation contributes to approximately 5% of forest and land degradation (Republic of Ghana, 2015), and the environmental impacts of mining and extractive operations, if not addressed properly, could result in more and lasting damaging impacts to livelihoods and communities already suffering from climate change impacts.



2.3 MSMEs in Ghana

According to the Integrated Business Establishment Survey, Ghanaian MSMEs constitute about 92% of all business in Ghana and account for 85% of the manufacturing employment (Business Ghana, 2018). They operate largely within the private sector and contribute about 70% of Ghana's GDP. In terms of formal sector employment, they account for just over half of all full-time employees, with the percentage likely much higher in the informal sector (International Trade Centre, 2016). They are an integral part of the Ghanaian economy, and they tend to employ vulnerable groups, including women, youth, and low-skilled workers. As MSMEs often operate in labour-intensive, low-valued-added sectors, wages tend to be low.

MSMEs in Ghana are particularly vulnerable to the impacts of climate change. In sub-Saharan Africa, around 23–25% cannot access finance—finance that could be invested in adaptation activities—due to either the denial of credit or unfavourable terms and conditions of a proposed loan (World Bank, 2018c). In addition to this difficulty, many MSMEs are directly impacted by climate change, as they operate in sectors that are highly vulnerable to climate change.

2.4 Sectors Prioritized for NAP Private Sector Engagement

2.4.1 Methodology for Prioritization of Sectors and Stakeholders

A list of economic sectors for inclusion within the NAP, and their relative prioritization, has not been developed at this point in the NAP process. As such, sectors have been identified for consideration within this strategy on an independent basis. This selection has been conducted on the basis of the following factors:

- **Identified vulnerability from existing literature:** Consideration has been given to existing assessments of Ghana’s climate change vulnerability and the sectors most likely to be impacted. Such information can be found in Ghana’s Third National Communication (Republic of Ghana, 2015), the NCCAS (United Nations Development Programme [UNDP] & UNEP, 2012), and other related documents.
- **Stakeholder engagement:** Public and private sector stakeholders familiar with both the Ghanaian private sector landscape and climate change adaptation challenges have been consulted and have provided a number of recommendations regarding key industries and actors that should be engaged in the NAP process.
- **Assessed interest and influence:** A stakeholder mapping exercise was conducted on the basis of the aforementioned considerations. Potential private sector stakeholders were initially considered on the bases of their potential or existing interest and influence in the NAP process. This approach is loosely constructed on the basis of an approach advanced by the Imperial College London (2019), with the dimensions of assessment being broadly defined as the following:
 - *Interest* can come from a stakeholder’s demonstrated interest in the project or its potential to be impacted by the project.
 - *Influence* represents the entity’s potential to have a significant impact on the success of Ghana’s ability to achieve its goals in the NAP process, for better or worse. These may be so-called “business multipliers,” such as business associations or a chamber of commerce, or may include the largest firms in an oligarchic or monopolistic market.
- **Role of private sector actors:** The Ghanaian public sector operates a number of state-owned enterprises in a variety of industries; at the end of 2017, the state portfolio included 86 entities, with 45 being entirely state-owned. This strategy aims to focus on those sectors dominated by private sector interests, as working with public sector entities requires a different form of engagement.

These criteria were applied on an iterative basis, as further consultation with relevant private sector actors has helped to identify new initiatives and actors relevant to the process. Given the ongoing development of and potential for change within the private sector, a similarly flexible, iterative approach should be adopted in the implementation of this strategy to allow for the inclusion of new actors and/or initiatives.

2.4.2 Sectors Prioritized for NAP Private Sector Engagement

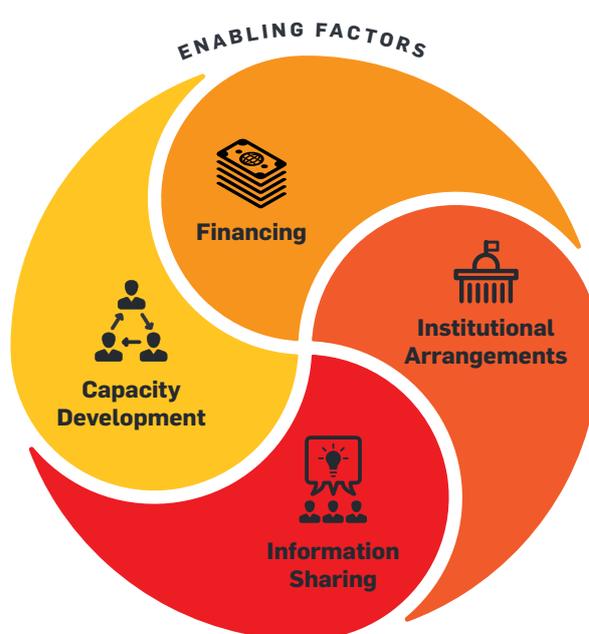
The following sectors have been prioritized for private sector engagement in Ghana's NAP process:

- **Agriculture and fisheries:** Both have been identified as among the most vulnerable sectors to the impacts of climate change. This vulnerability is compounded by the fact that many of those people working in these industries are among the least financially secure Ghanaians and often lack access to formal sources of financing to invest in adaptation.
- **Construction:** Housing and infrastructure have been identified as being insufficiently adapted to the impacts of climate change. Furthermore, many actions to enhance resilience will require skilled labour within this sector.
- **Finance:** The financial sector is exposed to the impacts of climate change through the impacts that climate change may have on the productive enterprises that the sector lends to or invests in. Engagement with the financial sector can also create new sources of finance that can either directly finance adaptation actions or be blended with public sources of finance to de-risk investments or raise large-scale financing (i.e., PPPs).
- **Mining:** The mining sector is a major source of foreign exchange for Ghana and an important player within Ghana's private sector. It is also a significant user of land, energy, and water resources, and, as such, this sector should be prioritized.

Health, energy, and water supply have been identified as key sectoral vulnerabilities for Ghana (USAID, 2017). However, each of these industries involves major public sector participation and, as such, are not the focus of this document.

The **tourism** sector is also important for Ghana. It is a key foreign exchange earner for the economy and has a multiplier effect on other sectors of the economy (Republic of Ghana, 2015). It further stands to be impacted by climate change, due to coastal threats and impacts on natural resources that will affect ecotourism, among others. However, this sector is less organized than other sectors, and its organization has been in flux during recent years. As such, while engagement with this sector is important, the fragmented nature of the industry may reduce the efficiency of said engagement. For this purpose, the tourism sector was not identified as a priority sector for this strategy. However, engagement should be pursued through further consultation with the Ministry of Tourism and Ghana Tourism Authority.

Figure 2. Enabling factors for private sector engagement in the NAP process



Source: Crawford & Church, 2019.

3.0 Barriers and Enabling Factors for Private Sector Adaptation Efforts in Ghana

A series of barriers to private sector adaptation efforts have been identified in Ghana. Many of these had been identified previously through efforts by the Government of Ghana, in the development of the NAP Framework and previously in the NCCAS. Additional barriers have been identified through consultation with a variety of stakeholders, both within the identified sectors and in those with a broader perspective on private sector activities and vulnerabilities within Ghana.

The NAP Global Network guidance organizes the barriers to and enabling factors for promoting private sector engagement in adaptation into four key categories: financing, institutional arrangements, information sharing, and capacity development (Crawford & Church, 2019; see Figure 2).

A series of barriers to private sector adaptation action have been identified through bilateral and multilateral consultations with key stakeholders in Ghana's private sector. These are structured below according to the framework provided by the NAP Global Network.

3.1 Financing

Access to finance has been highlighted as a key challenge to investing in adaptation in Ghana. Interest rates are high, and there is a lack of capacity within the private sector to write bankable proposals to raise funding. Furthermore, some of the private enterprises that are most vulnerable to the impacts of climate change—including MSMEs—are among those with the least access to finance.

Compounding this problem, actions taken to adapt to the impacts of climate change may have returns that are not immediate, are related to longer-term trends that are not aligned with shorter-term lending cycles, or are not fully understood (Antwi-Agyei, 2018). This can make it more complicated for financial institutions to finance this type of investment, as the returns are not entirely clear.

There are a number of potential solutions to overcoming financing barriers to adaptation action in Ghana's private sector. These will need to be tailored to the specific industry challenges and sequenced in line with the prioritization of actions under the NAP process. These include, among others:

- **Concessional finance:** Finance for adaptation offered at more attractive rates than what is available on the market and/or with a longer loan tenor/duration. This approach can be particularly useful in cases where investment capital is difficult to access, short term (while benefits from adaptation are more likely to appear over a longer period), or high cost. This finance generally comes from the government, from donor agencies,

or from international finance institutions such as the World Bank or the African Development Bank.

- **Blended finance:** Blended finance involves developing financial products that combine, or “blend,” public concessional finance with private financing at market rates and maturities. This can “crowd in” private financing of adaptation by allowing private sector financiers to finance the less risky components of an adaptation-related project, while some of the riskier components are covered by public sector finance (Crawford & Church, 2019). Governments can create conditions for financial institutions to meet in order to access blended finance, such as achieving certain environmental and social safeguards or supporting the NAP (Crawford & Church, 2019). In the case of Ghana, such a pre-condition might be the effective employment of guidance put forward by the Sustainable Banking Committee (see Section 7.2.3.1). Engaging the private sector in this way can provide a bridge for engagement with key financiers and can help build the sector’s understanding of adaptation.
- **Guarantees and risk management:** One common barrier to financing for adaptation action is that either the project or borrower is viewed as risky. The government can help de-risk one or both of these perceived risks through the provision of some level of guarantee, whereby the government will ensure that a certain share of the loan will be paid by the government if the borrower is unable to for certain reasons. These are known as partial credit guarantees (where the creditworthiness of the borrower is that which is being guaranteed) or partial performance guarantees (where the technology/project is the subject of the guarantee). Political risk guarantees can also be obtained, where a lender is guaranteed in the case of certain political outcomes that change the policy or regulatory landscape in which the project is operating, and can also support challenges outlined below in Section 3.4.3.
- **Procurement contracts:** Government procurement can help secure demand for climate-resilient products and services (Crawford & Church, 2019). The use of these services can, in turn, help demonstrate their viability for climate adaptation.
- **Tax incentives:** Governments can provide tax breaks for companies that invest in products that enhance the resilience of their operations or society more broadly through targeted tax credits.

The effective use of many of these instruments depends on both the availability of financing and the capacity of the government (or other relevant institutions) to administer these instruments.

3.2 Information Sharing

Lack of information is a common barrier to adaptation action and was cited repeatedly as a major obstacle in stakeholder engagement for the development of this strategy. There are a variety of ways in which the Ghanaian government can help improve the private sector’s access to the information it needs to make informed business decisions and take action on climate change adaptation. Similarly, there are likely lessons to be learned from efforts on adaptation within Ghana’s private sector (even where they are not explicitly recognized as such), and the exchange of this information between the public and private sectors can encourage its utilization and diffusion of good practices.

3.2.1 Awareness of Climate Challenges and Adaptation Solutions

Ghana's NAP Framework notes that, "to increase private sector involvement, climate change should be presented as a business risk to the private sector" (Government of Ghana, 2018, p. 7). However, engagement with private sector actors in Ghana has suggested that there is mixed understanding of both the impacts of climate change and potential measures that can be taken to respond to these impacts, as well as ways to take advantage of opportunities that those impacts may present.

Thus, engaging the private sector in adaptation work must begin with raising private actors' understanding of climate change impacts, followed by understanding how these risks will impact their activities, operations, and profitability or how they could present new business opportunities. During bilateral interviews, many actors suggested ways in which the private sector could be engaged, including:

- **Sector-focused training:** Businesses can be trained in public sector-sponsored workshops on the impacts of climate change as well as potential coping solutions. These workshops should be designed and organized in coordination with business associations.
- **Media engagement:** Focused engagement of the media—in general, as well as sector-specific publications/outlets, as applicable—can be an effective and efficient means of sharing information related to the impacts of climate change, both broadly and on specific sectors.
- **Presentations at trade fairs and other sectoral events:** Many industries have trade fairs or other events that convene a broad share of the sector. Organized by business associations, these events can provide an opportunity to present information on climate impacts and potential solutions.

The implementation of awareness-raising on climate challenges and adaptation solutions will need the involvement and collaboration of public entities, including the Ghana Meteorological Agency. The agency's involvement will enhance the awareness of its role in climate change information and data generation and increase the use of its services for better planning by actors, especially farmers. In Ghana, weather station coverage is limited, presenting a barrier for smallholder farmers to adapt their practices to short-term weather patterns and variability, which subsequently affects their long-term planning (International Institute for Sustainable Development, 2017). The field of domestic climate information generation needs further investment to improve both its accuracy and accessibility to actors.

3.2.2 Lack of Data on Practices and Impacts

While it is certain that there is adaptation action at the firm level, much of the work being undertaken is relatively informal and may not be well documented in terms of the types of actions taken or their impacts.

While this type of data may be requested or mandated as a component of reporting, such a mandate may prove burdensome for smaller businesses and the informal sector within Ghana. Engagement with sectoral representatives should provide an opportunity to identify where there are gaps in understanding of existing practices and may warrant the development of

further studies to determine how engagement can be most effective through the provision of tools and frameworks.

3.3 Capacity Development

Even where other factors are conducive to private sector action on climate change adaptation, many companies may lack the technical capacity to design and implement adaptation activities. The government can play a key role in engaging private sector actors and their representatives to enhance their capacity and enable their participation.

3.3.1 Capacity to Implement Solutions

Companies often also lack the technical capacities needed to design and implement these adaptation measures. For instance, in the sectors of agriculture and building and construction, consultations with actors in Ghana revealed that there is frequently limited in-house technical capacity to implement the required adaptation actions.

The government, along with other partners—including civil society organizations, research institutes, and donor agencies—can aim to address this shortcoming through the provision of capacity building on climate change adaptation for those working in the private sector. This capacity building can take a number of forms, including:

- **Bilateral engagement:** Bilateral engagement and training of business associations can allow these associations to work to build their members' capacity to adapt to climate change.
- **Certification:** By certifying actors or entities who are trained to build these capacities, the public sector can help those private sector actors who are seeking contractors to enhance their climate resilience.
- **Sectoral workshops:** By engaging actors in sector-specific workshops, the public sector can provide private sector actors with the best available information on climate impacts for their sectors, as well as potential solutions. These workshops can also provide an opportunity for dialogue and allow private sector stakeholders to voice their key needs and priorities.

3.3.2 Capacity to Access Climate Finance

Few actors within Ghana have knowledge of or capacity to access international climate finance. There is limited knowledge of finance opportunities or sources or methods for accessing said finance. In many cases, this is accompanied by a lack of capacity related to the elaboration of strong project concepts and proposals. However, there are opportunities that the private sector can potentially take advantage of, such as requests for proposals through the Green Climate Fund's (GCF) Private Sector Facility and its project preparation support.

Key private sector actors, such as relevant association staff, should be invited to capacity-building trainings on climate finance opportunities and means of accessing these opportunities, including the development of project concepts and proposals. These may be held in concert with such trainings for public sector actors and should seek to actively incorporate input from private sector actors, such as Ecobank, which is accredited to the GCF.

3.3.3 Finance Sector Understanding of Climate Risks

Related to the barriers identified in Section 3.1, many investment opportunities in climate change adaptation (as well as mitigation) are not fully understood by actors in the financial sector, including at the national and regional levels. This can cause these institutions to avoid financing such actions or, if they do, charging a significant risk premium.

Likewise, the concept of assessing the overall climate risk of an institution's portfolio is a relatively recent concept. However, by doing so, financial institutions can reduce their own vulnerability to climate impacts while developing a stronger understanding of the economic value of resilience.

The EPA already works with private sector lenders who request support in making lending decisions. The government can expand this engagement, including through the Sustainable Finance Committee, by conducting trainings for private financiers to understand and manage the climate-related risk exposure of their portfolio as well as the potential benefits of investment in adaptation.

Efforts should likewise be made to engage directly with microfinance institutions. These institutions have different levels of capacity from traditional lenders and finance different types of activities, but they could be particularly important in reaching MSMEs.

3.3.4 Insurance Sector's Understanding of Climate Risk

The insurance sector in Ghana has had limited engagement on climate change-related risk to date and has limited capacity to understand, factor in, and mitigate climate risks within its operations.

There is significant potential to train the insurance sector to account for climate risks, as well as climate-related risk reduction, to enhance that sector's incentive to support climate-resilient development and disincentivize maladaptive behaviour.

3.4 Institutional Arrangements

Appropriate legal and policy frameworks are critical to promoting private sector engagement in the NAP process and investment in adaptation action. Stakeholders have identified a number of key institutional barriers to private sector action on climate change.



Photo: [CIAT/Neil Palmer \(CC BY-NC-SA 2.0\)](#)

3.4.1 Lack of Regulatory Authority

In certain cases, such as the building sector, regulations exist, but they are currently not being enforced. This lack of enforcement takes away from the potential of government regulation as a tool to enhance climate resilience. Enforcement and monitoring of existing regulation need to be addressed if Ghana is to consider options that will mandate climate adaptation measures be adopted.

In the case of the building sector, there is a call among actors for the creation of a regulatory body. There are also concerns that the standards authority lacks the capacity to enforce its mandate.

Through engagement with appropriate actors, such as the Chamber of Construction Industry, in the NAP process, the importance of this barrier for the desired sectoral outcomes can be further considered and solutions identified.

3.4.2 Perceived Lack of Interministerial Coordination

A number of private sector actors have noted that there are frequently conflicting messages emerging from different bodies of the government, implying a lack of consistency within processes for the development of government policy. Where this is the case, it presents a challenge for the effective implementation of this private sector engagement strategy, which seeks to avoid adding to the engagement burden of private sector actors by seeking synergies with other existing processes. Enhancing interministerial coordination is a key component of Ghana's NAP Framework, and it will be prioritized throughout the NAP planning process.

3.4.3 Perceived Lack of Policy Continuity

There is a perception among a variety of private sector actors that government policies lack durability beyond the extent of the current administration, which can create uncertainty. This perception of a lack of continuity can contribute to an environment in which businesses are hesitant to make longer-term investments in policy-relevant areas. This is a particular challenge for climate change adaptation, for which the returns are more clearly demonstrated in a longer time frame beyond election cycles.

To build confidence in the stability of the legal and policy context for adaptation investment decisions, the revision or adoption of legislative instruments supporting adaptation should be periodic, timely, and transparent (Crawford & Church, 2019). This means including a review and update cycle for both the NAP and any implementing regulations and related government actions that are undertaken. Such efforts should support greater private sector confidence in adaptation investments.

A summary of these barriers and potential solutions can be found in Table 1.

Table 1. Summary of identified barriers to adaptation action and options for private sector actors

Type of barrier	Barrier	Options for addressing
Finance	High interest rates	Concessional finance specifically for adaptation action Blended finance instruments Fiscal incentives: tax breaks, risk guarantees (partial credit guarantees, performance guarantees, political risk guarantees), government procurement contracts
	Short loan tenors/durations	
Information	Awareness of climate challenges and adaptation solutions	Sector-focused trainings Engage key media actors and conduct trainings for reporters Presentations at trade fairs and other sectoral events
Capacity	Lack of capacity to write project concepts and proposals	Trainings on project concepts and proposal development
	Capacity to implement solutions	Bilateral engagement with associations on implementing sectoral solutions Certification of sectoral adaptation practice trainers Sectoral adaptation solution training workshops for businesses
	Lack of financial sector understanding of climate risks	Capacity-building training for finance sector actors and engagement through sustainable banking committees
	Capacity of insurance industry to assess climate risks	Capacity-building training for finance sector actors
Institutional	Lack of regulatory authority	Include relevant private sectors on sectoral committees and include institutional strengthening as a key area of discussion
	Perceived lack of interministerial coordination	Promote coordination among all relevant agencies through ongoing engagement of the National Climate Change Committee Strengthen interministerial coordination as appropriate to prevent conflict between NAP implementation and other ministerial business/communications
	Perceived lack of policy continuity	Develop a periodic, timely, and transparent process for revision of legislative instruments around supporting adaptation

4.0 Existing Government Efforts and Mechanisms to Engage the Private Sector

There are a number of efforts underway in Ghana to engage the private sector, both specific to climate change and more broadly in public policy. Public policy provides a useful framework for engagement with the private sector, including the potential development of PPPs. The government should work to leverage these existing policies and mechanisms to engage the private sector in its NAP planning and implementation.

4.1 Private Sector Engagement in Ghana's Public Policy

4.1.1 National Climate Change Adaptation Strategy

The NCCAS (UNDP & UNEP, 2012) considers the private sector and civil society organizations as key implementing bodies for adaptation action. It identifies the responsibilities of MESTI and the District Assemblies to engage with the private sector and notes that sector strategies should consider private sector engagement, as per the focus of the NAP private sector engagement strategy.

4.1.2 Ghana National Climate Change Policy

Ghana's National Climate Change Adaptation Policy highlights the private sector as one of the key actors in climate change adaptation, noting that any of the adverse impacts of climate change are already being felt by private actors. The policy notes particular concern for the primary export sectors of cocoa and timber, as well as a need to find opportunities to leverage private sector investment to "climate-change-proof social and physical infrastructure" (MESTI, 2013).

4.1.3 PPP Policy

Ghana's National Policy on Public Private Partnerships (PPP) was adopted in 2011. It defines a PPP as "a contractual arrangement between a public entity and a private sector party, with clear agreement on shared objectives for the provision of public infrastructure and services traditionally provided by the public sector" (Government of Ghana, 2011). The PPP policy establishes guiding principles, establishes the role of different public sector institutions, and establishes PPP processes for government-originated and unsolicited projects.

The instruments envisioned under the PPP policy (the Project Development Facility, the Viability Gap Scheme, and the Infrastructure Financing Facility/Ghana Infrastructure Investment Fund) have further potential to support the development of transformational projects that catalyze private sector investment in climate adaptation and resilience.

Ghana's PPP portal has identified 32 PPP projects. The bulk of these (24) are in the Accra region, and most (18/32) are focused on the social and health sectors. At the time of this writing, the majority of PPPs are in a pre-procurement stage and just over a quarter (28%) are in procurement (Public Investment Division, 2019). While not explicitly focusing on climate resilience, some PPPs, such as those in irrigation or water infrastructure, may have implications for enhancing climate resilience and indicate a potential for this tool to be used for climate-resilience purposes in these sectors going forward.

4.1.4 Project Development Facility

The Project Development Facility (PDF) was first envisioned in the PPP policy as one of the financial instruments available to private actors. The PDF has now been established, and a dedicated account was opened at the BoG in 2018. The PDF is the official government vehicle for the financing of project preparation and transaction advisory work. It is financed through monies approved by parliament, loans, and grants from development partners (World Bank, 2018b).

The PDF may be a vehicle for supporting the development of PPPs in priority adaptation measures in Ghana and may thus be able to support the engagement of private sector actors in the implementation of the NAP.

4.1.5 Viability Gap Scheme

The Viability Gap Scheme (VGS) was also identified as a key financial instrument envisioned within the PPP policy. It was approved in 2016 and expected to be operationalized in 2019. The goal of the scheme is to facilitate private sector involvement in PPPs that have commercial potential but require significant upfront capital expenditure. The government has determined that it will use the VGS sparingly and has identified an initial set of priority projects within the PPP pipeline as potential candidates for VGS funding (World Bank, 2018b). None of these have yet been climate-oriented, but there is no barrier that prevents this mechanism from being used for said purpose.

Once the NAP process has been further developed, the VGS could potentially be employed where there are high-priority adaptation projects that require substantial initial capital outlays that can be structured as commercially viable PPPs to overcome barriers to private investment.

4.1.6 Ghana Infrastructure Investment Fund

The Ghana Infrastructure Investment Fund was established in 2014, replacing the Infrastructure Financing Facility. It has a mandate to originate, structure, and invest in infrastructure-related projects across Ghana, including PPPs. It was funded through an initial capitalization of USD 250 million and receives 2.5% of total value-added tax receipts and up to 25% of the Annual Budget Funding Amount. The board has approved USD 187.5 million in commitments for a variety of projects. It can be used to support PPP projects but has yet to do so (World Bank, 2018b).

4.2 Existing Initiatives on Private Sector Engagement Related to Climate Change

Effective private sector engagement for the NAP process will build on existing efforts, taking advantage of relevant learnings and best practices. Some of the ongoing efforts at private sector engagement in both climate change mitigation and adaptation are noted below. Where possible, the platforms that have been created should be engaged in the adaptation process. However, it should be noted that the opportunities created by climate change adaptation differ from those in climate mitigation, particularly given the fact that there are many climate mitigation actions that may show strong economic returns without any public sector support. These may exist within adaptation as well, but efforts to engage the private sector in this focus area may need to cast a wider net than mitigation efforts.

4.2.1 Nationally Appropriate Mitigation Actions Private Sector Platform

The Nationally Appropriate Mitigation Actions (NAMA) Private Sector Platform was put in place by the PEF to engage the private sector in climate change mitigation in Ghana. The PEF was supported in this effort by UNDP and MESTI. The PEF aims to use this platform to garner private sector interest and support investments in low-carbon initiatives that will ultimately contribute to greenhouse gas emission reductions and encourage the creation of green businesses.

4.2.2 NDC Private Sector Engagement

In order to enhance the engagement of the private sector in the funding and implementation of the country's NDC, Ghana is part of a consortium of six countries that will benefit from the NDC Private Sector Engagement project. The aim of the project is to map and assess existing national private sector players and national financial products, and correspondingly develop a comprehensive finance platform for the implementation of climate actions as well as a resource mobilization strategy. The EPA's presence in these efforts creates significant opportunities for synergies between these two initiatives. This project is implemented by the UNDP NDC Support Program, funded by the European Union and the governments of Germany and Spain.



4.2.3 GCF Country Readiness Program – Private Sector Engagement

Under the GCF Readiness program, Ghana has submitted a request for funding to “strengthening national capacities to access climate finance through enhanced country strategies and stakeholder engagement in Ghana.” One of the main objectives of this support

project is to engage the private sector through stakeholder awareness and targeted training for potential climate action financiers in the private sector.

4.2.4 Ghana Climate Innovation Centre

The Ghana Climate Innovation Center (GCIC) is a pioneering business incubator with the unique focus of developing SME ventures and entrepreneurs in Ghana’s “green economy.” The mission of the centre is to develop and support an exceptional set of transformational ventures and entrepreneurs who are pioneering adaptive and mitigating solutions for climate change issues in Ghana. The work of the GCIC focuses on five key economic sectors: energy efficiency and renewable energy, solar power, climate-smart agriculture, domestic waste management, and water management and purification. The GCIC is part of the World Bank’s infoDev Climate Technology Program, a unique program that supports high-growth, clean-tech companies to commercialize and scale the most innovative private sector solutions to climate change.

4.2.5 World Business Council for Sustainable Development Project – Weather Data and Smallholder Farmers

The weather data and smallholder farmers project has been initiated by the World Business Council for Sustainable Development and Opus Insights to implement technology solutions for farmers and supply chains affected by climate change in West Africa. It will do so by scaling up CocoaCloud, a data platform and impact initiative to strengthen agricultural productivity and climate resilience in the West African cocoa landscape. With the target of reaching one million farmers in Ghana and Côte d’Ivoire by 2024, the CocoaCloud data platform generates, translates, and disseminates critical information—such as weather forecasts and location-specific agricultural advice—that supports climate-smart decisions for agriculture. The impact initiative is already supporting 7,500 cocoa farmers, extension advisors, and wider community members in the Western Region of Ghana by providing training and localized weather forecasting services (including mobile phone alerts), enhanced by four weather stations installed locally in 2018 (Crawford & Church, 2019).

4.2.6 Tenure and Global Climate Change Project

The USAID-funded Tenure and Global Climate Change Project is working in Ghana to address challenges faced by the country’s cocoa sector. The project is focused on addressing the issue of low productivity as a result of old trees needing to be replanted and deforestation associated with the sector. The project, led by Tetra Tech with Winrock International, has brought together a number of cocoa supply chain stakeholders, including The Hershey Company and ECOM Agroindustrial, to address challenges on cocoa farm rehabilitation related to land tenure (Winrock International, 2019). The new shade trees to be planted are more resilient to weather stress and are expected to be accompanied by the planting of additional cash crops to supplement farmers’ incomes while the new cocoa trees mature.

5.0 The Business Case for Investing in Adaptation

As the impacts of climate change will vary from industry to industry and region to region, the business case for investment in adaptation in Ghana will be sector-specific. However, around the world, many companies have already begun to make substantial investments in climate change adaptation. These investments are being made for three main reasons (Crawford & Church, 2019):

- To manage risks for business continuity and reputation
- To capitalize on new markets and business opportunities
- To comply with policies, regulations, and investor interests.

Different private sector actors in Ghana will have different reasons for investing in climate resilience. For example, agricultural interests in Ghana are already being impacted by climate change, and this could get worse should crops fail as a result of increasing temperatures and variations in precipitation patterns. This can impact a number of actors throughout the agribusiness value chain, for example, as they see risks to their operations and supply chains. Larger, more visible companies may see threats to their reputation, should they fail to clearly demonstrate that they are taking climate change seriously.

While the impacts of climate change pose many risks for businesses in Ghana, addressing these impacts can not only help ensure business continuity but can also create a host of new business opportunities. The NAP Framework recognizes this and sees “creating markets in technologies and services that are beneficial to adaptation” as a key role for the private sector in NAP implementation. Climate-resilient goods can include products such as seeds that are more resilient to changing temperatures or precipitation patterns or equipment for monitoring and addressing vector-borne diseases. It can also include the delivery of services, such as the mechanical drying of agricultural goods. Ensuring that the private sector understands the emerging opportunities presented by climate change—and not just the costs—will be a crucial communications objective of the government (Crawford & Church, 2019).

All of the above directly impact the private financiers as well. The 2017 recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD), convened by



the Financial Stability Board, noted two key categories of climate-related risk: risks related to the transition to a lower-carbon economy and risks related to the physical impacts of climate change (TFCD, 2017). The latter of these (“impacts”) provides the basis for a business case for financial sector action on climate change. As climate change impacts the enterprises that financial sector actors invest in, their ability to repay loans (or produce a return for equity investors) diminishes. As such, private financiers have an interest in understanding climate-related risks and may even have an interest in supporting investments in resilience to reduce their exposure. While climate risks may indicate an imperative to reduce exposure to many of the most climate-impacted areas, “much of the impact on future assets will come through weaker growth and lower asset returns across the board.’ This suggests that investors may not be able to avoid climate-related risks by moving out of certain asset classes” (TFCD, 2017, p. iii). Better information on climate risks will in turn help investors engage with companies on the resilience of their strategies.

6.0 Potential Roles of Private Sector Actors and Approaches for Private Sector Engagement in Ghana

Private sector actors can play a variety of roles throughout the development and implementation of the NAP. In alignment with the principle to “engage the industry first,” the roles considered below are principally for the business associations or multipliers that represent a variety of companies within a specific industry.

Figure 3. Potential Roles for Private Sector Organizations in NAP Development and Implementation



6.1 Convening

One key role that all private sector associations can play is that of convening stakeholders. This type of engagement will be critical as public sector actors seek to organize trainings, workshops, and other forms of engagement.

6.2 Information Sharing, Awareness-Raising, Communications

As noted above, information on and understanding of climate impacts and measures to reduce climate risks can be limited among private sector actors in Ghana. To address this gap, the government can first try to leverage the country’s business associations and multipliers, many of which engage regularly with their members. The associations can thus act as an efficient

conduit for information, including information on climate-related risks, opportunities to engage in the NAP process, or opportunities to access finance.

6.3 Capacity Building

Private sector associations can also engage in efforts to train and build capacities among their membership on climate change adaptation, preferably in a “train the trainers” model, through which capacities built among associations are then transferred to members. These capacities can originally come from the government, can be developed organically within the association, or can be gleaned through interactions with other associations or industries, both domestic and international.



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6.4 Establishment of Context, Background, and Identification of Challenges

Private sector actors are well placed to understand the types of threats that their industry faces. They are able to note threats to their industry from a variety of sources, even if they do not necessarily associate these threats directly with climate change. Similarly, when climate-related impacts are presented to them, private sector actors are well placed to determine which of these impacts pose the greatest threat to their businesses, supply chains, and employees. As such, private sector voices are crucial to the government understanding the context and unique challenges faced by industry in a changing climate, and these voices should be drawn upon as the state defines the extent of the climate threat to private enterprise and finance.

6.5 Identification of Measures to Overcome Vulnerability

As noted above, private sector actors can highlight which climate impacts pose the greatest threats to them and where opportunities might lie for new goods and services that promote adaptation. This can be helpful in the identification and prioritization of adaptation measures for inclusion in the final NAP document. Additionally, given that private sector actors are already dealing with the impacts of climate change, in many cases, they may have already come up with appropriate solutions. Private sector actors can also gauge the feasibility of proposed measures and how realistic they are, considering barriers to implementation and/or financing (Crawford & Church, 2019).

6.6 Sharing Results and Best Practices with Government and Other Stakeholders

As private sector actors engage in efforts to climate-proof their own operations or provide climate resilience products and services to other actors, they can, as appropriate, relay best practices to the relevant associations and to the public to create an iterative process of monitoring and improvement of the efforts at resilience-building that informs the maintenance of a NAP as a living document. Successful examples of climate adaptation can also serve to promote crowding in, as other companies seek to follow the good examples set by first movers or “adaptation champions.”

6.7 Financing Climate Resilience

Private sector capital can be instrumental in the adoption of actions to adapt to climate change. As noted above, financial sector actors may have an incentive for investing in climate-resilience activities. Private financiers can blend their own financing with that of international funds such as the GCF or the World Bank where appropriate. Private sector actors can likewise access and channel climate finance, such as through the GCF’s Private Sector Facility.

7.0 Engaging Key Private Sector Actors in Ghana

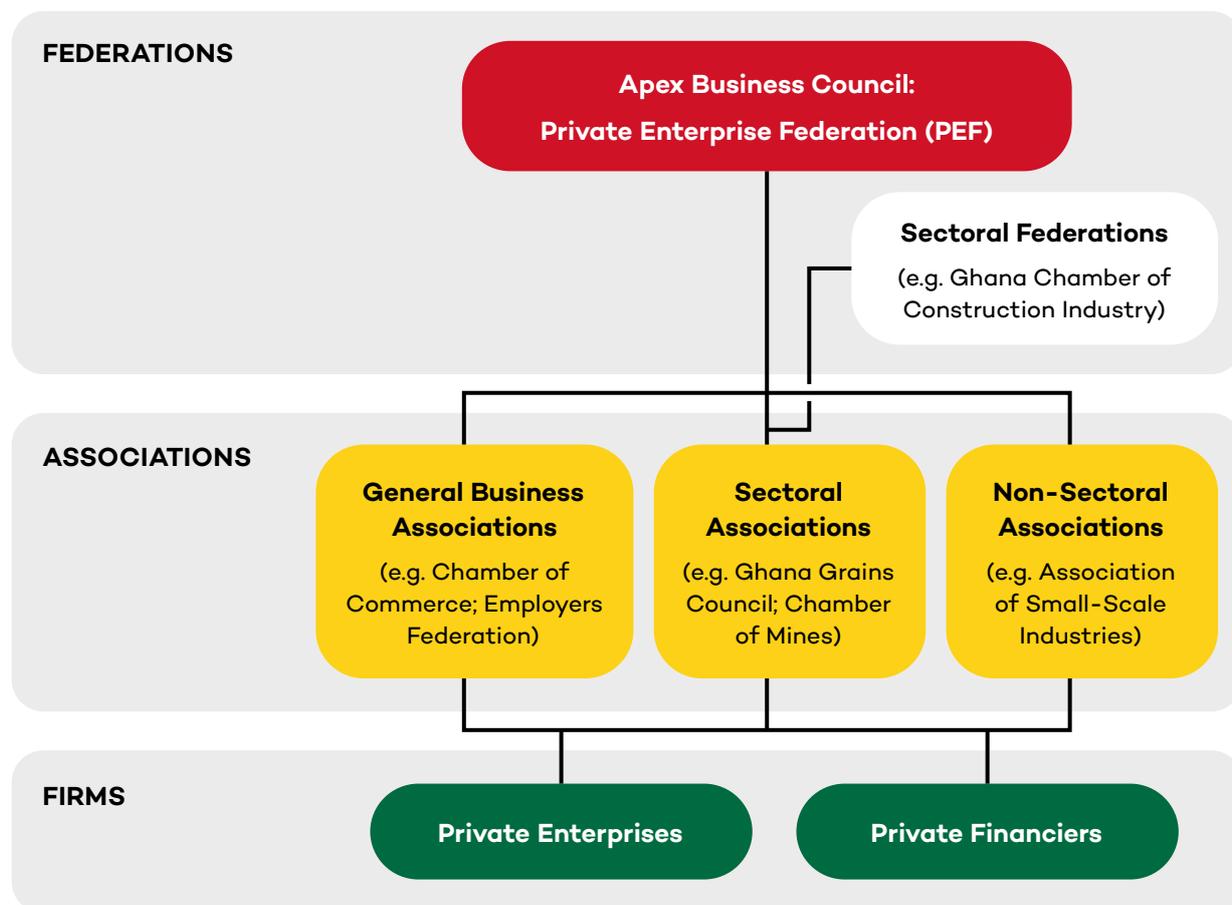
Ghana has a well-organized private sector with a large variety of business membership organizations (BMOs). These organizations provide a potential conduit to a number of private sector actors and can play a wide variety of roles. In a number of cases, these groups are organized hierarchically, with economy-wide or sector-focused BMOs coming together to form federations whose members are associations rather than particular companies.

Many of the large BMOs in Ghana represent the broad interests of the business community, including the Chamber of Commerce and the Employers Federation. There are also sector-focused associations that provide a variety of services for their membership. In certain cases, these have been organized into sectoral federations, such as the Ghana Chamber of Construction Industry, which allow these associations to align efforts where there are common objectives.

The key private sector associations and federations for NAP engagement are considered below. These represent key actors from the sectors identified as being most relevant for private sector engagement in adaptation: agriculture, construction, and finance. For each association, the following information is included, as available/ appropriate: a short description of their mandate, their current efforts related to climate adaptation, their potential to contribute to the NAP, and potential opportunities for engagement, in addition to any additional relevant information on the status of the sector.



Figure 4. Organization of Ghana’s private sector



7.1 Engaging Key Economy-Wide Business Interests in Ghana

There are several organizations representing private sector actors in Ghana that do not focus on a particular sector. These actors represent the overall interests of the organized business community and should be a focus for ongoing engagement in the NAP development and implementation process as and when appropriate.

7.1.1 Chamber of Commerce and Industry

The Ghana National Chamber of Commerce and Industry is a voice for the business community in Ghana. It has 5,000 members, eight operational offices throughout the country, and maintains regular contact with the government to advocate for business interests within Ghana.

The Ghana National Chamber of Commerce and Industry has not been involved in climate-related issues, though there is interest in doing so. They have noted that lack of awareness of climate change is a significant barrier among a large share of their membership.

7.1.2 Private Enterprise Federation

The PEF is an association of business associations. They provide advocacy, research, and capacity building for their membership. Their key areas of advocacy are climate change, corruption, and licensing and permitting. Given their cross-cutting role, with membership that ranges across a variety of industries, the PEF is able to provide broad insights into the Ghanaian economy and is in a strong position to maintain engagement with the focal points within different sectors.

The PEF has noted that key areas of need among their membership that relate to climate change include capacity building and education around climate change and its impacts. Many of their member organizations would benefit from enhanced capacity to access and use financing, including but not limited to accessing climate finance.

The PEF has the potential to provide a channel for convening key stakeholders around the NAP. This broad type of consultation should prove most useful at key junctures within the NAP process, including the development of a draft NAP document and the convening of private sector actors for the validation of the final product. Periodic engagement with technical staff at the PEF should also be pursued on an ongoing basis where appropriate, particularly for the purposes of ongoing strategic engagement with the broader private sector or aspects of it.

7.2 Engaging Key Private Sector Actors by Industry

A number of key actors are identified below by industry. This is not an exhaustive list of the BMO within the different industries, nor is it intended to rank these organizations. Instead, this section provides an initial mapping to help guide efforts to engage with the relevant sectors.

7.2.1 Agriculture

The agricultural sector in Ghana is represented by a number of different actors. These are primarily organized by crop type and size of holding. A number of these are discussed in further detail below.

One key method of engaging with these groups is through the Agricultural Working Group, which is organized by the Ministry of Food and Agriculture. This group meets quarterly and has committees organized around certain topics; the committees meet at more frequent intervals.

Another key public sector resource that should be engaged going forward is the network of Research-Extension-Farmer Linkage Committees designed to serve as an interface between the National Agricultural Research System and the National Agricultural Extension System (Ghana National Agricultural Research and Extension System, 2013).

7.2.1.1 FARMERS ORGANIZATIONS NETWORK

The Farmers Organizations Network (FON) is a network of small-scale farmers, including fisherfolk and livestock producers. Given that most of Ghana's agricultural concerns are small scale, its members represent a significant share of the agricultural community. FON's

key activities include advocacy and training of its members. They also participate in regional knowledge-sharing activities with other West African farmers' networks.

FON has experience working with its membership on a variety of climate-related efforts. It has started to educate farmers on the impacts of climate change, introduced farmers to drought-resistant seeds, begun construction of irrigation dams, undertaken tree-planting initiatives to combat deforestation and slope destabilization, and supported the adoption of drip irrigation.

FON's close relationship to its membership allows it to play a key role in the identification of climate-related challenges for the agricultural community. For example, the particular climate-related impacts noted among its membership are drought and heavy storms, causing crop damage near the Black Volta.

Given FON's close relationship with smallholder farmers, it has the potential to act as a key information resource for the continued identification of Ghana's evolving vulnerabilities to climate change. It also puts FON in a strong position to act as a trusted intermediary and disseminator of information related to resilience, whether this comes from the government or its engagement with other networks across the region. These factors, along with its experience in project implementation, means that FON has the potential to act as an effective implementing entity of climate-resilience projects. For larger projects, this role would have to involve collaboration with a larger entity, given the relatively small scale of its previous experience.

7.2.1.2 GHANA GRAINS COUNCIL

The Ghana Grains Council (GGC) is the private sector association for actors in the value chain for grain production in Ghana. In addition to farmers, its membership includes banks, insurers, and a range of service providers for processing agricultural goods. Its key activities involve advocacy, capacity building, warehousing services, and a variety of networking-related services for their membership.

The GGC provides advice and support to its membership on climate change adaptation. For example, GGC advises its membership on seed choices. It also recommends that member farmers make use of mechanical drying services in order to reduce their reliance on increasingly unpredictable weather patterns to dry their crops.

Given the GGC's relationship with the full value chain of the grains sector, it is in a strong position to liaise with the government and advise on these particular challenges throughout both the development and the implementation of Ghana's NAP. The GGC can provide information and capacity-building services to various parts of the grains value chain and can support engagement with actors in the value chain that may be less engaged on climate-related issues but stand to be affected by climate impacts. While the GGC itself is not a provider of specific products that can help enhance the resilience of Ghana's agricultural sector, some of its members do indeed provide these services, such as the mechanical drying services noted above.

7.2.1.3 FEDERATION OF ASSOCIATIONS OF GHANAIAAN EXPORTERS

The Federation of Associations of Ghanaian Exporters (FAGE) is a private sector federation of associations of farmers that primarily export their produce. FAGE works to assist members with

finding solutions to barriers that hinder the production and export of their products, primarily through market-based approaches. It also advocates for fair governmental intervention, given the state's role as the market regulator for agricultural inputs importation and sale.

FAGE's members are aware of the impacts of climate change on the sector, and some have already started acting to adapt their activities. In regions where climate change is putting pressure on water availability for crop production, for instance, many farmers have invested in irrigation, in addition to collecting rainwater during the wet seasons for use during drier seasons. But while some adaptation measures are being taken, there is no systematic use of adaptation options among members of the federation; only those farmers with financial capacity are investing in adaptation measures in their farming activities. There is an earnest interest to see government interventions widely enhance knowledge and implementation of adaptation techniques within the FAGE community.

Although FAGE has participated in climate-related workshops organized by the EPA in the past, the members of the federation would like more actionable involvement with governmental institutions and programs on adaptation in Ghana. Its main suggestions include:

- Collaborate with EPA experts to organize trainings on adaptation technologies, including: (1) multi-cropping techniques in climate-sensitive areas, (2) afforestation, (3) plant protection techniques, (4) identification of climate-fit pesticides, and (5) conservation cropping techniques.
- Assess vulnerabilities and report on adaptation options for their industry, jointly with the EPA, and develop a roadmap for the implementation of the adaptation options.
- Identify funding sources to implement the roadmap.

Engaging FAGE in the development and implementation of the NAP in Ghana will primarily be at the technical level, with the needs and vulnerabilities of their sector identified and fed into the overall NAP planning and the development of relevant adaptation options translated into concrete actions for implementation. This can, in part, be done under NAP planning for the agriculture sector, with a specific focus on FAGE activities.

7.2.2 Forestry

The Forestry Commission of Ghana (FCG) has recently signed a landmark agreement with the World Bank that rewards community efforts to reduce carbon emissions from deforestation and forest degradation. This five-year Emission Reductions Payment Agreement with the Forest Carbon Partnership Facility Carbon Fund unlocks performance-based payments of up to USD 50 million for carbon emission reductions from the forest and land-use sectors (World Bank, 2019a). As these mitigation measures have been materialized, the forestry sector in Ghana must also engage in actions to address any impediment to implementing sustainable practices that enhance adaptation in sectors whose activities depend on forest resources.

The NAP process represents an opportunity for the FCG to engage with actors, both private and public, to advance work on adaptation-related matters in the forestry sector. In driving this adaptation planning process, the EPA should identify jointly with the FCG short-, medium- and long-term actions in that regard. As agriculture (especially expanding cocoa farming), illegal mining, and logging are the main threats to Ghanaian forests, the FCG, the Cocoa Board, and

the Chamber of Mines must be involved in discussing climate change and adaptation in the forestry sector. The engagement must start with working sessions that raise awareness about the impacts of climate change on the forestry sector, then assess in-depth vulnerability and propose adaptation options that would showcase priority pathways to integrate into the NAP document with a strategy for implementation. The private sector industries whose activities are linked to forest resources can explore ways to contribute to funding the identified adaptation measures through instruments such as corporate social responsibility programs.

7.2.3 Finance and Banking

As noted above, Ghana has a robust finance and banking sector. One of the key actors in this sector is the GAB, which has engaged in climate change and sustainable development issues principally through the Sustainable Banking Principles Committee. Furthermore, the sector may be involved in accessing international climate finance through the GCF Accreditation of Ecobank going forward.

7.2.3.1 SUSTAINABLE BANKING PRINCIPLES COMMITTEE

The banking sector in Ghana has established the Sustainable Banking Principles Committee, which aims to develop sustainable banking principles to ensure that banks and clients are in alignment with the Sustainable Development Goals, especially Goal 13 (climate action). This committee was spearheaded by the BoG and also includes the GAB and the EPA. The committee is currently developing a series of principles for sustainable lending and guidance notes for lending to particular sectors. Guidance notes are in development for:

- Agriculture and forestry
- Power and energy
- Manufacturing
- Oil and gas
- Construction and real estate

Adherence to the principles is not initially intended to be mandatory. However, the BoG does intend to make use of these principles in its own operations, which will have a general impact on the conduct of finance within the country.

The Sustainable Banking Principles Committee will continue to meet quarterly following the publication of the principles and the guidance notes. The Government of Ghana can most effectively engage this committee in the NAP process through its representative on the committee and engagement in the quarterly committee meetings.

The EPA further plays an ongoing role in engagement with the private sector through their role in providing due diligence on projects and assessment of environmental risks, as well as training financial institution risk officers on climate vulnerability. Further discussion on enhancing the sophistication of these efforts, including consideration of models for inclusion of resilience in environmental impact assessments, should continue to be considered throughout the NAP development and implementation process.

7.2.3.2 ECOBANK GHANA LIMITED

Ecobank Ghana Limited is a banking company in Ghana that had total assets of GHS 9.09 billion at the end of 2017 (Ecobank, 2019). The company was accredited to the GCF at the Fund’s 23rd Board Meeting, July 6–9, 2019, in Songdo, South Korea (Antonich, 2019). The bank has been accredited for medium-sized projects (USD 50 million to USD 250 million) that have minimal environmental and social risks. In terms of fiduciary standards, the bank is approved at a basic level (general management and administrative capacities, transparency, accountability), as well as on-lending and blending (GCF, n.d.).

7.2.4 Insurance

The insurance industry is a key potential private sector partner in addressing climate change in Ghana. As an industry that supports management and pooling of risks, not only is the industry well-positioned to support adaptation action, it is also potentially vulnerable, as climate change is likely to impact many of the industry’s consumers.

Understanding of climate change within the insurance industry is rudimentary within Ghana.² However, there is recognition of the fact that it poses a threat to the industry and that a business case can be made for further engagement on the issue. There are current efforts to establish insurance schemes to insure crops; such arrangements will necessarily be impacted by climate change, as one of the sectors that is likely to feel substantial climate impacts. Efforts should be made to ensure that these schemes are structured effectively to take into account the latest science and promote investments in resilience.



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The GIA is the trade association for all licensed insurance and reinsurance companies in Ghana (GIA, n.d.b). It currently has 54 members, divided among life insurance, general insurance, and reinsurance, as well as one associate member (Ghana Insurance College) (GIA, n.d.b).

The GIA should be the main point of contact for engagement with the private sector in the NAP context. Efforts should focus first on engaging with the association to identify opportunities to enhance the sector’s understanding of the impacts of climate change to incorporate climate-related risks into how the insurance companies do business, through broad and/or sector-focused trainings. The GIA could further engage by developing tools and approaches for actions and investments that Ghana’s insurers and reinsurers can undertake to reduce its and its customers’ exposure to climate risks.

² Based on consultations with key stakeholders.

7.2.5 Building and Construction

Building and construction will play a critical role in ensuring that Ghana's infrastructure and building stock are resilient to the impacts of climate change. The NCCAS notes that "over the years, provision of infrastructure facilities such as roads, bridges, and housing in Ghana have not taken into consideration additional climate risk, especially at the design stage. The ultimate effect is that in times of intense climatic impacts such as flooding, infrastructure facilities are not able to withstand the shocks" (UNDP & UNEP, 2012).

Infrastructure and building consist of large investments with long lifetimes. Smart, climate-resilient design and development can thus have significant long-term benefits. In contrast, building and infrastructure investments that do not effectively take climate into account are likely to prove costly for years to come and could endanger Ghanaians. Ensuring that the building and construction sector has the capacity and the intention to develop in a climate-resilient manner will be critical to enhancing public safety and the resilience of the country as a whole.

The sector is currently in the process of consolidating how it is organized, with the recent formation of the Ghana Chamber of Construction Industry. This new development has the potential to create a central focal point for effective engagement with the entire industry.

7.2.5.1 GHANA CHAMBER OF CONSTRUCTION INDUSTRY

The Ghana Chamber of Construction Industry was inaugurated in May 2019. Its members include a number of the key associations representing various parts of the construction and building industries. Its membership currently stands at 12 associations. The organization has identified the following as its key functions:

- Advocacy
- Championing the creation of a regulatory body
- Networking
- Capacity building
- Market linkage
- Research and development

The Ghana Chamber of Construction's efforts to provide capacity-building services to its member associations, as well as its efforts to develop a regulatory body, have the potential to contribute to the goals of the NAP. Its inauguration presents an opportunity for engagement as it continues to grow and evolve. Its central role within the industry suggests that it has strong potential to be a key convener and an intermediary between the government and the industry, where broad input from the sector is required. There could also be links to academia, integrating climate-resilient building into the training of architects and engineers.

7.2.5.2 GHANA REAL ESTATE DEVELOPERS ASSOCIATION

The majority of real estate developers in Ghana are members of the Ghana Real Estate Developers Association (GREDA). The association focuses on increasing the housing stock to

decrease the housing deficit currently faced by Ghana, currently estimated to be 2 million units (GhanaWeb, 2019).

The association aims to stay current on best practices in green building internationally and to share these practices with its membership. It aims to engage at least once a month, through workshops, seminars, trade fairs, CEO breakfasts, and other events. Engagement with the government on green building practices has occurred, but not on a regular basis.

GREDA is interested in common strategies for green building within the country, such as setting national targets regarding the share of the population that live in green, resilient housing. Additionally, it could potentially support the elaboration of specific guidelines for climate-resilient development in coastal areas and efforts to ensure that they are followed.

GREDA's central role among real estate developers means that it can contribute significantly to the development and implementation of the NAP. Given its engagement in forums that provide the most up-to-date information on green building, it can contribute to the identification of measures and approaches for inclusion in the NAP. GREDA's regular engagement with its membership means that it can be an effective conduit for the transmission of information and the building of capacity to enhance resilience in the sector. Its members will further be key players in the adoption of resilient building practices and may ultimately be among the private enterprises that provide key services to individuals and businesses.

However, even though a majority of the developers in Ghana are members of GREDA, only a small percentage of homes in Ghana are constructed by developers. The majority are developed by individuals on their own. GREDA is, of course, working to change this. The role of professional real estate developers within the industry is beyond the scope of this strategy. That said, the individual approach to housing does mean that efforts to engage with GREDA's membership may have limited impact. Efforts may need to be taken to engage with the public more broadly on resilient housing development. Further engagement with the industry and with GREDA may help to determine their potential to act as a partner in any such efforts.

7.2.6 Mining – Chamber of Mines

Mining is a key industry in Ghana, as noted in Section 2.2. The Ghana Chamber of Mines has expressed an interest in climate change and environmental issues more broadly. To date, its efforts have been limited to mitigation and reducing the consumption of fossil fuels. However, the sector's significant use of land, water, and energy resources underscore the need for it to adapt to climate change, to ensure that both mining operations and mine-adjacent communities are resilient going forward. The organization has the potential to prove an important partner for the government. In particular, it may prove pivotal as a convener of its member organizations in the country.

7.3 Summary of the Potential Roles of Ghanaian Associations in NAP Development and Implementation

Table 2. Potential roles of key private sector actors in NAP planning and implementation³

Organization	Sectoral context	Review/ identify measures	Provide capacity building	Implement projects (with funding)	Provide adaptation services	Finance measures (own or external resources)
Association of Bankers						• (members)
Association of Building and Civil Engineering Contractors of Ghana		•	•	•		
Ecobank Ghana Ltd						•
Federation of Associations of Ghanaian Exporters	•	•	•			
Farmers Organizations Network	•	•	•	•		
Ghana Chamber of Mines	•	•	•			
Ghana Grains Council	•	•	•		• (members)	
Ghana Insurers Association			•			
Ghana National Chamber of Commerce			•			
Private Enterprise Federation		•	•			
Ghana Real Estate Developers Association		•	•		• (members)	
Sustainable Banking Committee		•	•			

³ “Convening” is omitted, as it is common to nearly all of the identified actors.

8.0 Modalities of Engaging with the Private Sector in the NAP Process

8.1 Multistakeholder Secretariat/Coordinating Committee

The Least Developed Countries Expert Group *Technical Guidelines for the NAP Process* (2012) are an important resource in the NAP process. In the planning stage, the guidelines recommend that governments designate a multistakeholder secretariat or coordinating committee for the NAP process (Crawford & Church, 2019). Accordingly, the NAP Framework calls for the EPA and MESTI to “establish cross-sectoral policy groups to develop the NAP by nominations for participation from a range of ministries, agencies and non-state actors, including civil society and the private sector” (Antwi-Agyei, 2018). The roles of these groups need to be further elaborated. In terms of private sector actors for engagement in this process, special attention should be paid to engagement with the PEF, given its focus on climate change, its broad representation of the private sector, and its reach to potentially engaging the key associations mentioned above. For efficiency’s sake, these should be engaged at the highest level appropriate, while considering dynamics within the industry and whether associations representing a particularly climate-vulnerable section of the industry should be invited to participate, even if a broader industry coalition exists.

Key contributions to the NAP process: providing inputs on sectoral context; identifying measures for inclusion in NAP

8.2 Engagement Through Existing Forums with Public and Private Membership

As noted above in the principles, private sector engagement should seek to utilize existing structures wherever possible and appropriate. A number of such engagement opportunities exist, including, but not limited to:

- **Agricultural Working Group**, organized by the Ministry of Food and Agriculture: This group has quarterly meetings and has a series of committees organized around particular topics that have more relevant communication. Participation in one or more of these quarterly meetings, and potential subsequent engagement in one of the committees, as relevant, would offer a valuable opportunity to share information on the NAP process and receive inputs from the agricultural sector.
- **Sustainable Banking Principles Committee**: The EPA is a member of this initiative, along with the BoG and the GAB. The committee meets at least quarterly, sometimes more often. They have recently focused on the development of guidance notes for sustainable lending to a variety of sectors. At the time of this writing, these guidance notes are near

completion, pending the execution of a CEO's roundtable. The committee will continue to meet following the publication of these notes and may provide a valuable entry point for engagement with the financial sector.

Key contributions to the NAP process: providing inputs on sectoral context; identifying measures for inclusion in NAP; sharing information; building capacity

8.3 Awareness-Raising Through Industry Events

In both the planning and implementation phases of the NAP, there may be situations where broad input from a priority sector is necessary. This may potentially require the organization of government-hosted sectoral events, such as workshops, trade fairs, or conferences. However, in the interest of both efficiency and effectiveness, efforts should be made to either secure an invitation to participate in an industry-focused event or to organize a stakeholder engagement activity in a manner that is complementary to said event.

Relevant events might include elements such as the engagements that GREDA aims to hold for its members on a monthly basis, for example.

Key contribution to the NAP process: sharing information

8.4 Purpose-Driven Training Workshops

In many cases, it may be important to organize workshops to build the capacity of actors and address identified capacity gaps. These should largely be focused on particular sectors and may be focused on particular regions, as appropriate. Examples of relevant topics could include:

- Climate impact projections, climate risks, and potential measures for addressing them in the agricultural sector
- Approaches for assessing climate risks for the financial sector
- Green building methods that enhance climate resilience.

Such technical workshops can also provide an opportunity for identifying solutions relevant to the local context. Where internal capacities are limited, the government should work with partners in civil society, bilateral donors, and international organizations to design and deliver these training workshops.

Key contributions to the NAP process: building capacity; identifying measures for inclusion in NAP

9.0 Principles of Private Sector Engagement in Ghana's NAP Planning and Implementation

Building on the nature of Ghana's private sector landscape, a series of key principles have been developed to guide the engagement of the private sector in NAP planning and implementation. Given that the NAP development and implementation process will continue for quite a while, the private sector engagement strategy will need to be flexible. The below principles aim to inform an approach to decisions related to a dynamic engagement environment.

Figure 5. Guiding principles for private sector engagement in Ghana's NAP planning and implementation



- **Engage at the appropriate level for the activity:** Development and implementation of the NAP will require a variety of different actions in which the private sector can be involved. Where a larger cross-section of private sector actors is needed, such as general validation of NAP drafts, it will likely be appropriate to engage at the level of a broad federation, such as the PEF. In contrast, where specific inputs are required in a particular sector, engagement with an association or industry-specific federation may be more appropriate.
- **Engage the industry first, rather than the company:** Financial and human resources for public sector investment in engaging the private sector in adaptation are both scarce. Fortunately, many of Ghana's key priority industries for engagement are well organized into BMOs that serve a wide variety of purposes. These associations should be the first stop for engagement with the private sector, including in awareness-raising actions and capacity building.
- **Utilize existing structures:** The public sector currently has representation in several existing modalities for engagement with private sector actors. These include Agricultural Working Group meetings organized by the Ministry of Food and Agriculture and the EPA's presence on the sustainable banking committee. The government should identify and

use the relevant structures that already exist for private sector engagement prior to attempting to establish a new platform for engagement.

- **Lead by example:** Management of Ghana's state-owned enterprises allows the Ghanaian government an opportunity to demonstrate good practices across a variety of businesses. Doing so can demonstrate public sector commitment to adaptation, help create markets and develop experience for products that build climate resilience, and raise awareness of solutions within both the public and private sectors, promoting crowding in. The state enterprises commission should thus be an active participant in engagement efforts and the NAP process.
- **Ensure dynamism:** The landscape of the private sector at the time of this writing may not be a perfect overview of the private sector at the conclusion of the NAP development process. As such, the components of this strategy, as with all elements of the NAP, should be regularly reviewed and updated as appropriate to reflect new developments within Ghana's private sector.

10.0 Next Steps for Private Sector Engagement

This strategy provides an approach to engagement with the private sector in Ghana in the NAP process. It has identified key actors within several important and climate-vulnerable sectors, as well as roles that these actors might play in supporting the work of the NAP. The approach is intended to be flexible and to avoid pre-judgment of the broader NAP process.

What follows are intended as the first steps toward private sector engagement in the NAP process. It does not necessarily include all the approaches and modalities for engagement identified above, as the use of these will depend largely on the structure of the NAP process going forward.

However, a few key aspects of the next steps can be identified: enhancing the knowledge and capacity of private sector actors and effectively integrating private sector stakeholders into the NAP development process.

10.1 Information Sharing and Capacity Building

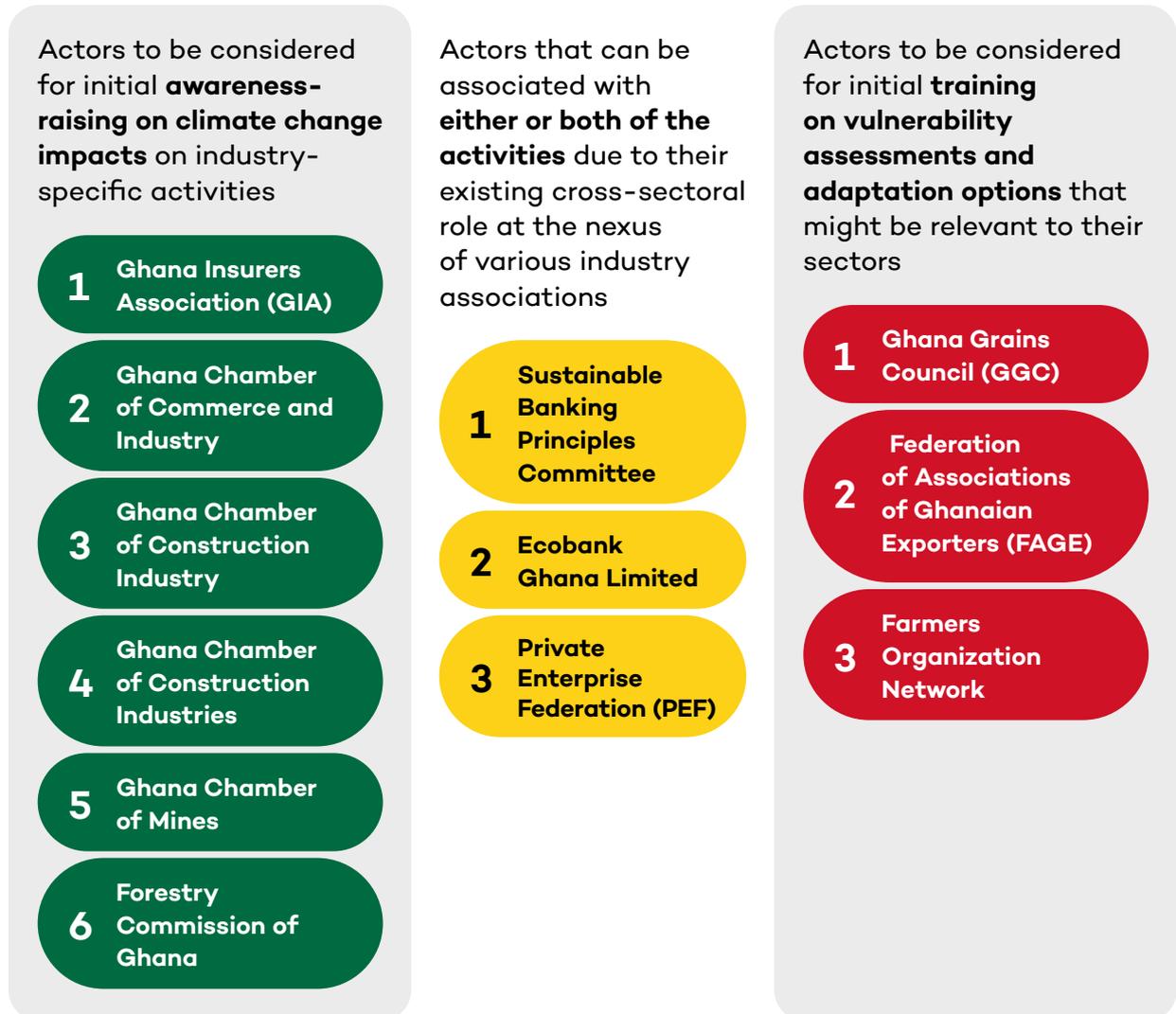
Information drawn from multistakeholder exchanges and bilateral interviews show that private sector actors in Ghana are at different stages when it comes to knowledge of climate change in general and climate change in connection with their activities and industries in particular, through potential impacts on either their value chain, operations, or profitability. For better planning in engaging the private sector in the adaptation work overall, and in the NAP specifically, actors should possess a good understanding of climate impacts on their industry, the broader concept of adaptation, and potential adaptation measures as best practices available in the country or easy to access for implementation. For this purpose, it is suggested that the EPA:

1. Work with partners to provide tailored, industry-specific awareness-raising and/or capacity building on **climate change impacts** and **adaptation** to those actors whose understanding and knowledge of such concepts are limited. This will prepare them to be fully engaged in the later part of the NAP process. Approaches for undertaking this process are identified in Section 3.
2. Organize **industry-specific training** for actors who are aware of the current and potential effects of climate change on methodologies, ways, and tools (including Indigenous Knowledge) to conduct vulnerability assessments and identify adaptation options.

These two activities will prepare actors for effective and informed engagement. By identifying adaptation priorities in their industries, stakeholders can feed into the overall NAP document preparation and implementation planning either through projects or programs for which funding will be sought in the overall planning of NAP in Ghana.

Figure 6 proposes a classification of actors based on their suitability for either or both types of the suggested activities (awareness-raising or training) at this current stage of the analysis.

Figure 6. Classification of actors for the specific immediate engagement activities



10.2 Integration of Private Sector Stakeholders into the NAP Process

Additionally, as the NAP process proceeds, key private sector actors should be included in decision-making processes, as noted in Section 8. Final determination of the level of private sector engagement in sectoral working groups should be determined as follows:

- For national sectoral working groups, determination of the key actors for a particular group should be undertaken in conjunction with the industry federation, if one exists (such as the Ghana Chamber of Construction Industries). If not, engagement can occur with the most active associations in the sector. The PEF should also be consulted.

- For district-level stakeholder engagement, the relevant federation/associations should be approached for input, as should the Chamber of Commerce, which has a series of district-level chapters and can identify key sectoral players within said chapters.

10.3 Interministerial Engagement

It was noted by stakeholders that consistency of messaging among government ministries can be a barrier to private sector engagement. It is anticipated that the NAP will take a whole-of-government approach and will help to address this.

Additionally, this engagement may wish to focus on areas where they can help in the expansion of private sector engagement. For example, the EPA should plan to engage with the Ministry of Tourism to discuss existing engagement with the sector, current trends, and how this sector may more effectively be brought into the NAP process despite the apparent lack of formal organization of the sector.

Furthermore, the EPA staff responsible for the NAP development and implementation should scale up engagement with the ministries that organize working groups with the private sector, such as efforts related to agriculture (Ministry of Food and Agriculture), agricultural insurance (Insurance Commission), and others, as appropriate.



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Annex 1. Stakeholder Consultations

In the development of the private sector engagement strategy, bilateral consultations were conducted with the following entities:

- Ghana Environmental Protection Agency (EPA) – multiple departments
- Private Enterprise Federation (PEF)
- Ghana National Chamber of Commerce
- Ghana Association of Bankers
- Sustainable Banking Committee
- Association of Building and Civil Engineering Contractors of Ghana
- Farmers Organizations Network
- Federation of Associations of Ghanaian Exporters
- Ghana Grains Council
- Ghana Real Estate Developers Association (GREDA)
- Chamber of Mines
- Biogas Technologies/NAMA Private Sector Platform

Further participants were engaged via a national workshop for private sector engagement, which was held in August 2018.

Annex 2. Agenda for Stakeholder Engagement Workshop: August 27–28, 2019, Mensvic Grand Hotel, Accra

Time	Session	Lead	Description/Notes
08:30 – 09:00	REGISTRATION		
09:00 – 09:15	Welcome Remarks	Mr. John A. Pwamang, Ghana EPA	Mr. Pwamang will provide welcome remarks and open the workshop.
09:15 – 09:35	Introduction to the NAP process	Dr. Antwi-Boasiako Amoah, Ghana EPA	Dr. Boasiako Amoah will welcome participants and provide a brief overview of the NAP development process in Ghana.
09:35 – 09:55	Workshop objectives and overview of the project	Mr. Paolo Cozzi, Climate Analytics, Inc.	This session will share the purpose of the workshop and discuss the advancement of the project to date.
09:55 – 10:15	Snapshot of the private sector in Ghana	Thomas Kankam, Private Enterprise Federation	This session will provide an overview of the Ghanaian economy and the role of the private sector within it, focusing on the key industries and actors within those industries.
10:15 – 10:35	Introduction to private sector engagement in the NAP process & roles of private sector actors	Mr. Alec Crawford, International Institute for Sustainable Development (IISD)	This session will provide an overview of why private sector actors should be involved in the NAP process, and key ways they can be engaged, as well as key barriers to private sector investment in adaptation.
10:35 – 10:55	BREAK		

Time	Session	Lead	Description/Notes
10:55 – 11:25	Discussion: Why does(n't) the private sector engage in adaptation in Ghana?	Mr, Kouassigan Tovivo, Climate Analytics	<p>Based on the previous session, a brief overview of the barriers to private sector investment that have been identified in the Ghanaian context will be given. Participants will discuss what they see as the key barriers to private investment in adaptation in Ghana are.</p> <p>Discussion Questions:</p> <ul style="list-style-type: none"> • Are the identified barriers to private sector adaptation appropriate and relevant to the Ghanaian context? • Are there other relevant barriers that were not mentioned? • What tools can be employed to overcome these barriers?
11:25 – 12:25	Key sectors for engagement in the NAP in Ghana	Paolo Cozzi	<p>This session will present sectors which are anticipated as being most vulnerable and having most potential to participate in the national adaptation planning, and also discuss anticipated roles these actors can play, and appropriate modalities for engagement.</p> <p>Discussion Questions</p> <ul style="list-style-type: none"> • Are the identified sectors the most relevant for the NAP process? Are any relevant sectors missing? • Who are the key actors for engagement with these sectors? What additional key actors should be included? For what roles? • How do we effectively engage with other elements of the financial sector? • Are there additional ways these actors can be engaged in the NAP process?
12:25 – 13:25	LUNCH		

Time	Session	Lead	Description/Notes
13:25 – 14:25	Case studies of private sector engagement in adaptation	Kouassigan Tovivo	<p>This session will share examples of engaging the private sector in adaptation action. This will be followed by discussion.</p> <p>Discussion Questions</p> <ul style="list-style-type: none"> • Are any of the presented case studies relevant to the Ghana context? Why or why not? • Which industries in Ghana are most likely to have supply chain actors that are concerned about climate change impacts? • What successful examples of private sector climate adaptation have you seen in Ghana?
14:25 – 15:10	Identified principles and modalities of engagement	Paolo Cozzi	<p>This session will present the high-level principles that have been identified for engagement with the private sector in the NAP process, as well as potential modalities for engaging with private sector actors. Participants will have an opportunity to provide feedback and provide additional inputs on how best the private sector might be engaged.</p> <p>Discussion Questions</p> <ul style="list-style-type: none"> • Are the identified principles of engagement appropriate? • Are the modalities of engagement appropriate? Are there other ways that you would recommend incorporating into the strategy? • Are there specific incentives that you think would be effective in mobilizing the private sector that haven't been identified? • Are there additional existing platforms for public-private engagement that should be incorporated in the strategy?
15:10 – 16:10	Discussion: Additional feedback on the Private Sector Engagement Strategy and next steps in validation	Paolo Cozzi & Kouassigan Tovivo	<p>In an open session, participants will be invited to share additional comments on the Private Sector Engagement Strategy that have not been addressed.</p> <p>Discussion Question</p> <ul style="list-style-type: none"> • What additional feedback do you have regarding the draft private sector engagement strategy?
16:10 – 16:30	Closing remarks and next steps	TBC, Ghana EPA	The Ghana EPA will provide closing remarks and share next steps.

