



Climate Governance

CAT Climate governance series

GHANA

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CAT Climate Governance series

Under the Paris Agreement, governments have committed to limiting temperature increase to well below 2°C above pre-industrial levels and pursuing efforts to limit it to 1.5°C. Achieving this objective will require halving global emissions by 2030 and reaching net zero CO₂ emissions by 2050 and all gases around 2070, with net negative emissions thereafter.

Governments in all countries play a critical role in enabling this transformation, which involves action from all aspects of society and the economy.

The Climate Action Tracker (CAT) tracks the progress of countries towards achieving the climate targets they have set for themselves under the Paris Agreement and what the combined effect of these commitments and policies mean for global temperature levels at the end of this century.

In this series, the CAT expands on its country analysis to evaluate the ability and readiness of national governments to enable the required economy-wide transformation towards a zero emissions society.

Our assessment focuses on national governments and analyses four aspects of governance covering key enabling factors for effective climate action:

- the political commitment of the government to decarbonisation,
- the institutional framework it has put in place to achieve its emission reduction targets,
- the processes it has established to develop, implement and review mitigation policies, and
- its ability and willingness to engage with relevant stakeholders on policy development.



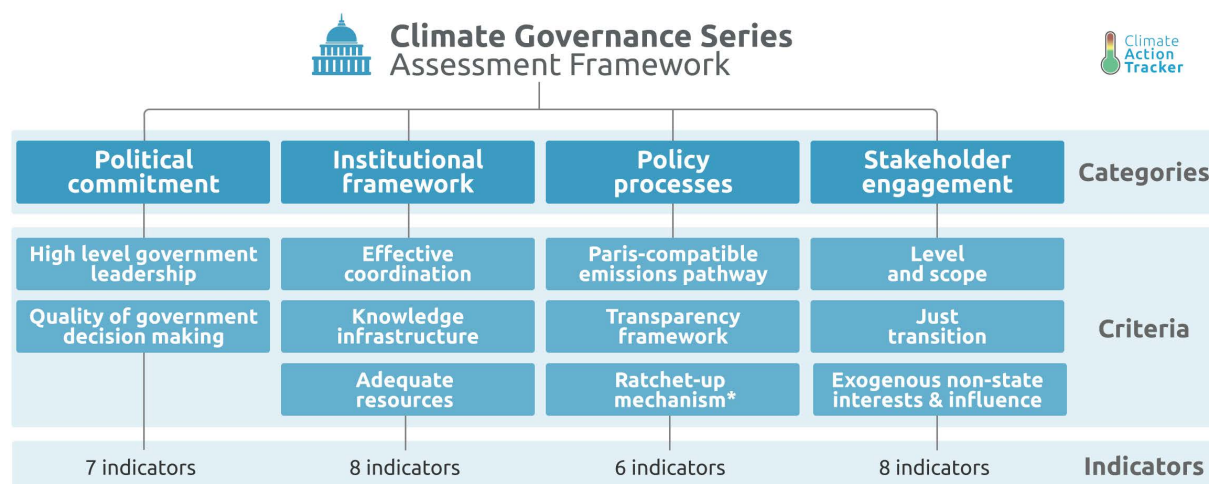
The Climate Governance Series seeks to offer a standardised and replicable approach to assessing a government's ability and readiness to achieve the required transformation, highlighting positive developments and areas for improvement.

Since 2019, we have been expanding the scope of our coverage. All country profiles are available on our website.

Legend

Understanding our indicators

This report series seeks to produce a standardised and replicable approach to assessing a country's readiness to transition to a zero emissions society. To achieve this, we have assessed a number of possible indicators under four broad categories and eleven criteria. **Criteria** are marked in bold text throughout this document.



Notwithstanding the desire for standardising, our framework is a living document and we occasionally revise the number and make of indicators. For complete details, see our methodology page.

Understanding our rating system

Our rating system highlights positive developments within countries, identifies areas of improvement, and establishes a basis on which to compare climate governance across countries.

Each individual indicator has been assessed and given a score. The categories and criteria linked to those indicators are then given a rating based on those scores.

Very Poor	<p>≤ 20% of possible score This rating indicates that the government is deficient and improvement is necessary.</p>
Poor	<p>20 – 40% of possible score This rating indicates that the government is showing a limited level of readiness but improvement is still necessary.</p>
Neutral	<p>40 – 60% of possible score This rating indicates that the government is showing some level of readiness, but improvement is still necessary.</p>
Acceptable	<p>60 – 80% of possible score This rating indicates that the government is showing a good level of readiness, although improvement is still possible.</p>
Advanced	<p>≥ 80% of possible score This rating indicates that the government is performing well, although improvement is still possible and beneficial.</p>

Executive summary

🚩 National level readiness

Ghana's president and his government are sending mixed messages – in that they are showing support for efforts to fight climate change, but at the same time also support fossil fuel extraction. Clear policy direction is important in efforts to drive the transition to a zero emissions society.

The two main political parties, in a de facto two-party system, recognise the need for climate action, although it is not a prominent topic for either of them. Ghana will hold presidential and parliamentary elections in 2024. The risks associated with a change in government appear to be more related to project implementation than policy direction as incoming administrations often put projects that were initiated by a previous administration on hold.

Structures for horizontal and vertical coordination on climate issues do exist but are not fully effective. While Ghana has the institutional structure in place to mobilise and manage climate finance, to date, the government has had difficulties in raising sufficient funds for climate action. The government institutions responsible for coordinating climate change action seem to receive sufficient budget to perform their statutory tasks, and their staff base seems stable. These institutions are therefore likely able to constantly build capacity and expertise.

Ghana has no long-term decarbonisation target nor strategy. Its low-carbon development strategy focuses on the period up to 2030. Ghana's Renewable Energy Act provides the legislative framework for renewable energy development, but the country has no other climate-related legislation in place, and there is no evidence to suggest the government is committed to developing such legislation.

Ghana has submitted several GHG Inventory Reports to the UNFCCC, which is uncommon amongst developing nations and an indication that Ghana has sufficient human and financial resources to compile these reports.

While the structures for policy review are in place, they are not fully operational and effective. The government identified a need for technical support to improve its transparency and review mechanisms. Whether domestic climate action becomes progressively more ambitious can only be assessed once Ghana has published its revised NDC, currently under development.

The government goes to considerable effort to increase public awareness of climate change issues, but much work remains to be done, as only a fifth of the Ghanaian population is aware of climate change and its adverse impacts. While Ghana has no formal body nor procedure to ensure a Just Transition yet, the government recognises the need for a Just Transition as part of its climate policy development process. The government appears to be actively involving the private sector in the implementation of its climate policies.

Category	Criteria	Recommendations
Political commitment	High level government leadership	<ul style="list-style-type: none">Strengthen the political commitment on climate mitigation – and the transition to a zero emissions society – at the highest government levels. Explicitly withdraw support for investments in and development of fossil fuel infrastructure.
	Quality of government decision making	<ul style="list-style-type: none">Anchor climate targets in law to increase the likelihood that future governments will continue to implement climate measures.
Institutional framework	Effective coordination	<ul style="list-style-type: none">Improve existing coordination mechanisms to ensure that climate mitigation – and the transition – are mainstreamed into all line ministries and local governments.
	Knowledge infrastructure	<ul style="list-style-type: none">Ensure that all line ministries align their policies with Ghana's NDC target; and consider the transition to a zero emissions society in their policies.
	Adequate resources	<ul style="list-style-type: none">Identify barriers to accessing international climate funds and develop a plan to tackle them.

Policy processes	Paris-compatible emissions pathway	<ul style="list-style-type: none"> • Ensure all line ministries incorporate indicators to track NDC implementation in their Medium-Term Development Plans. • Develop comprehensive climate change legislation that covers all economic sectors and enshrines emission reduction targets.
	Transparency framework	<ul style="list-style-type: none"> • Set a long-term 1.5°C-compatible emissions reduction target and develop policies to achieve this target. • Ensure that all line ministries implement an MRV framework to track and report on progress on climate action.
	Ratchet-up mechanism	<ul style="list-style-type: none"> • Relaunch the public G-CARP website, with data on GHG emissions in Ghana.
Stakeholder engagement	Level and scope	<ul style="list-style-type: none"> • Scale up efforts to increase public awareness of climate change and the positive effects of mitigation action.
	Just transition	<ul style="list-style-type: none"> • Ensure a Just Transition for those working in the affected sectors, and for workers and communities that may be harmed by the transition to a zero emission society.
	Exogenous non-state interests and influence	<ul style="list-style-type: none"> • Prepare and publish a strategy to involve the private sector in mitigation efforts, similar to the "Private sector engagement strategy for the National Adaptation Plan".

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1 Introduction

1.1 Domestic context

Ghana is a unitary constitutional democracy, located in West Africa, with a population of 30 million (World Bank, 2021a). The country is a *de facto* two-party state, where the social-democratic National Democratic Congress and the liberal-conservative New Patriotic Party compete for power. Neither party has been able to hold on to power for more than the two-term limit of the President. As a result, projects that were initiated under a previous administration are often discontinued by a new government and can languish until the political winds shift again (Gyebi, 2018; Mills, 2018).

In December 2020, President Nana Addo Dankwa Akufo-Addo, from the New Patriotic Party, was re-elected to a second and final term in office. Ghana has a winner-take-all political system, where all cabinet posts are filled by the Party that wins the elections. Historically, the winning party has done so with a wide margin and comfortable majorities in parliament, which made passing new legislation easy (Kwarkye & Mensah, 2021).

However, the 2020 election produced a hung parliament. The National Democratic Congress and the New Patriotic Party both have 137 seats, with one seat held by an independent MP. This makes it more difficult for the government to pass new bills (Kwarkye & Mensah, 2021). While it is possible that the opposition party drags its feet and hinders the executive, this situation also offers an opportunity of more inclusive and better governance, and accountability through oversight over the executive (Kwarkye & Mensah, 2021).

Ghana was amongst the world's ten fastest-growing economies in 2019, largely driven by growth in the mining and petroleum sectors and by strong agricultural output (AfDB, 2020). While the COVID-19 pandemic substantially slowed down economic growth; from 6.5% in 2019 to an estimated 1.7% in 2020, the near-term economic outlook is positive, with projections showing economic growth of 4% in 2021 and 2022 (AfDB, 2021).

Ghana's state debt is high and the country likely remains at high risk of fiscal and debt risks in the near term (AfDB, 2021). High debt servicing costs may become a burden, especially in oil-producing countries (IMF, 2017). This would make it more difficult for Ghana to achieve its sustainable development goals.

Ghana's economy is becoming more service-oriented. Whereas agriculture was the most dominant economic sector in Ghana until 2005, the services and industry sectors now contribute most to the country's GDP, accounting for 45% and 35%, respectively, of the national GDP in 2020 (Ghana Statistical Service, 2021). Ghana is rich in natural resources; it is Africa's largest gold producer and second-largest cocoa producer (Metals Focus, 2020; Wessel & Quist-Wessel, 2015). In 2007, a large offshore oil field was discovered, and production started in 2010.

Ghana consistently ranks in the top three countries in Africa for freedom of speech and press freedom (World Bank, 2021b). The country also scores relatively high on the Corruption Perception Index, with a score of 43 out of 100 (Transparency International, 2020).

However, corruption is perceived to be a problem: more than 50% of inhabitants believe that corruption is increasing and the government is not adequately addressing it (Afrobarometer, 2019). Many feared that Ghana would fall prey to the resource curse and that oil production would lead to bad governance, corruption and – ultimately – a weaker democracy (Kopiński et al., 2013). However, at least with respect to the oil sector, Ghana seems to be more transparent about oil sales, revenues and contracts than other oil-abundant countries such as Nigeria and Angola (EITI, 2021; Malden & Gyeyir, 2020).

Poverty and inequality remain an issue, notwithstanding economic growth. Between 2012 and 2016, the poverty rate declined by just 0.2% annually, compared to, for instance, a 2% annual decrease in 1990 (Tanaka et al., 2018). In 2016, 23% of Ghana's population lived below the national poverty line and an estimated 8% in extreme poverty (Ghana Statistical Service, 2018). Rural poverty is almost four times as high as urban poverty; and poverty rates are highest in the Northern, Upper East and Upper

West Regions (Cooke et al., 2016). This regional inequality has increased in recent years (Tanaka et al., 2018).

Ghana's greenhouse gas emissions totalled 42.4 MtCO₂e in 2016 (including LULUCF emissions), which is 66.4% above 1990 levels and 7.1% above 2012 levels (EPA, 2020a). The Agriculture, Forestry and Other Land Use (AFOLU) sector is the largest contributor to GHG emissions, responsible for 54.4% of total emissions in 2016, followed by the energy (35.6%) and waste (7.5%) sectors. Ghana's GHG emissions excluding LULUCF equalled 29.3 MtCO₂e in 2016 (EPA, 2020a).

After the discovery of commercial quantities of oil and gas off its coast in 2007, the relative importance of biofuels in Ghana's energy mix declined. In 2018, oil and biofuels and waste accounted for the lion's share of Ghana's energy supply, responsible for 42% and 39%, respectively. Natural gas plays an increasing role for energy generation; while it played no role in energy supply in 2008, it accounted for 13% of total energy supply in 2018. Hydropower supply has been relatively stable between 1990 and 2018 and contributed to 5% of the total primary energy supply in 2018 (IEA, 2021a).

Since 2015, total installed generation capacity has increased substantially, leading to significant overcapacity. This compounds the fiscal challenges the Ghanaian government is facing because it has contracts for more natural gas than it needs (IRENA, 2020).

Although Ghana's 2011 Renewable Energy Act set a target of a 10% renewable electricity share by 2020, solar and wind accounted for only 0.03% of the energy mix in 2018 (IEA, 2021a; Republic of Ghana, 2011). The Renewable Energy Master Plan, released in 2019, moved this target to 2030 and sets a goal of increasing the share of renewable energy (including hydropower capacity up to 100 MW) from 42.5 MW in 2015 to 1363.63 MW by 2030 (MoE, 2019). Studies show that Ghana has the potential to increase the share of renewables to 77% of generation by 2040 if it puts the right policies in place (IRENA, 2020). If cost projections for renewable energy continue to decrease, this number may be even higher (IRENA, 2020; Wachsmuth & Anatolitis, 2018).

Ghana is vulnerable to climate change. Rising sea levels, droughts, increasing temperatures and erratic rainfall adversely impact infrastructure, hydropower production, food security and coastal and agricultural livelihoods (US AID, 2017).

Twenty-five per cent of Ghana's population lives in coastal areas and is vulnerable to flooding and waterborne diseases (US AID, 2017). The agriculture sector relies on rain-fed agriculture, so droughts pose a significant threat to food production and the livelihoods of farmers (EPA, 2020a). Increasing weather extremes may also threaten hydropower energy production (EPA, 2020a).

1.2 Climate Governance Snapshot

Several institutions are responsible for climate action in Ghana. These include the Ministry of Environment, Science, Technology and Innovation (MESTI), the Environmental Protection Agency (EPA), the Ministry of Finance (MoF), the National Development Planning Commission (NDPC) and the Ministry of Energy (MoE). MESTI carries the main responsibility for climate change action, whereas EPA provides technical support.

Several Ministries, Departments and Agencies (MDA) have established climate change focal units. For instance, the National Resources, Environment and Climate Change (NREC) Unit at the MoF oversees and coordinates climate finance in Ghana. The Climate Change Unit at the Forestry Commission serves as the national REDD+ Secretariat. At the Energy Commission, the Renewable Energy, Energy Efficiency and Climate Change Division oversees climate change issues in the energy sector (EPA, 2020a).

Ghana's first NDC from 2016 set the unconditional target of reducing greenhouse gas emissions by 15% below business-as-usual (BAU) levels by 2030. Subject to international support, the Ghanaian government could increase this target to a 45% reduction below BAU by 2030 (Republic of Ghana, 2015a). The government signalled its intention to enhance ambition in its NDC by 2020, but had not yet submitted an updated NDC as of July 2021 (Climate Ambition Alliance, 2019).

Ghana still refers to the 2013 National Climate Change Policy (NCCP) (MESTI, 2013), which has a strong focus on adaptation and provides limited details. However, the Nationally Determined

Contribution of 2015, the Low Carbon Development Strategy of 2016 and the NDC Implementation Plan of 2019 are more recent policies that build on the NCCP (MESTI, 2016, 2019a; Republic of Ghana, 2015a). The Renewable Energy Master Plan of 2019 sets four goals, including to increase the share of renewable energy from 42.5 MW in 2015 to 1363.63 MW by 2030; and to provide renewable energy (MoE, 2019).

Ghana does not have comprehensive climate change legislation, but rather piecemeal laws, regulations and policies across various sectors. These do not provide for climate measures in all sectors. Further, Ghana's NDC targets are not enshrined in law.



Key Institutions

Ministry of Environment, Science, Technology and Innovation (MESTI)

MESTI is the main ministry responsible for climate change-related issues. It houses the Environmental Protection Agency (EPA) and the National Climate Change Committee.

Environmental Protection Agency (EPA)

The EPA is the main institution responsible for the technical coordination of the implementation of climate change projects and programmes (MESTI, 2013). The EPA is Ghana's focal point for international bodies such as the UNFCCC and the Intergovernmental Panel on Climate Change (IPCC) (EPA, 2020a).

National Climate Change Committee (NCCC)

The NCCC is a multi-sectoral task force on climate change and consists of representatives of government and non-government institutions, including MESTI, the MoF, the Ministry of Food and Agriculture, civil society organisations and bilateral and multilateral development partners. The NCCC may also serve as a forum to share experiences on NDC implementation (MESTI, 2019a).

Ministry of Finance (MoF)

The MoF tracks domestic and international climate finance flows; and prepares an SDG compliant budget, including for climate change mitigation and adaptation action.

National Resources, Environment and Climate Change (NREC) Unit

The NREC is a unit within the MoF, and oversees, coordinates and manages finance of natural resources, climate change and green economy activities. Its core tasks include managing domestic resources to address climate change and support provided by the international community; to monitor and analyse budget performance of ministries, departments and agencies in respect of climate change programmes; and collaborating with stakeholders in resource mobilisation for the implementation of climate change and green economy projects. The NREC Unit serves as Ghana's National Designated Authority to the Green Climate Fund (MoF, 2021).

Ministry of Energy (MoE)

The MoE is responsible for sustainable energy policies and the scaling up of renewable energy investments. The Ministry adopted the Renewable Energy Master Plan in 2019.

Ministry of Local Government and Rural Development (MLGRD)

The MLGRD facilitates the involvement of local governments in national climate change activities. Together with the National Development Planning Commission the MLGRD supports local governments in formulating their Medium Term Development Plans.

National Development Planning Commission (NDPC)

Ghana's NDPC is the state planning agency and responsible for ensuring that climate change issues are integrated into the national planning process; and for coordinating the preparation of sectoral and annual national progress reports, which cover climate change-related issues (EPA, 2020a).



Key Plans & Strategies

National Climate Change Policy (NCCP)

The NCCP, launched in 2013, “is Ghana’s integrated response to the challenges of climate change within its socio-economic context” (MESTI, 2013).

Ghana National Climate Change Master Plan

The National Climate Change Master Plan identified ten programme areas for the period 2015-2020, including reducing greenhouse gas emissions and increasing carbon sinks. The other eight programme areas are focused on adaptation and climate resilience (MESTI, 2015).

National Action Plan to Mitigate Short-Lived Climate Pollutants (NAP to mitigate SLCPs)

The NAP to mitigate SLCPs identified and prioritised 16 SLPC mitigation measures across seven sector. The NAP was released in 2018 and followed a two-year consultative process, which involved stakeholders from various sectors (MESTI, 2018).

Low Carbon Development Strategy (LCDS)

MESTI released the Low Carbon Development Strategy in 2016. The LCDS is considered a living document and the government will regularly update “priorities and strategies”. The Strategy does not contain a long-term emissions reduction goal, but is rather focused on the time period to 2030 and implementing the NDC (MESTI, 2016).

NDC Implementation Plan

MESTI released the NDC Implementation Plan in 2019, which identified barriers to the implementation of climate action, outlined financial and technological needs, and proposed measures in various economic sectors and next steps to NDC implementation (MESTI, 2019a).

Medium-Term Development Plan (MTDP)

The MTDP for the period 2018-2021 focus on a range of issues, including adaptation and mitigation priorities. The MTDP also refers to Ghana’s NDC targets (Government of Ghana, 2017). The NPDC is currently preparing the MTDP for the period 2022-2025.

Renewable Energy Master Plan

The 2019 Renewable Energy Master Plan sets four goals, including one to increase the share of renewable energy (including hydropower capacity up to 100 MW) from 42.5 MW in 2015 to 1363.63 MW by 2030 (MoE, 2019).



Targets

Nationally Determined Contribution (NDC)

Ghana’s first NDC sets an unconditional target of reducing greenhouse gas emissions by 15% relative to a business as usual (BAU) of 73.95 MtCO₂e by 2030. With international support, Ghana could increase this target to a 45% reduction below BAU levels by 2030 (Republic of Ghana, 2015a).

Ghana is preparing an updated NDC, which is likely to be submitted later in 2021 (EPA, 2020c).

10% Renewable Energy by 2030

The 2011 Renewable Energy Act set a target of a 10% share of renewable energy by 2020 (Republic of Ghana, 2011). The Low Carbon Development Strategy, released five years later, extended this target to 2030, conditional on international support (MESTI, 2016).



Key Laws & Regulations

Renewable Energy Act

The Renewable Energy Act of 2011 provides a legal framework for renewable energy promotion. It introduced a feed-in-tariff (Section 25) and established a Renewable Energy Fund (Sections 31 and 32). The Act also includes the policy target of a 10% share of renewable energy by 2020, but this target has not been met and is now extended to 2030 (Republic of Ghana, 2011).

2 National assessment

2.1 Political commitment

Political commitment

High level government leadership

Quality of government decision making

Ghana's president and his government are sending mixed messages – in that they are showing support for efforts to fight climate change, but at the same time also support fossil fuel extraction. Clear policy direction is important in efforts to drive the transition to a zero emissions society.

The two main political parties, in a de facto two-party system, recognise the need for climate action, although it is not a prominent topic for either of them. Ghana will hold presidential and parliamentary elections in 2024. The risks associated with a change in government appear to be more related to project implementation than policy direction as incoming administrations often put projects that were initiated by a previous administration on hold.

High-level government leadership can be a driving force for stimulating economy-wide transformational changes and increasing climate mitigation ambition by sending clear policy signals.

The Ghanaian Government has shown moderate levels of commitment to enhance climate ambition. While President Nana Addo Dankwa Akufo-Addo regularly stresses the importance of climate change mitigation and adaptation at international events, for instance, the World Economic Forum in Davos in 2020 and at the 2021 Climate Adaptation Summit, he did not mention 'climate change' or 'low carbon development' in key domestic speeches (The Presidency Republic of Ghana, 2021). President Nana Addo Dankwa Akufo-Addo seems to be paying some attention to increasing resilience and implementing adaptation measures; however, there is little evidence he supports the transition to a zero emissions society. The President has also not argued for Ghana to commit to a long-term decarbonisation target.

Cabinet Ministers occasionally refer to the need for climate action. The Minister of Finance, for instance, has indicated that "climate-conscious industrialisation and digitalisation are key to Africa's recovery [from the COVID-19 crisis] and structural transformation of the economies" (Ghana News Agency, 2021). There is, however, very little evidence to show that climate change mitigation is one of the government's priorities.

One of the objectives of the National Medium-Term Development Plan of 2018-2021 is achieving the country's Nationally Determined Contribution (NDC) (Government of Ghana, 2017). The Medium-Term Development Plan has a stronger focus on adaptation than on mitigation, which can be explained by the fact that Ghana is highly vulnerable to the adverse effects of climate change, so adaptation is a key priority.

While there is some level of support for climate action, there is also government support for the expansion of fossil fuels (e.g. Voltaian Basin), and this has resulted in the increased extraction of offshore oil and gas in recent years (Oxford Business Group, 2020; Reed, 2021; Skaten, 2018). Oil and gas extraction are not compatible with the Paris Agreement temperature limit and investments in the sector are very likely to become stranded assets (IEA, 2021b).

The Ministry of Environment, Science, Technology and Innovation (MESTI) is Ghana's lead agency for climate change coordination and implementation. MESTI's portfolio is very broad and climate change is only a small part of what falls into the ministry's purview. MESTI receives technical support from the Environmental Protection Agency (EPA), which also hosts the focal point to the UNFCCC, and coordinates Ghana's participation in international processes (Benefoh & Amoah, 2017). The Natural Resources, Environment and Climate Change (NREC) Unit at the Ministry of Finance (MoF) oversees,

coordinates and manages finance of natural resources, climate change and green economy policies and projects (MoF, 2021).

The **quality of government decision making** at the highest levels is a key factor in implementing ambitious climate policies as national governments provide resources and direction for lower levels of government and can stimulate horizontal dynamics through mainstreaming, lesson-drawing, and cooperation (Jänicke et al., 2015).

Our analysis of the quality of government decision making in Ghana shows moderate results with regards to the continuity of policy development and broad-scale political support for climate mitigation. It also indicates there are concerns regarding the extent to which the government can be held accountable for its efforts to increase climate mitigation ambition.

Broadscale political support for ambitious climate action is not visible in Ghana, although no political party openly opposes mitigation measures. Prior to the 2016 elections, representatives from various political parties, including the New Patriotic Party and the National Democratic Congress discussed their plans to address climate change (UNDP, 2016b), but neither of the two major parties proposed ambitious climate action.

President Akufo-Addo's New Patriotic Party mentioned climate change just once in its 200-page Manifesto with regards to accessing international finance. Promise number 231 is to "work with international partners to access part of the global fund for climate change management" (New Patriotic Party, 2020).

The National Democratic Congress put forward a number of proposals to increase climate resilience and decrease emissions in its 2020 Manifesto (National Democratic Congress, 2020). However, while the Minority Leader in Parliament, Mr Haruna Iddrisu, called for prioritising climate change on Ghana's development agenda, his party has not proposed any emission reduction targets (other than in the 2016 NDC) nor a long-term reduction goal (Duodo, 2021).

The risks associated with a change in government appear to be more related to project implementation than policy direction (Gyebi, 2018; Mills, 2018). For example, one of President Akufo-Addo's first actions after assuming office was to approve a micro-hydro power station, a project that had been dormant since his party lost power in 2008 (The Presidency Republic of Ghana, 2020).

Ghana's National Climate Change Policy (NCCP) stems from 2013 and needs to be updated in the near future to reflect changing political and societal circumstances, scientific insights, and technological developments. The 2015 NDC, the 2016 Low Carbon Development Strategy and the 2019 NDC Implementation Plan build on the NCCP and provide the most recent developments (MESTI, 2016, 2019a; Republic of Ghana, 2015a).

There are some concerns about the trustworthiness of the Ghanaian government in general. Allegations of corruption are common in the country and Ghanaians generally have medium to low levels of trust in the President and Parliament (Afrobarometer, 2020). One report on REDD+, released in 2016, found for example that as a result of limited public participation in decision making processes, powerful political figures have significant influence on Ghana's forestry sector. According to the report, there is a "high inclination to manipulate, pressure and interfere in policy-making and implementation to accommodate friends, and receive commissions" (Korwin, 2016).

It is difficult to draw conclusions about the government's track record in implementing climate policies, due to limited transparency on policy implementation. A third party review of its urban policy did find anecdotal evidence that the policy had some positive impacts on low carbon development, but noted that further analysis was needed to really quantify the effect in terms of actual emission reductions (Inkoom et al., 2019). In any event, the original policy did not really articulate the measures to be implemented and so it contributed little to the ability to assess accountability (MLGRD, 2012).

2.2 Institutional Framework



Structures for horizontal and vertical coordination on climate issues exist but are not fully effective. While Ghana has the institutional structure in place to mobilise and manage climate finance, to date, the government has had difficulties in raising sufficient funds for climate action. The government institutions responsible for coordinating climate change action seem to receive sufficient budget to perform their statutory tasks; and their staff base seems stable. These institutions are therefore likely able to constantly build up capacities and expertise.

Effective coordination across ministries and agencies and with sub-national governments affects the ability of actors to align overarching climate policy targets efficiently and consistently.

While the coordination structures are clear, they do not appear to be fully operational (EPA, 2020a). MESTI is tasked with coordinating the implementation of climate policies, with a technical backstop from the EPA. The National Climate Change Committee, which consists of MDAs, donors, the Parliament, CSOs, research institutions and the private sector, oversees the implementation of the National Climate Change Policy (Republic of Ghana, 2015b). It is, however, unclear how often the NCCC meets and whether the committee advances climate coordination in Ghana.

The Ministry of Local Government and Rural Development facilitates local government climate action. Weak coordination at both the national and sub-national level and inconsistent policies have been identified as key barriers to implementing the NDC (MESTI, 2019a).

Ghana has taken measures to mainstream climate considerations into line ministries' policies and plans. In 2017, it developed a toolkit to support mainstreaming climate change and SDGs into the planning process (MESTI, 2017). Its 2019 NDC implementation plan was also prepared in consultation with relevant ministries (MESTI, 2019a). Meeting the country's NDC and accelerating the implementation of its strategy to reduce deforestation (REDD+) (2016-2036) form part of its latest national medium-term plan for 2018-2021 (Republic of Ghana, 2017).

The Planning Commission also tracks the extent to which MDA's have climate plans, while both mitigation and adaptation are mentioned, the focus seems to be much more on adaptation measures. According to its latest annual progress report, just over 50% of MDAs had such plans, though copies of these plans are difficult to obtain online (NDPC, 2020)

While climate change and reducing emissions are mentioned in sectoral policies, these policies do not integrate the concept of a zero emissions society. The 2019 Renewable Energy Master Plan aims to "provide an investment-focused framework for the promotion and development of renewable energy resources for economic growth, improved social life and minimise the adverse effects of climate change" (MoE, 2019). The 2020 National Transport Policy seeks to contribute to meeting the country's NDC and mainstreaming climate considerations in the development of transport infrastructure (MoT et al., 2020).

Ghana's agenda for transforming the country's agriculture sector ("Investing for Food and Jobs: An Agenda for Transforming Ghana's Agriculture (2018-2021)") considers climate change, but has a strong focus on adaptation and increasing climate resilience (Government of Ghana, 2017). Likewise the Ministry of Works and Housing is also focused on climate resilience (MoWH, 2021). The 2012 National Urban Policy, which is currently being updated, included promoting mitigation measures as one of its policy objectives.

While there appears to be a growing alignment between the country's NDC and its sectoral plans, there is a lack of balanced treatment of adaptation and mitigation. Further, whether all of the government's plans are consistent with the transition to a zero emissions society is another matter. Take, for example, Ghana's Gas Master Plan. Research suggests this plan undermines Ghana's ability

to follow a Paris compatible emissions pathway and runs the risk of creating stranded assets (Climate Analytics, 2021)

The Ministry of Local Government and Rural Development and the National Development Planning Commission support local governments with developing their Medium-Term Development Plans. These plans cover four-year periods and generally include some actions aimed at increasing climate resilience.

Few sub-national actors have prepared medium-term development plans (Ghana News Agency, 2020). Research found that local governments are unable to mainstream adaptation-related actions into local governance, because of limited resources and the "science-heaviness" of climate change (Musah-Surugu et al., 2019). The same issues are likely to apply to mitigation-related activities. Notwithstanding the coordination challenges, some sub-national actors are very active on climate change, like the city of Accra which just released its five year action plan (City of Accra, 2020).

Another important criterion is the existence and utilisation of a **knowledge infrastructure capable of supporting strategic planning and policy development**, as this aids in the elaboration and application of decarbonisation analyses in climate policy development.

Ghana's Council for Scientific and Industrial Research is a government agency with private sector and academic representation and has a number of research institutes dedicated to specific topics. There is no bespoke climate institute, but the Council does have two research programmes that look at climate-friendly energy pathway pathways and models, and climate mitigation measures generally; however these appear to be project based rather than broad in focus (CSIR, 2020, 2021a, 2021b). Ghana's NDC implementation plan mentions the possibility of the Centre for Scientific and Industrial Research being involved in knowledge development and NDC implementation (MESTI, 2019a).

Academic, civil society and the private sector form part of the National Climate Change Committee, though their role and influence is unclear.

Capacity at universities and research institutions is also a constraint (MoE, 2019).. Funding of R&D activities has not been properly streamlined, which has led to "a lack of focus and duplication of resources" (MoE, 2019).

The government keeps track of studies on climate mitigation and adaptation in Ghana, as noted in the Fourth National Communication (EPA, 2020a). However, it is unclear to what extent the government considers those studies when developing new policies, and could be the reason for the lack of detail covered by some of the policies eg lack of targets in the 2015 NDC and the 2019 Renewable Energy Master Plan.

Capital and resource constraints are significant barriers to effective climate governance and continue to be an impediment for developing countries' climate action (Bhave et al., 2016). In climate policy processes, those implementing them need to have **adequate resources and capacity** made available, and to efficiently use them.

Ghana is relatively well prepared to mobilise climate finance, with the MoF and its NREC Unit playing a key role. The NREC Unit is responsible for overseeing, coordinating and managing finance to projects related to climate change and the green economy. Its core activities include providing advice on climate change and green economy policies; collaborating with relevant stakeholders in resource mobilisation for the implementation of climate change policies; serving as a frontier for managing both domestic and international support for climate change-related projects; and assisting with the development of policies and reforms that promote transparency and accountability in natural resource governance or management (MoF, 2021). All MDAs are tasked to mainstream climate change activities into their programmes and budget by using the Climate Change Finance Tracking tools developed by the MoF (MoF, 2020).

Ghana articulated its need for financial assistance in its NDC (Republic of Ghana, 2015a) and reiterated this in its Low Carbon Development Strategy (MESTI, 2016). The Fourth National Communication lists mitigation actions to achieve the NDC goal (a conditional 45% emissions reduction below BAU), and estimates investment costs for implementation up to 2030, as well as the estimated split between public-private sector and consumer investments (EPA, 2020a). In its Fourth National Communication,

the Ghanaian government also lists key barriers to the mitigation measures, such as uncertainty of available resources and unattractiveness of specific sectors (e.g. clean cooking) to financial institutions" (EPA, 2020a).

Ghana received USD 776.5 million from international donors in the period 2013 to 2017 (Civic Response, 2020). This finance predominantly targets mitigation activities and was distributed across 405 projects. An estimated 30% of climate finance in this period came in the form of loans, although the International Monetary Fund had found that Ghana is at high risk of debt distress, which jeopardises financial stability and the ability of the government to invest in social infrastructure (Civic Response, 2020; IMF, 2021). Ghana also receives finance from the Green Climate Fund for four projects (GCF, 2021). However, these sources are insufficient to meet Ghana's financing needs. While the country appears to be in a good position to mobilise climate finance, the government explicitly stated that its attempts to secure climate finance were less successful (MESTI, 2019a) Also, a comprehensive plan to allocate finance across economic sectors seems to be lacking.

Evidence suggests that the EPA staff are well-qualified and that there is a high degree of staff retention, which offers the institution with good opportunity to constantly build up capacities and expertise. The chief executive of EPA was appointed in August 2020 (EPA, 2020d). His predecessor had been with EPA for 20 years (EPA, 2020e). The UNFCCC focal point at EPA has been in this role for at least ten years, co-authoring the Second and Third National Communications to the UNFCCC. Although EPA received support from various Ghanaian academics, the UN Environment Programme, and other initiatives in preparing its Fourth National Communication, its own staff seem to have done most of the work, which is an indication for disposing of the required expertise.

2.3 Process for policy development, implementation and review



Ghana has no long-term decarbonisation target or strategy. Its low-carbon development strategy focuses on the period until 2030.

Ghana's Renewable Energy Act provides the legislative framework for renewable energy development, but the country has no other climate-related legislation in place. There is no evidence to suggest that the government is committed to developing such legislation.

Ghana has submitted several GHG Inventory Reports to the UNFCCC, which is uncommon amongst developing nations and an indication that Ghana has sufficient human and financial resources to compile these reports. While the structures for policy review are in place, these are not fully operational and effective.

The government identified a need for technical support to improve its transparency and review mechanisms.

Whether domestic climate action becomes progressively more ambitious can only be assessed once Ghana has published its revised NDC, which is currently under development.

A **defined Paris-compatible decarbonisation pathway** is an important component to aid the long-term planning for, and alignment with, the Paris Agreement's overall objectives.

Ghana, however, has no long-term decarbonisation goal. The country's Low Carbon Development Strategy (LDCs) provides policy actions for the period until 2030 but not beyond (MESTI, 2016)]. In the absence of a long-term emission reduction target, line ministries are unlikely to have considered the transition when developing and implementing policies.

Comprehensive climate legislation that enshrines binding reduction targets and covers all economic sectors would support long-term planning and the transition to a zero emissions society. However,

Ghana's existing legal framework is insufficient to address climate change. It only has piecemeal legislation and policy frameworks addressing specific mitigation measures.

The 2011 Renewable Energy Act provides the legislative framework for the development, management and utilisation of renewable energy, including a Feed-In-Tariff for renewables, established in 2013 (PURC, 2013; Republic of Ghana, 2011). Ghana also has energy efficiency standards and labelling regulations, and a 10-year over-aged vehicle importation tax to disincentivise the import of old and polluting vehicles (EPA, 2020a).

An **enhanced transparency framework mechanism** is necessary in order to track progress towards achieving emission reduction targets in line with the Paris Agreement, as well as providing checks and balances for the government's climate commitments.

The basic structure for MRV is in place in Ghana, with room for improvement. In its 2019 NDC implementation plan, the government noted that in order to comply with the Paris Agreement's enhanced transparency framework, the existing domestic MRV system must be upgraded to include the national GHG inventory, climate action accounting, progress on achieving the NDC's target, and tracking of support (MESTI, 2019a).

In 2013, the government launched a Climate Ambitious Reporting Programme (G-CARP) to support the preparation of national and international reports on greenhouse gas emissions, implemented climate measures, and financial and technical support received. It also aids in tracking progress towards meeting NDC targets and indicators (MESTI, 2019b). However, the website that collects Ghana's climate data appears to no longer be online at the time of writing – July 2021. It is unclear whether and to what extent all relevant line ministries and agencies make use of this programme. In 2019, MESTI identified a number of barriers to the G-CARP including limited funds, low visibility of MRV results for policy decision-making, and a lack of access to good quality data (MESTI, 2019b). At the same time, Ghana seems to have sufficient capacity for regular inventory reporting. The country has regularly submitted National Inventory Reports to the UNFCCC, which is uncommon amongst developing countries. Of the 54 African nations, only ten have submitted Inventory Reports.¹ The National Development Planning Commission implements the Annual Progress Report (APR), which is the framework monitoring and evaluation system for the medium-development policy framework (MESTI, 2019a; NDPC, 2020).

The MoF developed climate finance tracking tools that MDAs need to implement, but it is unclear to what extent this happens (MoF, 2016).

Ghana will review progress towards meeting its NDC in 2025; however few details about the modalities of this process are currently available (MESTI, 2019a; Republic of Ghana, 2015a). For this review to be effective, the country requires more technical support on how to track progress of the NDC and other climate goals, especially in aggregating the cumulative effects of individual mitigation actions (MESTI, 2019b).

Third-party reviews of policy implementation have also noted the need for studies assessing the GHG impact of policy measures (Inkoom et al., 2019). While G-CARP has been in place since 2013, there is no evidence that line ministries regularly review policies and adjust these to align with national climate change targets.

Ghana has not formalised a **ratchet up mechanism**, but is updating its NDC in accordance with the Paris Agreement's five-year cycle. Further ratcheting up may be part of the review process envisaged in 2025. The government is working with the NDC Partnership to update its current NDC in 2021 (EPA, 2020c). It remains to be seen whether the updated NDC will set more ambitious climate targets.

¹ These are: Algeria (2001, 2010), Benin (2019), Egypt (2016), Ghana (2001 (although not a full report), 2011, 2015, 2020), Mauritania (2016), Mauritius (2011, 2018), Namibia (2016, 2019, 2021), South Africa (2014, 2018, 2019) and Togo (2017).

2.4 Stakeholder engagement

Stakeholder engagement		
Level and scope	Just transition	Exogenous non-state interests and influence

The government goes to considerable effort to increase public awareness of climate change issues, but much work remains to be done, as only a fifth of the Ghanaian population is aware of climate change and its adverse impacts. While Ghana has no formal body nor procedure to ensure a Just Transition yet, the government recognises the need for a Just Transition as part of its climate policy development process. The government appears to be actively involving the private sector in the implementation of its climate policies.

The government's **level and scope of engagement** with stakeholders reflects how well it is aware of external knowledge and the expectations of its constituents, which, in turn, affects the ability for sound government decision-making.

The Ghanaian government has a number of initiatives to disseminate knowledge on climate change issues. Since September 2019, all primary schools in Ghana have been teaching children about climate change following a curriculum developed by the EPA, together with the National Council for Curriculum and Assessment and the Ghana Education Service. The EPA is also training primary school teachers across the country and work is underway to integrate climate change in the curriculum for secondary education (EPA, 2020a).

Various Ghanaian universities and institutes also offer climate change courses and programmes, and support capacity building and knowledge generation, for instance, the University of Ghana, Accra Technical University and Kumasi Technical University (Benefoh & Amoah, 2017). The University of Ghana hosts the Centre for Climate Change and Sustainability Studies since 2017 (Centre for Climate Change and Sustainability Studies, 2021).

The Government has also organised several events to raise public awareness on climate change in recent years, such as, a Climate Change Week in 2016, which targeted school children, academia, civil society, the private sector and the general public (EPA, 2020a). The EPA, as well as academic institutions and NGOs disseminate information on climate change through media, including radio interviews and social media (EPA, 2020a). EPA also organised training workshops for journalists (EPA, 2020a).

Notwithstanding these efforts, polling data still suggests that awareness in the general public is low. Forty-four per cent of Ghanaians have not heard about climate change and only 21% are aware of the issue and that it will have negative effects (Selormey et al., 2019).

The knowledge base is also limited. Some research on mitigation measures in certain sectors (power, transport, urban development) is available at the sub-national level, but (Awoopone et al., 2017; Ayetor et al., 2020; Diawuo et al., 2018; EPA, 2020a) extensive research on pathways to transition to a zero emissions society is lacking, making it challenging for stakeholders to plan and drive mitigation activities.

Ghana recognises the importance of effective stakeholder engagement in order to achieve its NDC (MESTI, 2019a). Ghana regularly conducts stakeholder consultation when developing reports and planning documents, but it is difficult to gauge the extent to which this secures meaningful input and buy-in (MESTI, 2016).

For instance, civil society and private sector representatives are part of the National Climate Change Committee and the National Steering Committee for the Renewable Energy Master Plan; however, it is difficult to find any detailed information about this engagement (EPA, 2020a; MoE, 2019). Further, the Ministry of Local Government and Rural Development requested input as part of its revision of

the National Urban Policy (GUTT, 2019)]. The resulting revision guideline emerged from a two-year engagement process and has climate mitigation as one of its key pillars.

More broadly, the National Development Planning Commission is seeking input from various actors in its development of the Medium-Term Development Framework for 2022-2025. The commission engaged technical experts from MDAs, civil society organisations, and academia (News Ghana, 2021). Since 2018, the Commission has also organised a series of National Development Fora, to solicit public opinions on the various topics covered by the Medium-Term Development Framework (News Ghana, 2021). However, it is unclear to what extent the government considered those opinions for policy-making.

To ensure a **Just Transition** to a zero emissions society, it is necessary that workers in the affected sectors are not left behind. The transition may also come with significant injustices resulting from, for example, mining for minerals for the production of renewable energy technologies, and e-waste processing. These injustices often interact with existing inequalities and vulnerabilities and have serious impacts for human health and environment (Sovacool et al., 2020). This is particularly relevant for Ghana, which processes high volumes of e-waste, mostly imported from Europe and North America (Sovacool et al., 2020).

Ghana is considering the need for a Just Transition as part of its climate policy development process (EPA, 2020a). In 2018, Ghana was a pilot country for the application of the International Labour Organization's Just Transition Guidelines, and the EPA and the Ministry of Employment and Labour Relations organised a National Dialogue on "decent work and just transition to an environmentally sustainable economy" (Mensah, 2019). Ghana has begun using the ILO's Green Jobs Assessment Model as part of its policy development process, but is limited by the lack of data needed to support modelling efforts (EPA, 2020a).

The **management of non-state actor interests** is another important consideration, as it depicts whether governments have succeeded in addressing resistance created by vested interests as well as communicating the fairness of their policies to the public. An assessment of the ability to manage non-state actor interests reveals how much public support or opposition policies receive.

The Ghanaian government seems to be actively involving the private sector in its climate action-related efforts. In 2020, EPA released a *Private sector engagement strategy for the National Adaptation Plan*, which outlines key barriers for private sector participation, considers the role of the private sector in planning and implementing adaptation measures, and identifies key stakeholders in the private sector (EPA, 2020b). The private sector was also involved in the implementation of Nationally Appropriated Mitigation Actions (NAMAs) (PEF, 2016; UNDP, 2016a).

Whereas the oil and gas sector is able to influence the drafting of regulations in, for instance, Kenya and Nigeria, this does not appear to be the case in Ghana (CAT, 2020, 2021). The country complies with the Extractive Industries Transparency Initiative's standard, which requires the disclosure of information along the extractive industry value chain. Specifically, it should be clear how fossil fuel revenues make their way through the government and how they benefit the general public (EITI, 2021).

A 2020 report from the Natural Resource Governance Institute found that Ghana is one of the most transparent countries in reporting on its commodity trading activities. Oil sales data have been used to hold the Ghana National Petroleum Corporation and companies accountable for their commodity trading activities. There is, however, limited public awareness of this data and how it can be used for accountability purposes (Malden & Gyeyir, 2020).

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The Consortium



NewClimate Institute is a non-profit institute established in 2014. NewClimate Institute supports research and implementation of action against climate change around the globe, covering the topics international climate negotiations, tracking climate action, climate and development, climate finance and carbon market mechanisms. NewClimate Institute aims at connecting up-to-date research with the real world decision making processes.

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Climate Analytics is a non-profit climate science and policy institute based in Berlin, Germany with offices in New York, USA, Lomé, Togo and Perth, Australia, which brings together interdisciplinary expertise in the scientific and policy aspects of climate change. Climate Analytics aims to synthesise and advance scientific knowledge in the area of climate, and by linking scientific and policy analysis provide state-of-the-art solutions to global and national climate change policy challenges.

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