Second-Party Opinion

The Republic of Ghana Sustainable Financing Framework



Evaluation Summary

Use of Proceeds Instruments

Sustainability Bond Guidelines 2021, Green Bond Principles 2021, Social Bond Principles 2021, Green Loan Principles 2021, and Social Loan Principles 2021

Sustainalytics is of the opinion that the Republic of Ghana's Sustainable Finance Framework is credible and impactful and aligns with the four core components of the Green Bond Principles 2021, Social Bond Principles 2021, Green Loan Principles 2021, and Social Loan Principles 2021 (the "Use of Proceeds Principles"). The categories for the use of proceeds — Renewable Energy, Energy Efficiency, Pollution Prevention and Control, Environmentally Sustainable Management of Living Natural Resources and Land Use & Terrestrial and Aquatic Biodiversity Conservation, Sustainable Water and Wastewater Management, Clean Transportation, Climate Change Adaptation, Green Buildings, Access to Essential Services, Socioeconomic Advancement and Empowerment, Affordable Basic Infrastructure, Affordable Housing, Employment Generation, and Food Security and Sustainable Food Systems — are aligned with those recognized by the Use of Proceeds Principles and will, overall, lead to positive environmental and social impacts. Sustainalytics notes, however, that the Framework's criteria deviate substantially from market expectation in some areas, specifcially in the areas of hydroelectric power generation and investments in hard-to-abate activities without defined thresholds. Sustainalytics considers this to be a limitation of the Framework.

Sustainability-Linked Instruments

Sustainability-Linked Bond Principles 2020, Sustainability-Linked Loan Principles 2021

Sustainalytics is of the opinion that the Republic of Ghana's Sustainable Finance Framework aligns with the Sustainability-Linked Bond Principles 2020 and Sustainability-Linked Loan Principles 2021 (the "Sustainability-Linked Principles").

Overview of KPIs and SPTs:

KPI	SPT	Strength of the KPI	Ambitiousnes s of SPT
KPI 1 - completion rate in senior high schools	Increase the completion rate in senior high schools, to 75% by 2030	Very strong	Ambitious
KPI 2 - hospital beds per capita	Increase hospital beds per capita to 14 per 10,000 population by 2030	Strong	Ambitious

Evaluation Date October 12, 2021

Issuer/Borrower Accra,
Location Ghana

The UoPs and SPTs contribute to the following SDGs:



































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Scope of Work and Limitations

Sustainalytics' Second-Party Opinion reflects Sustainalytics' independent¹ opinion on the alignment of the Republic of Ghana ("Ghana", "the Issuer", or "the Borrower") Sustainable Finance Framework ("the Framework") with current market standards. As part of the Second-Party Opinion, Sustainalytics assessed the following:

- The Framework's alignment with the Sustainability Bond Guidelines 2021, Green Bond Principles 2021, Social Bond Principles 2021, Green Loan Principles 2021, Social Loan Principles 2021, Sustainability-Linked Bond Principles 2020, and Sustainability-Linked Loan Principles 2021²³ (the "Principles");
- The credibility and anticipated positive impacts of the use of proceeds and SPTs; and
- The Issuer's sustainability strategy, performance and sustainability risk management.

As part of this engagement, Sustainalytics held conversations with various members of Ghana's Ministry of Finance to understand the sustainability impact of their business processes and the core components of the Framework. Ministry of Finance representatives have confirmed that:

- (1) They understand it is the sole responsibility of Ghana to ensure that the information provided is complete, accurate or up to date;
- (2) They have provided Sustainalytics with all relevant information; and
- (3) Any provided material information has been duly disclosed in a timely manner.

Sustainalytics also reviewed relevant public documents and non-public information. This document contains Sustainalytics' opinion of the Framework and should be read in conjunction with that Framework. Any update of the present Second-Party Opinion will be conducted according to the agreed engagement conditions between Sustainalytics and Ghana.

Sustainalytics' Second-Party Opinion, while reflecting on the alignment of the Framework with market standards, is no guarantee of alignment nor warrants any alignment with future versions of relevant market standards. The Second-Party Opinion is valid for issuances aligned with the respective Framework for which the Second-Party Opinion was written up to 24 months or until one of the following occurs: (1) A material change to the external benchmarks⁴ against which targets were set; (2) A material action by the Government of Ghana has a bearing on the achievement of the SLBs/SLLs or the materiality of the KPI.

For the use of proceeds instruments, the Second-Party Opinion:

- addresses the anticipated impacts of eligible projects expected to be financed with bond proceeds but does not measure
 the actual impact. The measurement and reporting of the impact achieved through projects financed under the
 Framework is the responsibility of the Framework owner.
- opines on the potential allocation of proceeds but does not guarantee the realized allocation of the bond proceeds towards eligible activities
- Sustainalytics relied on its internal taxonomy, version 1.9, which is informed by market practice and Sustainalytics' expertise as an ESG research provider

For sustainability-linked instruments, the Second-Party Opinion:

addresses the anticipated SPTs of KPIs but does not measure the KPIs' performance. The measurement and reporting
of the KPIs is the responsibility of the Bond/Loan issuer.

No information provided by Sustainalytics under the present Second-Party Opinion shall be considered as being a statement, representation, warrant or argument, either in favour or against, the truthfulness, reliability or completeness of any facts or

¹ When operating multiple lines of business that serve a variety of client types, objective research is a cornerstone of Sustainalytics and ensuring analyst independence is paramount to producing objective, actionable research. Sustainalytics has therefore put in place a robust conflict management framework that specifically addresses the need for analyst independence, consistency of process, structural separation of commercial and research (and engagement) teams, data protection and systems separation. Last but not the least, analyst compensation is not directly tied to specific commercial outcomes. One of Sustainalytics' hallmarks is integrity, another is transparency.

² The bond Principles, Guidelines and Handbooks are administered by the International Capital Market Association and are available at: https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/

The loan Principles and Guidelines are administered by the Loan Market Association, Asia Pacific Loan Market Association and Loan Syndications & Trading Association and are available at: https://www.lsta.org/content/? industry sector=guidelines-memos-primary-market

⁴Benchmarks refers to science-based benchmarks



statements and related surrounding circumstances that Ghana has made available to Sustainalytics for the purpose of this Second-Party Opinion.

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Introduction

Ghana is located in West Africa, bordered by Côte d'Ivoire to the west, Togo to the east and Burkina Faso to the north. Ghana had an estimated population of over 30.2 million in September 2019, with over 50.5 percent of the population living in urban areas. The greater metropolitan area of Accra, the capital of Ghana and its largest city, has an estimated population of over 4.2 million.

Ghana has developed the "Framework" under which it intends to issue use of proceeds (green, social, sustainability) bonds or loans and sustainability-linked bonds or loans. Ghana engaged Sustainalytics to review the Framework, dated August 2021, and provide a Second-Party Opinion on the Framework's alignment with the Sustainability Bond Guidelines 2021, Green Bond Principles 2021, Social Bond Principles 2021, Green Loan Principles 2021, Social Loan Principles 2021, Sustainability-Linked Bond Principles (SLBP)⁵ or Sustainability-Linked Loan Principles (SLLP)⁶ (the "Principles"). This Framework has been published in a separate document.7

Under the use of proceeds instruments, the proceeds will finance or refinance, in whole or in part, existing or future expenditures that support Ghana's sustainable development. The Framework defines eligibility criteria in fourteen areas:

- 1. Renewable Energy
- Energy Efficiency
 Pollution Prevention and Control
- Environmentally Sustainable Management of Living Natural Resources and Land Use & Terrestrial and Aquatic **Biodiversity Conservation**
- Sustainable Water and Wastewater Management
- 6. Clean Transportation
- 7. Climate Change Adaptation
- 8. Green Buildings
- 9. Access to Essential Services
- 10. Socioeconomic Advancement and Empowerment
- 11. Affordable Basic Infrastructure
- 12. Affordable Housing
- 13. Employment Generation
- 14. Food Security and Sustainable Food Systems

Under sustainability-linked instruments, a premium payment is tied to the achievement of the Sustainability Performance Targets for two KPIs related to the provision of accessible public services.

The KPIs and SPTs used by Ghana are defined in Tables 1 and 2 below.

Table 1: KPI Definitions

KPI	Definition
Completion rate in senior high schools	The completion rate measures he percentage of a cohort of children or young people aged 3-5 years above the intended age for the last grade of each level of education who have completed that grade, in line with the Demographic and Health Survey (DHS) programme defined by the UNESCO Institute of Statistics. ^{8 9 10}

⁵ The Sustainability Linked Bond Principles (SLBP) were launched by ICMA in June 2020. They are administered by the ICMA and are available at: https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/June-2020/Sustainability-Linked-Bond-PrinciplesJune-2020-100620.pdf

⁶The Sustainability-Linked Loan Principles (SLLP) were launched by LSTA in May 2021. They are administered by the LSTA and are available at: https://www.lsta.org/content/sustainability-linked-loan-principles-sllp/#

⁷ The Framework will be made available by the Ministry of Finance.

⁸ The DHS Program has collected, analyzed, and disseminated accurate and representative data on population, health, HIV, and nutrition through more than 400 surveys in over 90 countries, at: https://dhsprogram.com/

The intended age for the last grade of each level of education is the age at which pupils would enter the grade if they had started school at the official primary entrance age, had studied full-time and had progressed without repeating or skipping a grade. For example, if the official age of entry into primary education is 6 years, and if primary education has 6 grades, the intended age for the last grade of primary education is 11 years. In this case, 14-16 years (11 + 3 = 14 and 11 + 5 = 16) would be the reference age group for calculation of the primary completion rate. In this case, 20-22 (3-5 years above the intended age) would be the reference age group for the calculation of the SHS completion rate, at: http://uis.unesco.org/en/glossary-term/completion-rate-primary-education-lower-secondary-education-upper-secondary-education-

¹⁰ Republic of Ghana's free SHS policy seeks to absorb all fees paid at the country's SHS level, including physical infrastructure, at: https://moe.gov.gh/free-shs-policy/

	As part of this definition, 20-22 (3-5 years above the intended age) would be the reference age group to calculate the senior high schools (SHS) completion rate.
	The completion rate is calculated by the number of persons in the relevant age group who have completed the last grade of a given level of education divided by the total population of the same age group.
Hospital beds per capita	The hospital beds KPI is calculated by the number of total hospital beds, including labour and delivery beds, divided by the country's total population (estimates based on 2010 population census). The data, number of hospital beds, will be obtained from the Holistic Assessment Report of the Ghana Health Sector.

Table 2: SPTs and Past Performance

KPI 1	2014/15	2015/16	2016/17	2017/18 (baseline)	2018/19	2019/20	SPT 2029/30
Completion rate in senior high schools	44%	46%	48%	52.5%	55.9%	64.1%	75%
KPI 2			2017	2018	2019 (baseline)	2020	SPT 2030
Hospital beds per capita	-	1	9.68	10.05	9.98	9.07	14

¹¹ The hospital beds per capita can be assessed relative to a threshold of 18 per 10,000. This threshold is below the observed OECD high income country minimum (since year 2000) of 20 per 10,000 and tends to correspond to an inpatient hospital admission rate of around 5 per 100 per year. This indicator is designed to capture low levels of hospital capacity; the maximum threshold is used because very high hospital bed densities are not necessary an efficient use of resources. The indicator is computed as follows, using country data on hospital bed density (x), which results in values ranging from 0 to 100:

[•] Country with a hospital bed density x < 18 per 10,000 per year, the indicator = x / 18*100

[•] Country with a hospital bed density $x \ge 18$ per 10,000 per year, the indicator = 100

Sustainalytics' Opinion

Section 1: Sustainalytics' Opinion on the Alignment of the Framework with Relevant Market Standards

Alignment with Use of Proceeds Principles

Sustainalytics is of the opinion that the Framework is credible, impactful and aligns with the Sustainability Bond Guidelines 2021, Green Bond Principles 2021, Social Bond Principles 2021, Green Loan Principles 2021, and Social Loan Principles 2021 (the "Use of Proceeds Principles"). For detailed information, please refer to Appendix 1: Sustainability Bond/ Sustainability Bond/ Programme External Review Form. Sustainalytics highlights the following elements of Ghana's Framework:



Use of Proceeds

Overall Assessment of Use of Proceeds

Use of Proceeds	Activity	Classification	Sustainalytics' Assessment
Renewable Energy	Solar, wind, and tidal energy	Green	- Aligned with market practice
	Small scale and mini hydro below 25 MW	Green	Sustainalytics views small hydro as aligned with market practice. It is also noted that Ghana has established Environmental and Social impact assessments to manage risks related to hydro development and that there is no evidence that the development of new hydro facilities is associated with major E&S controversies.
	Large hydro with emissions intensities 100-200gCO ₂ /kWh	Not aligned	 While recognizing the key role hydro is intended to play in Ghana's development, Sustainalytics considers the financing of large hydro without assurance that emissions will be below 100gCO₂/kWh to be a substantial deviation from market practice
	Rehabilitation and maintenance of existing hydropower facilities	Green	- Aligned with market practice
	Geothermal energy with emissions under 100g CO ₂ /kWh	Green	The emissions threshold is aligned with market practice
	Biomass power generation with lifecycle emissions of less than 100g CO ₂ /kWh and from sustainable feedstock ¹²	Green	The emissions threshold is aligned with market practice Sustainalytics considers Ghana's intended feedstocks, wood waste and municipal waste (primarily food waste) as aligned with market expectations
	Transmission and storage ¹³ infrastructure dedicated to renewable energy	Green	- Aligned with market practice
	Renewable energy- based decentralized electrification options	Green	Aligned with market practice considering the focus on renewable energy
	R&D for renewable energy technologies	Green	Aligned with market practice It is noted that, while associated with positive impact, it is more challenging to quantify the outcomes of R&D expenditures

¹² The Issuer has confirmed that "sustainable" feedstocks are waste products from forestry and sawmill operations such as wood offcut and municipal solid waste (primarily food waste). Sustainalytics notes the importance of the proper segregation of recyclables in accordance with the waste hierarchy.

¹³ The issuer has confirmed that storage technologies under consideration include batteries or other commercially viable technologies such as hydrogen or capacitors.



	Training programmes	Green	- Aligned with market practice for governmental issuers
	to increase technical knowledge in renewable energy installations		It is noted that, while associated with positive impact, it is more challenging to quantify the specific environmental benefits of such expenditures
	Support for renewable Independent Power Producers, including tax incentives	Green	Renewable energy technologies supported are understood to be those defined within the Framework. Supports may take a variety of forms, but in all cases are intended to promote the production of renewable energy. Aligned with market practice for governmental issuers
Energy Efficiency	Equipment, systems, services and improvement of industry processes	Green/Transition	 The Issuer has confirmed that these investments may relate to energy efficiency improvements in cement, food and beverage and iron and steel industries and that investments in these areas are intended to support the achievement of Ghana's NDC targets, and as such advancement of the Country's progress towards its Paris Agreement commitments. The criteria do not, however, include performance thresholds that aim to align investments with science-based decarbonization trajectories. Sustainalytics recognizes the challenges of ensuring that expenditures on hard-to-abate activities such as cement and steel production will result in alignment with science-based trajectories, as well as the environmental benefits that incremental improvements in carbon-intensive sectors. Nonetheless, it is market expectation that investments activities aim to achieve such alignment over time and that they be guided by credible transition strategies. Therefore, while recognizing the environmental benefits that incremental improvements in carbon-intensive sectors may deliver, and considering the need for ongoing sustainable development in Ghana, Sustainalytics considers the lack of these elements to be a limitation of the framework. Sustainalytics notes further that this category is expected to account for a minority of allocation. In addition, the Government intends to install energy efficient appliances such as LED lighting and building systems. The Issuer may also install power correction devices to improve energy efficiency up to 20%. Sustainalytics considers the financing of such energy-efficient electrified equipment to be aligned with market expectation.
	Public Lighting Improvements (LED street lighting) and clean rural household lighting	Green	- Aligned with market practice
	Smart grids and smart meters	Green	While noting the variety of investments that may be considered "smart grids", such investments are generally aligned with market expectations
	Energy efficiency programmes for governmental, commercial and residential buildings, including the development of an appliance labelling program and awareness and capacity building	Green	Aligned with market practice Sustainalytics highlights the Government's work in developing locally-appropriate energy labels and encourages reporting on the positive outcomes achieved through this programme
Pollution Prevention and Control	Waste prevention, treatment, management and recycling projects Establishment of waste sorting centers Waste bins for major and principal streets	Green/Social	 Aligned with market practice, noting that these activities are in support of the waste hierarchy and enable improved recycling The Issuer has confirmed that projects for inclusion include the promotion of urban composting programmes In addition to the environmental benefit of such projects, Sustainalytics recognizes the social benefits associated with improved waste management in Ghana

	Construction,		
	expansion and maintenance of waste treatment facilities		
	Waste to energy projects, such as conversion of municipal solid waste to energy	Green	- Sustainalytics recognizes that energy from waste could take out of circulation potentially recyclable materials and undermine the objectives of a zero-waste circular economy. Additionally, in order to have low emissions intensity of such projects, the composition of residual waste, particularly fossil carbon content, is a crucial consideration. However, Sustainalytics also notes that, due to current constraints of recycling in many parts of the world, energy from waste can offer better residual waste management options than landfills in many cases. Sustainalytics encourages the removal of increasing amounts of recyclables, especially plastics and metals, and the monitoring of thermal efficiency of the financed facilities.
	Rehabilitation of landfill areas, decommissioning and re-engineering of existing landfill sites, including modification and the operation of existing landfills that enables 50% methane capture rate	Green	 While gas capture for energy generation from decommissioned landfills is viewed as market practice internationally, Sustainalytics views such interventions on active landfills to promote improved waste management overall and therefore to be acceptable within the local context. The Issuer has disclosed that current projects have gas capture efficiencies of approximately 50%; Sustainalytics encourage the Ghanaian Government to strive for a best-practice figure of 75% and to continue to report on this progress. Sustainalytics recognizes the environmental benefits associated with proper decommissioning of landfills, 14 and highlights that to ensure full alignment with market expectations that methane capture should be included in such projects,
	Development of air pollution monitoring, control and treatment systems to improve air quality	Green	Sustainalytics recognizes the environmental benefits of air quality monitoring, in particular in urban areas. Aligned with market expectation for a governmental issuer
Environmentally Sustainable Management of Living Natural Resources and Land Use & Terrestrial and Aquatic Biodiversity Conservation	Sustainable fisheries – support for small-scale and artisanal fisheries	Green ¹⁵	 While the activities under the Framework are not certified to any sustainability scheme, the Government has confirmed that the majority of marine fish catch is carried out through short and close-to-shore fishing trips and without the use of chemicals. Industrial scale fishing methods such as trawlers and long-liners are excluded. Sustainalytics understands that artisanal fisheries can be subsistence or industrial fisheries, providing for local consumption or export, and notes that industrial-scale fisheries may pose environmental risks including overfishing and by-catch. While noting the positive intents of supporting sustainable small-scale fishers, Sustainalytics highlights the lack of specific or measurable assurance that financed activities will adhere to credible sustainability standards and encourages the Issuer to report on its management of the sustainable fishery programs to ensure long-term sustainability.

¹⁴ Environmental benefits of proper decommissioning include reduced air pollution and groundwater protection through management of leachate. ¹⁵ While the primary intent of the expenditure is green, Sustainalytics also recognizes its social impacts.

Sustainable management of land	Green	Sustainalytics considers soil recovery and restoration to be aligned with market practice and notes that soil remediation should not be related to the contamination or negative environmental externalities from the issuers' own activities.
Sustainable and Organic Farming		 Sustainalytics views positively support and promotion of certified organic farming. While the initiatives considered by the Government are not certified organic, they are understood to be aligned with recognized organic approaches, such as reduction of erosion, increased water efficiency, and avoidance of inorganic chemicals and fertilizers. These initiatives will support the Plant Protection and Regulatory Services Divisions's (PPRSD) five-pronged approach¹⁶ to reducing the use of agrochemicals and agricultural pollution. Sustainalytics also recognizes that the expenditures under this category are not directly financing agricultural operations, and are instead programmes related to improving environmental performance, and therefore considers this to be aligned with market expectations.
R&D on climate resilient seeds	Green	The Issuers intends to finance research by The Council for Scientific and Industrial Research and public universities, with the aim of improving climate resiliency in the country's agricultural sector. Based on the public-sector nature of the research and the intended environmental benefits, Sustainalytics considers this to be aligned with market expectation. It is noted that, while associated with positive impact, it is more challenging to quantify the outcomes of R&D expenditures
Agricultural energy and water efficiency	Green	Sustainalytics anticipates that investments in improved energy and water efficiency for agriculture will deliver environmental benefits, noting that some forms of agriculture face additional key risks relating to, for example, biodiversity and pesticide use.
Research and certification development in relation to forestry	Green	 Sustainalytics considers FSC/PEFC to be market practice for the production of timber and views Ghana's intent to invest in supporting the development of timber certification and other programmes promoting sustainable forest management to be aligned with market expectations.
Development of sustainable technologies in agriculture, including ecological pest management, seed and grain storage Research on biodiversity protection and training programmes	Green ¹⁷	Aligned with market practice It is noted that, while associated with positive impact, it is more challenging to quantify the specific environmental benefits of training or R&D expenditures, and the Issuer is therefore encouraged to report on the specific outcomes of these programmes
Climate-smart technologies in livestock and fish production and installation of post- harvest storage and food processing facilities	Green ¹⁷	Sustainalytics considers investments intended to improve climate resiliency of agriculture to be aligned with market expectation, noting that (i) Ghana will not finance projects directly related to Genetically-Modified Organisms and (ii) is intended to provide broad-based capacity building to improve the performance of Ghana's agriculture as a whole.

¹⁶ PPRSD aims to improve the environmental performance of the farming sector through improved agronomic practices, the use of bio-controls and natural pesticides, the use of natural enemies to control pests, the procurement of bio-rational pesticides to control Fall Armyworm, and the promotion of the use of less hazardous pesticides.

17 While the primary intent of the expenditure is green, Sustainalytics also recognizes its social impacts.

			- Ghana has disclosed that programmes under the Climate-Smart
			Investment Plan for Ghana, 18 developed with the cooperation of the UN and international organizations, may be the focus of expenditures in this category.
	Afforestation and reforestation programmes	Green	Aligned with market practice Sustainalytics notes that Ghana intends to deploy integrated forest management and encourages the Issuer to ensure ongoing sustainable management of afforested areas
	Protection, restoration and surveillance of coastal and marine environments	Green	- Aligned with market practice
Sustainable Water and Wastewater Management	Water treatment, transport and cleaning of wastewater and the disposal of sewage sludge Provision and maintenance of sustainable water infrastructure for clean and/or drinking water Water consumption reduction equipment and technologies Integrated water resources	Green	Sustainalytics considers the provision of drinking water and treatment of wastewater to be generally aligned with market expectation, and encourages the use of energy-efficient technologies where feasible
Clean Transportation	management Development, expansion, improvement, maintenance and management of low- carbon modes of transportation	Green	The Issuer has confirmed that eligible projects in this area relate to infrastructure for rail and non-motorized transportation Aligned with market practice
	Incentives for public transportation and upgrades to higher climate resilient design standards, including upgrading public transportation such as Bus Rapid Transit (BRT) systems.	Green	Sustainalytics considers investments in infrastructure for public mass transit to be aligned with market practice. Sustainalytics considers the use of electric transportation systems to be aligned with market practice
	Support for electric public transportation	Green	- Aligned with market practice
Climate Change Adaptation	Improvement in the resiliency to climate change and other natural disasters, such as flood risk management	Green	Sustainalytics considers it as best practice to ensure that investments in climate resiliency be selected through formal climate vulnerability assessments and encourages the Issuer to report to assure that this is the case.
	Expand and modernize weather information management systems	Green	- Aligned with market practice
	Development of extreme weather events observation systems and research and development on adaptation systems and infrastructure	Green	- Aligned with market practice
Green Buildings	New construction of government buildings	Green	- Sustainalytics considers the schemes selected to be credible.

 $^{^{18} \ \}underline{\text{https://documents1.worldbank.org/curated/en/300161592374973849/pdf/Climate-Smart-Agriculture-Investment-Plan-for-Ghana.pdf}$

Access to Essential Services	and renovation/retrofitting of existing government buildings certified with LEED, BREEAM, IFC EDGE Educational and vocational training Provision of healthcare infrastructure and services	Social	 Sustainalytics views it as a market practice that Frameworks define minimum levels of eligibility for multi-tier certifications, and considers it to be a deviation from market practice that Ghana has not done so. Sustainalytics notes positively Ghana's efforts¹⁹ in developing regionally-appropriate green building standards. Sustainalytics views positively the focus on financing public education, including physical infrastructure, removal of fees for senior high school, investments in teacher training, expenditures in relation to libraries and other means of information dissemination, and provision of transport services to improve educational accessibility. By focusing on free public services, this category is aligned with market practice By focusing on free public services, including hospitals and health-promotion programmes, this category is aligned with market practice Sustainalytics also notes positively Ghana's proactive
Socioeconomic Advancement and Empowerment	Reduction of socioeconomic inequalities and promotion of socioeconomic inclusion, advancement and empowerment of disadvantaged populations	Social	 investments in disease identification and prevention Investments in this category include a variety of programmes, including those run by the Government and subsidies to NGOs, all with the aim of providing services to target populations. The Framework defines as a target population individuals below the national poverty line including women, elderly people, persons with disability and children. Investments in programmes and supports for these individuals is considered to be aligned with market practice.
Affordable Basic Infrastructure	Provision of essential infrastructure and services to all such as clean drinking water, sanitation, transport and energy, which may include the development of electricity transmission and distribution infrastructure and rural roads and public transport in areas that lack connectivity or access	Social	 The Issuer has confirmed that the objectives of this category are to improve basic services for those households who do not receive the nationally-established minimum service levels. Sustainalytics views investments in water and sanitation to be aligned with market practice. As it relates to energy and transportation, Sustainalytics recognizes that investments in these areas may indirectly support the use of fossil fuels in power generation and/or as a transport fuel, and encourages that the Issuer focus on ensuring the connectivity and the social outcome of the expenditure.
Affordable Housing	- Development and access to affordable housing ²⁰ such as acquisition, repair, enlargement, improvement and refurbishment of housing through the National Housing and Mortgage Fund (NHMF) and Investment in public private funds to create social housing supply	Social	 Sustainalytics highlights (i) the clearly defined target group of public sector workers²¹, (ii) the below market mortgage rate and (iii) the ownership optionality for the NHMF program. Sustainalytics recognizes Ghana's intention to create social housing supply; considering the lack of clear definitions of affordability, Sustainalytics encourages the Issuer to report on how affordability has been ensured throughout the implementation of these programmes.
Employment Generation	Support of the MSME sector and integration of people with	Social	Sustainalytics views support for the SME sector in Ghana to be aligned with market practice, further noting positively that the focus of the expenditures in this category will be on specific

 $^{^{\}rm 19}$ In cooperation with GIZ, Ghana is working to develop national green building standards.

²⁰ Targeted population low and middle income population, which is defined as those in the bottom 2 and middle income quintile.

²¹ Ths Issuer has disclosed that in Ghana the majority of public sector workers fall within the low to medium income level.



	disabilities into the labour market		capacity-building for target groups as well as interventions to support businesses in times of crises such as COVID-19.
Food Security and Sustainable Food Systems	Provision and access to healthy, sufficient and nutritious food and resilient agricultural practices and improved productivity of small-scale producers.	Social	 While noting the diversity of initiatives which may be captured under this category, including support for farmers, training programmes, and programmes to provide healthy food, Sustainalytics generally views these activities to be aligned with market practice,

Additional Commentary on Green and Social Use of Proceeds

- The Framework defines exclusionary criteria for eligible expenditures, including activities related to fossil fuel production or power generation and activities in violation of international conventions or agreements. Sustainalytics considers these criteria to strengthen the Framework.
- Eligible expenditures may take a variety of forms, including direct investment, tax exemptions, operational
 investments and subsidies. Expenditures already financed via other external funding are not eligible.
 Sustainalytics recognizes the use of a variety of fiscal tools as aligned with market practice for a governmental
 issuer.
- The Framework defines a three-year lookback period, which is aligned with market practice.



Project Evaluation and Selection

- The Issuer has established an Inter-Departmental Working Group to assess the eligibility of potential expenditures, including representatives from nine ministries as well four government institutions.
- Eligible programmes and projects will be communicated to the Ministry of Finance which will approve
 expenditures consistent with eligible projects; the Treasury and Debt Management Division will be charged with
 processing eligible payments.
- Based on the defined multi-step process integrating multiple key stakeholders, Sustainalytics considers this
 process to be in line with market practice.



Management of Proceeds

- Net proceeds of eligible instruments will be deposited in a specific account with the Bank of Ghana, and tracked via internal processes. The Ministry's Cash Management and liquidity management policy will apply to proceeds pending disbursement and the Framework discloses that Ghana intends to achieve full allocation within three years of issuance.
- The Ministry of Finance is responsible for the management of proceeds, with the Treasury and Debt Management Division and Budget Division providing oversight.
- Based on the use of segregated accounts and the clear delegation of authority, Sustainalytics considers this process to be in line with market practice.



Reporting

- Ghana will produce an annual Allocation and Impact Report for its investors, including a list of projects which
 have received expenditures and relevant KPIs, the aggregate amount disbursed, and the balance of unallocated
 proceeds. Project-level descriptions may be provided subject to confidentiality concerns. The Framework
 provides examples of impact KPIs which may be used for each category.
- The Ministry of Finance is charged with producing this report, which will be reviewed by an external verifier.

Based on the commitment to annual allocation and impact reporting, Sustainalytics considers this process to be in line with market practice.

Alignment with Sustainability-Linked Principles

Sustainalytics is of the opinion that the Sustainability Finance Framework aligns with the five core components of the Sustainability-Linked Bond Principles 2020 (SLBP) and Sustainability-Linked Loan Principles 2021 (SLLP). For detailed information, please refer to Appendix 2: Sustainability Linked Bond External Review Form. Sustainalytics highlights the following elements of Ghana's Framework:



Selection of Key Performance Indicators (KPIs)

Relevance and Materiality of KPIs

Sustainalytics, in its assessment of materiality and relevance considers i) whether an indicator speaks to a material environment or social issue within the country, and ii) to what portion of impact the KPI is applicable.

Sustainalytics considers KPI 1 - completion rate in senior high schools and KPI 2 - hospital beds per capita, to be material and relevant given the following:

- According to the UN Sustainable Development Goals (SDGs) framework, equitable and universal education are considered a fundamental pillar to achieving sustainable economic development, while ongoing acceleration in the rate of improvement in health systems globally is required to meet targets. 22 SDG 4: Quality Education states that education plays a crucial role in driving benefits to society as: (i) it increases a country's human capital related productivity, (ii) promotes technological progress, and (iii) it improves income distribution while setting a quantitative target for universal postsecondary education. SDG 3: Good Health and Wellbeing specifically cites healthcare system funding and access to medical facilities as ongoing key challenges.
- Sustainalytics' country risk rating 23 methodology considers the management of a country's human capital 24 to be a core ESG factor in measuring a country's long-term prosperity and economic development. In this context, a country's human capital management includes the following key areas: "secondary education, life expectancy at birth and physicians per 1000 people". Thus, access to essential education and health services can be considered crucial in driving Ghana's human capital health, benefiting the country's socioeconomic development.
- iii) The need to improve the quality of care in the health system of Ghana is material in the local context as it is embedded in the country's socioeconomic development strategic plan.²⁵ Furthermore, the COVID-19 pandemic has exposed the shortcomings of health care systems worldwide, especially in emerging economies. At the same time, it also served as a catalyst to implement measures towards improving overall population health, innovating in the delivery of health care, and expanding the scope of services provided by hospitals. Disruptions to education have also been experienced throughout the pandemic, as school closures have fully halted some education without remote or online options.26

²² https://www.un.org/sustainabledevelopment/education/

²³ The Country Risk rating is determined by combining the country's Wealth Score and its ESG Factors Score. The country's Wealth Score provides insights to the country's long-term economic health. The Wealth Score measures the long-term health of the country's economy and its capacity to sustain economic growth. The score is comprised of measures of the country's natural and produced capital, human capital and institutional capital.

The ESG Factors Score measures the country's ability to manage its wealth sustainably.

²⁴ Human capital refers to the knowledge, skill sets, and experience that workers have in an economy.

²⁵ 5-year National Healthcare Quality Strategy (2017-2021), at: https://www.moh.gov.gh/wpcontent/uploads/2017/06/National20Quality20Strategy20Ghana.pdf

https://www.hrw.org/news/2020/08/26/impact-covid-19-childrens-education-africa

In terms of applicability, Sustainalytics notes that KPI 1 - completion rate in SHS, targets the youth population in Ghana, with the KPIs calculated based on individuals 20 to 22 years old. Considering Ghana's young age structure, with the majority of the population under the age of 25, 27,28 improved educational outcomes within this population group are anticipated to play an important factor in the local context. Additionally, education can be the key to eradicating poverty in the country while improving the living standard of its citizens, further magnifying the effects of this KPI.

In terms of applicability, Sustainalytics notes that KPI 2 - hospital beds per capita, covers the majority of Ghana's population as it measures the access of the total population to essential health care services. Hospital beds per capita is viewed to be an important input metric to the performance of the Country's health care system.

Overall, Sustainalytics considers the KPIs to be material in the local context of Ghana and its population.

KPI Characteristics

Sustainalytics' assessment of KPI characteristics considers i) whether a clear and consistent methodology is used, ii) whether the issuer/borrower follows an externally recognized definition, iii) whether the KPIs are a direct measure of the performance of the issuer/borrower on the material environmental or social issue, and iv) if applicable, whether the methodology can be benchmarked to an external contextual benchmark.²⁹

Sustainalytics considers Ghana's definition and methodology to calculate the KPIs performance to be clear and consistent. Further, it is noted that the calculation methodologies reference existing data, such as that of the OECD, to support their benchmarkability.

Overall Assessment

Sustainalytics overall considers KPI 1- completion rate in senior high schools to be very strong given that (i) it directly measures performance on a relevant and material social issue for the country that affects all citizens in the age cohort, and (ii) is clear and consistent.

Sustainalytics overall considers KPI 2 - hospital beds per capita, to be strong given that (i) it indirectly measures performance on a relevant and material social issue for the country, (ii) it covers its total population, (iii) the calculation methodology is aligned with the OECD methodology and hence supports benchmarking.

KPI 1 - completion rate in senior high schools	Not Aligned	Adequate	Strong	Very strong
KPI 2 - hospital beds per capita	Not Aligned	Adequate	Strong	Very strong



Calibration of Sustainability Performance Targets (SPTs)

Alignment with Issuer's/Borrower's Sustainability Strategy

Ghana has set the following SPTs for its KPIs:

- SPT 1 Increase the completion rate in senior high schools, to 75% by 2030
- SPT 2 Increase hospital beds per capita to 14 per 10,000 population by 2030

²⁷ Age structure by sex and age group, 1960-2010, at:

https://statsghana.gov.gh/gssmain/fileUpload/pressrelease/2010 PHC National Analytical Report.pdf

²⁸ Adolescents and Youth Dashboard - Ghana, (2021), at: https://www.unfpa.org/data/adolescent-youth/GH

²⁹ External contextual benchmarks provide guidance on the alignment with ecological system boundaries. This criterion is not applied to social KPIs or impact areas for which such contextual benchmarks are not available.

Sustainalytics considers the SPTs to be aligned with Ghana's national development goals - as part of its Long-Term National Development Plan ("LTNDP") 2018-2057. In alignment with the LTNDP, the Ghana@100 30, launched in 2019, sets out the strategies to achieve key development milestones by 2057, focusing on governance, economy, social and environment pillars. The social pillar includes the mandate to promote equitable, inclusive and well-developed human capital by enhancing education and health systems – among other social key areas. In addition to this, Ghana's education strategic plan adopted the Free SHS Programme in 2017, aiming to reduce the financial burden on parents while increasing access and quality to education. Thus, Sustainalytics notes that the SPTs are associated with expanding universal access to education and health services in Ghana, in line with its national policies.

Strategy to Achieve the SPTs

Ghana intends to achieve the SPTs through the following strategy:

- <u>Policy initiatives:</u> The Government of Ghana has initiated wide-ranging reforms concerning its national education³¹ and health³² systems. The existing High-Level Inter-Ministerial Committee (HLIMC) has oversight of implementing these policies. These policies cover key areas related to the SPTs, including completion of upper secondary education and enhancing the accessibility to health systems in the country.
- <u>Funding programs:</u> Ghana's 2020 SDG budget report³³ states the strategy for resource allocation towards achieving SDG 3 (healthcare): and SDG 4 (education) for national-level programmes. This comprehensive annual report shows the country's commitment and ability to track budget allocations across Ministries, Departments and Agencies (MDAs), as well as Metropolitan, Municipal and District Assemblies (MMDAs). Furthermore, under its Education Strategic Plan,³⁴ the Ministry of Education has identified the projected educational costs to expand the implementation of the Free SHS policy between 2018 and 2030.

Ambitiousness, Baseline and Benchmarks

Sustainalytics, in its assessment of the ambitiousness of SPTs for sovereign issuers, relies primarily on improvements against past and baseline performance as well as contextual factors supporting the relevance of the targets selected.³⁵

Ghana has set the 2017/2018 academic year as the baseline year for its SPT 1 as this was the first academic cycle after implementing the Free SHS Programme in the country. Hence, the baseline chosen is aimed to track the impact of the SHS programme since its implementation. The year 2019 has been selected as the baseline year for the SPT 2 as this was the most recent available year with robust data .

SPT 1: In terms of past performance, Ghana's completion rate in SHS grew from 44% in the 2014/15 academic year to 52.5% in the 2017/2018 academic year (baseline), an annual growth of approximately 6% in the same period. Based on this, the targeted increase of approximately 4%, from the baseline academic year to the SPT academic year, is aligned with past performance, and it represents a continued improvement in the Country's completion rate in SHS. Additionally, Sustainalytics notes that according to UNESCO, across the sub-Saharan Africa region, 60% of youths aged 15-to-17 do not attend school, the highest rate of any region globally.³⁶

SPT 2: In terms of past performance, Ghana's hospital beds per capita grew from 9.6 per 10,000 in 2017 to 10.05 per 10,000 in 2018, representing an annual growth of 0.037. Based on the limited information available previous to the baseline year, Sustainalytics was not able to fully assess the trajectory implied by the SPT against historical performance data. The rate of 18 per 10,000 population is considered to be the minimum across OECD countries, and thus represents a reasonable benchmark against which to measure Ghana's progress.

Sustainalytics considers the strategies to achieve the SPTs to align with Ghana's national sustainable development strategy and commitments and considers Ghana's SPTs to be ambitious given that they present a significant material improvement compared to the country's baseline performance.

³⁰ Republic of Ghana, "Ghana@100" (2019), at: https://s3-us-west-2.amazonaws.com/new-ndpc-static1/CACHES/IMAGES/2020/10/05/Ghana%20@100_layout_final%20_19%20Sept%202020.pdf

³¹ Ghana's 2020 SDGs Budget Report (2020), SDG 4 Quality Education, at:

https://www.mofep.gov.gh/sites/default/files/news/2020_SDGs_Budget_Report.pdf 32 National Health Policy (2020), at: https://www.moh.gov.gh/wp-content/uploads/2020/07/NHP_12.07.2020.pdf-13072020-FINAL.pdf

³³ https://www.mofep.gov.gh/sites/default/files/news/2020_SDGs_Budget_Report.pdf

³⁴ Education strategic plan 2018-2030. Ghana, at: https://www.globalpartnership.org/content/education-strategic-plan-2018-2030-ghana

³⁵ This methodology is adapted from Sustainalytics' methodology for assessing the ambitiousness of corporate targets, which also includes peer group comparisons and aderece to science-based or industry trajectories.

http://uis.unesco.org/en/topic/education-africa



As part of its adapted methodology for sovereign issuers with social KPIs, Sustainalytics considers all targets which are deemed to be reasonably ambitious and aligned with the SLBP to be "ambitious", and therefore has not considered assigning the grades of "moderately ambitious" or "highly ambitious" in this case.

SPT 1 - Increase the completion rate in senior high schools, to 75% by 2030	Not Aligned	Moderately Ambitious	Ambitious	Highly Ambitious
SPT 2 - Increase hospital beds per capita to 14 per 10,000 population by 2030	Not Aligned	Moderately Ambitious	Ambitious	Highly Ambitious



Bond and/or Loan Characteristics

The Republic of Ghana has disclosed that failure to achieve the SPTs at the observation date will result in structural and/or financial implications to any Sustainability-Linked Bond or Loan under the Framework. These implications could include, but are not limited to, a coupon step-up or increased redemption fee.

Should calculation of the KPI not be possible at the observation date the same penalty will be payable as had the SPT not been achieved.

Overall, Sustainalytics considers this structure to be aligned with the SLLP and further notes positively that all SPTs need to be met to avoid a penalty payment.



Reporting

Ghana commits to report on its performance on the KPIs annually and specifically at the relevant observation dates, with this information made available on the Ministry of Finance's website. The reporting will include at least up-to-date information on the performance of the KPIs, including the relevant baselines, the verification report, and any other information required to assist investors in assessing performance against the SPTs. Additionally, where feasible, information explaining the main factors contributing to the performance of the KPIs, data on positive impacts associated with the performance improvements, and any re-assessments of KPIs or adjustments to baselines will be provided. This approach is aligned with the SLBP and SLLP.



Verification

Ghana commits to having an external verifier or auditor provide limited assurance on the published KPI performance figures annually and at the SPT observation deadline. This report will be made available on the Ministry of Finance's website. This is aligned with the SLBP and SLLP on verification.

Section 2: Assessment of Republic of Ghana's Sustainability Strategy

Republic of Ghana's Sustainability Mandate

Over the past two decades, the Republic of Ghana has achieved political stability and favourable socioeconomic development, averaging an annual GDP growth rate of 6.65% from 2000 to 201937 and classifying under the World Bank's Lower Middle-Income Country status in 2011.38 Furthermore, the country scored 60 points in the Ease of Doing Business index39 in 2020, ranking 116th out of 190 countries. Between 1996 and 2017, the Republic of Ghana implemented five medium-term plans, starting with "Vision 2020".40 Since 2018, Ghana's development objectives are expressed in the Long-Term National Development Plan ("LTNDP") 2018-2057⁴¹, which is divided into ten medium-term plans of four-year duration each. The LTNDP targets five overarching goals, namely (i) Build an industrialized, inclusive and resilient economy, (ii) Create an equitable, healthy and prosperous society, (iii) Build well-planned and safe communities while protecting the natural environment, (iv) Build effective, efficient, and dynamic institutions for national development, and (v) Strengthen Ghana's role in international affairs. In alignment with the LTNDP, the National Development Planning Commission ("NDPC") launched the Ghana@10042 Strategy in 2019 to set out strategies to achieve key development milestones by 2057 with a focus on governance, economy, social and environment pillars.

In 2019, the Government of Ghana outlined its ambition to self-finance its future development in the Ghana Beyond Aid strategy⁴³, a national transformation agenda aimed at economic self-reliance and a shift in mindset. The strategy emphasizes the need for investment in infrastructure, skills development, and scientific and technological capacity development at the postsecondary levels. Ghana Beyond Aid has been built on the Coordinated Programme of Economic and Social Development Policies ("CPESDP") 2017-2024⁴⁴ and its associated Medium-Term National Development Plans⁴⁵, which are in turn aligned with the UN Sustainable Development Goals (SDGs) and the African Union Agenda 2063.46 The CPESDP has five key pillars of growth and development, namely (i) revitalizing the economy, (ii) transforming agriculture and industry, (iii) revamping economic and social infrastructure, (iv) strengthening social protection and inclusion, and (v) reforming public service delivery institutions. The Government of Ghana demonstrated commitment to its LTNDP goals through other complementary policy frameworks, as well as publicly accessible National⁴⁷ and Sectors⁴⁸ Annual Progress Reports. Furthermore, in 2019, the country submitted a Voluntary National Review (VNR) Report on the Implementation of the 2030 Agenda for Sustainable Development⁴⁹ to report on Ghana's sustainable development progress.

In 2016, the Republic of Ghana ratified the Paris Agreement and the associated Nationally Determined Contributions⁵⁰, which articulated "to unconditionally lower its GHG emissions by 15 percent relative to a business-as-usual (BAU) scenario emission of 73.95MTCO₂e by 2030" and "to increase climate resilience and decrease vulnerability for enhanced sustainable development". Ghana's strategy to tackle climate change is reflected in several policies and strategies, including the National Climate Change Policy ("NCCP"), the Low Carbon Development Strategy and the National Climate Change Adaptation Strategy. Informed by the recent World Bank Ghana Country Environmental Analysis (CEA)⁵¹, the country is attempting to prioritize environmental issues in development planning.52

The global COVID-19 pandemic has disrupted the pace of Ghana's economic growth, severely impacting the poorest and most vulnerable populations as well as slowing down the country's sustainable development efforts. 53 Despite facing the effects of the

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38 World Bank, "Ghana Looks to Retool Its Economy as it Reaches Middle-Income Status" (2011), at:
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https://www.worldbank.org/en/news/feature/2011/07/18/ghana-looks-to-retool-its-economy-as-it-reaches-middle-income-status

³⁹ World Bank, "Doing Business 2020", at: https://documents1.worldbank.org/curated/en/688761571934946384/pdf/Doing-Business-2020-Comparing-Business-Regulation-in-190-Economies.pdf

⁴⁰ Republic of Ghana, "Vision 2020 - The First Step: 1996-2000" (1995), at:

https://invenio.unidep.org/invenio/record/18439/files/vision_ghana2020.pdf

⁴¹ Republic of Ghana, "Long-term National Development Plan of Ghana (2018-2057)" (2017), at: https://s3-us-west-2.amazonaws.com/newndpc-static1/CACHES/PUBLICATIONS/2017/10/24/OUTLINE+-+LONG-TERM++PLAN.pdf

Republic of Ghana, "Ghana@100" (2019), at: https://s3-us-west-2.amazonaws.com/new-ndpcstatic1/CACHES/IMAGES/2020/10/05/Ghana%20@100 layout final%20 19%20Sept%202020.pdf

¹³ Republic of Ghana, "Ghana Beyond Aid Charter and Strategy Document" (2019), at: https://thinknovate.org/wpcontent/uploads/2019/05/Ghana-Beyond-Aid-Charter-and-Strategy-Document.pdf

⁴⁴ Republic of Ghana, "The Coordinated Programme of Economic and Social Development Policies 2017-2024" (2017), at:

http://www.mop.gov.gh/wp-content/uploads/2018/04/Coordinated-Programme-Of-Economic-And-Social-Development-Policies.pdf

⁴⁵ Republic of Ghana, "Medium Term Development Plan 2018-2021" (2017), at:

http://www.ndagh.org/application/files/1815/1455/4145/Final_Draft_SADA_MTDP_2018-2021.pdf

^{l6} African Union, "Agenda 2063", at: <u>https://au.int/agenda2063</u>

⁴⁷ Republic of Ghana, "National Development Planning Commission – Annual Progress Reports - National", at: https://www.ndpc.gov.gh/downloads/33/

⁴⁸ Republic of Ghana, "National Development Planning Commission - National Annual Progress Reports - Sectors", at: https://www.ndpc.gov.gh/downloads/35/

⁴⁹ Republic of Ghana, "Ghana - Voluntary National Review (VNR) Report on the Implementation of the 2030 Agenda for Sustainable Development" (2019), at: https://sustainabledevelopment.un.org/content/documents/23420Ghanas VNR report Final.pdf

⁵⁰ Republic of Ghana, "Ghana's intended nationally determined contribution (INDC) and accompanying explanatory note" (2015), at: https://www4.unfccc.int"/sites/ndcstaging/PublishedDocuments/Ghana%20First/GH_INDC_2392015.pdf

⁵¹ World Bank, "Ghana Country Environmental Analysis (CEA)" (2020), at: https://openknowledge.worldbank.org/handle/10986/33726

⁵² World Bank, "Ghana: Balancing economic growth and depletion of resources" (2020), at: https://blogs.worldbank.org/africacan/ghanabalancing-economic-growth-and-depletion-resources

⁵³ UNDP, "Long-Term Socio-Economic Impacts of COVID-19 in African Contexts" (2021), at:

pandemic, the Government launched the Covid-19 Alleviation, Revitalisation and Enterprise Support Programme ("CARES" or "Obaatanpa" Programme)⁵⁴ to stabilize, revitalize and transform Ghana's economy to create jobs and prosperity for Ghanaians over a three-year period. It is sequenced in two phases: a Stabilization that ran from July 2020 to December 2020; and a medium-term Revitalization Phase from 2021-2023.

Sustainalytics is of the opinion that the Ghana Sustainable Financing Framework is aligned with the LTNDP, Ghana@100, the CPESDP and its associated Medium-Term National Development Plans, the NCCP and other government environmental policies. The Framework may assist the country in meeting its sustainability targets by leveraging financing towards social and environmental projects. In view of the above, Sustainalytics considers Ghana to be well-positioned to issue social, green, or sustainability financing instruments.

Republic of Ghana's environmental and social risks management

Financing instruments issued by the Republic of Ghana under its Sustainable Financing Framework will finance projects that are anticipated to have positive social and environmental impacts. In addition, proceeds raised by sustainability-linked financing instruments may be directed to a variety of budgetary expenditures. Notwithstanding the anticipated environmental or social benefit of projects and programmes financed, Sustainalytics recognizes that, as with any large initiative, such eligible projects may lead to some negative environmental and social outcomes.

Key risks associated with the eligible projects could include (i) land use and biodiversity loss associated with large-scale infrastructure development, (ii) risks of increasing inequalities if social programmes are not appropriately targeted to beneficiaries or if universal access is not ensured, (iii) human and labour rights issues (including occupational health and safety risks) and (iv) risks related to bribery and corruption which could undermine the achievement of key objectives.

Sustainalytics is of the opinion that the Republic of Ghana is able to manage or mitigate potential risks through the following policies:

- Ghana has been a signatory to the 1992 Convention on Biological Diversity (CBD) since 1992⁵⁵ and the United Nations Convention to Combat Desertification (UNCCD) since 1994.⁵⁶ Ghana drafted an Environmental Action Plan in 1988.⁵⁷ The Environmental Protection Agency ("EPA") Act (Act 490) was passed in 1994 and subsequently established the Environmental Protection Agency, the main body responsible for regulating or administering environmental laws in Ghana.⁵⁸ The Environmental Assessment Regulations, LI 1652, was promulgated in 1999 to give comprehensive legal protection to the Ghana Environmental Impact Assessment ("EIA") procedures. Furthermore, the national Environmental Assessment Capacity Development Programme ("GEACaP") was established in 2001 to develop Environmental Assessment Sector Specific Guidelines for eight sectors, namely: Transportation, Mining, Tourism, General Construction & Services, Energy, Manufacturing, Agriculture and Health.⁵⁹ Furthermore, the country developed sectoral policies, including Fisheries Management Plan, Health and Pollution Action Plan, and Climate Change mitigation and adaptation strategies. However, the revised 2016 National Environmental Policy ⁶⁰ identified institutional inefficiencies with environmental management. Furthermore, the World Bank's 2020 Country Environmental Analysis for Ghana⁶¹ identified a series of institutional gaps and challenges, including the absence of a framework for land-use planning and noncompliance with EIAs. Sustainalytics notes that the country could further strengthen policies and institutions for environmental protection.
- Ghana is a signatory to a number of relevant international human rights mechanisms that enshrine the right to social
 protection and relevant ancillary services. This is reflected in a series of laws, such as the Children's Act, 1998 (Act 560),
 Persons with Disability Act, 2006 (Act 715), Domestic Violence Act of 2007 (Act 732), National Health Insurance Act,
 2003 (Act 650) and the amended Act 852 (of 2012), Human Trafficking Act, 2005 (Act 694) and Mental Health Act 2012

⁵⁴ Republic of Ghana, "Ghana Covid-19 Alleviation and Revitalization of Enterprises Support" (2020), at: https://www.mofep.gov.gh/sites/default/files/news/care-program.pdf

⁵⁵ Convention on Biological Diversity, "Country Profile – Ghana", at: https://www.cbd.int/countries/profile/?country=gh

⁵⁶ United Nations Treaty Collection, "United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa" (2021), at: https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-10&chapter=27&clang=_en

⁵⁷ Republic of Ghana, "Environmental Action Plan" (1988), at: https://documents1.worldbank.org/curated/en/278211468751766859/pdf/multi-page.pdf

⁵⁸ World Bank, "Ghanaian Environmental and Social Laws", at: https://esrmafrica.org/ghana-posts-3/

⁵⁹ Republic of Ghana, "Environmental Impact Assessment for the

⁶⁰ Republic of Ghana, "National Environmental Policy" (2016), at: <a href="https://new-ndpc-public-p

static1.s3.amazonaws.com/CACHES/PUBLICATIONS/2016/04/16/NATIONAL_ENVIRONMENTAL_POLICY.pdf

⁶¹ World Bank, "Ghana Country Environmental Analysis" (2020), at: https://openknowledge.worldbank.org/handle/10986/33726



(Act 846). The National Social Protection Policy ("NSPP") 62 seeks to advocate, facilitate and promote access to programmes such as the Livelihood Empowerment Against Poverty programme, the School Feeding Programme, and the free maternal health care programme. These activities are overarched by key policies, such as the Child and Family Welfare Policy (2014), the National Gender Policy (2014) and the National Youth Policy (2010). Ghana was one of the first countries in Africa to implement a National Health Insurance Scheme ("NHIS"). Established in 2003, the NHIS was explicitly designed to go beyond the formal sector. However, only one-third of the population benefit from the scheme with reliance on individual contributions. The Government of Ghana faces challenges in financing healthcare objectives and ensuring equity in distribution and access across the country. The National Health Policy ("NHP") 55 seeks to address these challenges. The COVID-19 pandemic has added a new layer of challenges for the health, physical safety, and economic security of the most vulnerable; therefore, the success of measures will depend on the systemic and systematic implementation by the Government to ensure equity and inclusion. Ghana's Agenda 111 policy recognizes disparity of access to hospitals as a key challenge to the equity of the health system, and the Government proposes improved funding and intergovernmental cooperation as key solutions. Specifically, the work is being carried out in cooperation with the Ministry of Local Government and Rural Development to select and secure sites for potential hospitals in areas currently facing access challenges, in particular in urban areas where land availability is limited.

- Ghana has been a member of the International Labor Organization (ILO) since 1957. The country has signed all nine of the core international human rights treaties and has ratified eight of them. Gramman Has also ratified all eight fundamental International Labour Organization (ILO) conventions, as well as 41 of the 178 ILO technical conventions in force as of 2021. The country promulgated the Labour Act, 2003 (Act 651), which led to the establishment of the National Labour Commission for effective settlement of labour disputes and to serve as a proactive legal framework for the work environment and the regulation of employer-employee relations. Similarly, the promulgation of the Fair Wages and Salaries Act, 2007 (Act 737) led to the implementation of the Single Spine Salary Structure to remove distortions in public sector salary administration. Despite efforts, the National Employment Policy (2014) and outlines a list of challenges, including a fragmented occupational safety and health regime, ineffective labour/workplace inspection, and poor working conditions. These have resulted in a weak labour administration system unable to protect the most vulnerable, including the informal sector, which is estimated to employ about 90% of the workforce. In 2017, the Government of Ghana published its medium-term national development policy framework "Agenda for Jobs: Creating Prosperity and Equal Opportunity for All" with a strategic focus on strengthening social protection and inclusion. Sustainalytics notes the need for the country to tackle the underlining drivers of inequalities to achieve its development ambitions.
- Ghana ratified the United Nations Convention against Corruption (UNCAC) as well as the African Union Convention on Preventing and Combating Corruption in 2007. Ghana, as a common law state, mostly adopts a dualist system and does not apply the Conventions directly. ⁷¹ Ghana has enacted various laws and created institutions meant to combat corruption. These include anti-corruption legal instruments, such as a Public Procurement Law (Act 663), Whistleblower Act (Act 720), Anti-Money Laundering Act (Act 749), Public Financial Management Act (Act 921), and institutions, such as the Commission for Human Rights and Administrative Justice ("CHRAJ") and the Economic and Organized Crime Office ("EOCO"). In 2014, Ghana's Parliament approved the National Anti-Corruption Action Plan ("NACAP")⁷² to prevent and fight corruption through ethics, integrity and the stringent application of applicable laws. NACAP's implementation

⁶² Republic of Ghana, "National Social Protection Policy" (2015), at: https://www.social-protection.org/gimi/gess/RessourcePDF.action;jsessionid=ecewH3epI4NC92dXCjBorlfbkc6cT81va5gcdRiBB2FhotVzvuBQ!988229515?id=557588

⁶³ World Health Organization, "Global Action Plan Signatory Agencies back Ghana's Health Financing Reforms" (2019), at:

https://www.who.int/news-room/feature-stories/detail/global-action-plan-signatory-agencies-back-ghana-s-health-financing-reforms

⁶⁴ Dake, A. (2018), "Examining equity in health insurance coverage: an analysis of Ghana's National Health Insurance Scheme", International Journal for Equity in Health, at: https://equityhealthj.biomedcentral.com/track/pdf/10.1186/s12939-018-0793-1.pdf

⁶⁵ Republic of Ghana, "National Health Policy" (2020), at: https://www.moh.gov.gh/wp-content/uploads/2020/07/NHP_12.07.2020.pdf-13072020-FINAL.pdf

⁶⁶ International Labour Organization, "NORMLEX – Ghana", at:

 $[\]underline{\text{https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:11110:0::NO::P11110_COUNTRY_ID:103231}$

⁶⁷ Ghana has not yet ratified the International Convention for the Protection of All Persons from Enforced Disappearance.

⁶⁸ Republic of Ghana, "National Employment Policy" (2014), at: https://www.ilo.org/wcmsp5/groups/public/---africa/---ro-abidjan/---ilo-abuja/documents/publication/wcms_373458.pdf

⁶⁹ Ghana Statistical Service, "2015 Labour Force Report" (2016), at:

https://www2.statsghana.gov.gh/docfiles/publications/Labour_Force/LFS%20REPORT_fianl_21-3-17.pdf

⁷⁰ Government of Ghana, "Medium-Term National Development Policy Framework. An Agenda for Jobs: Creating Prosperity and Equal Opportunity for All (First Step) 2018-2021" (2017), at: https://s3-us-west-2.amazonaws.com/new-ndpc-static1/CACHES/PUBLICATIONS/2018/08/23/Medium-term+Policy+Framework-Final+June+2018.pdf

⁷¹ UNCAC, "Implementation Review Group" (2015), at:

 $[\]underline{\text{https://www.unodc.org/documents/treaties/UNCAC/WorkingGroups/ImplementationReviewGroup/ExecutiveSummaries/V1500669e.pdf}$

⁷² Republic of Ghana, "National Anti-Corruption Action Plan (NACAP) 2011-2021" (2011), at:



started in 2015 and is coordinated by CHRAJ.⁷³ In 2017, the Government of Ghana established the Office of the Special Prosecutor to investigate and prosecute cases and allegations of corruption and other misconduct under the Criminal and Other Offences Act, 1960 (Act 29).⁷⁴ Ghana ranked 75th out of 180 countries in Transparency International's Corruption Perceptions Index (CPI), compared to 81st in 2017.⁷⁵ However, the 2019 Ghana Afrobarometer Survey⁷⁶ found that 53% of Ghanaians say "the level of corruption in the country has risen in the past year". Sustainalytics notes that public accountability and institutions can be further strengthened to address public concerns.

Based on these policies, standards and assessments, Sustainalytics is of the opinion that Ghana has implemented adequate measures and is well-positioned to manage and mitigate environmental and social risks commonly associated with the eligible categories and SLBs. As a commitment to transparency under the Framework, Sustainalytics encourages the Issuer to implement comprehensive due diligence assessment on risks and provide robust reporting on the impacts of issuances.

Section 3: Impact of the UoPs and SPTs Selected

Sustainalytics has focused below on where the impact is specifically relevant in the local context.

Importance of sustainable management of natural resources

Ghana has experienced severe droughts and floods in the past two decades⁷⁷. Considering the country's vulnerability to projected climate change impacts, it is anticipated that climate change will result in significant consequences for food security, water resources management and health. Agricultural exports, principally cocoa, have been an important driver of economic growth, representing 33% of the Country's GDP and serving as the source of livelihoods for over 50% of the population.⁷⁸ Furthermore, approximately one-sixth of Ghana's population lives in coastal zones, where the low-lying human settlements and fishing activities are vulnerable to sea-level rise.⁷⁹ Additionally, climate change will pose severe threats to fisheries' sustainability and fishing communities whose livelihoods depend on the activity.⁸⁰

Forests provide various ecosystem services and functions that support the country's predominantly agrarian economy. Ghana has had important primary forest cover loss, which jumped 60% from 2017 to 2018, according to the World Resource Institute. Such a degree of deforestation can contribute to climate change through CO2 emissions and further exacerbate land degradation. In fact, the Agriculture, Forestry and Other Land Use (AFOLU) sector are responsible for 71% of the total greenhouse gas emissions of Ghana. Carbon removals by forests are estimated to be equivalent to 47% of the Country's total emissions

In response, the Government of Ghana has drafted a National Climate Change Policy as well as a National Adaptation Plan Framework to pursue a sector-focused adaptation planning process, with emphasis on agriculture, forestry, water, energy, gender, and health. Furthermore, the country published a National Climate-Smart Agriculture and Food Security Action Plan (2016-2020)⁸⁴ to develop an overall approach for programme areas against the background of the following principles, namely: (i) understanding that sustainability of natural resources, including land, forest, water and genetic biodiversity is significantly influenced by agricultural practices, and (ii) the need for sustainable agricultural systems as the fundamental basis for achieving national food security and poverty reduction. Furthermore, Ghana's REDD+ Strategy (2016-2035) aims to significantly reduce emissions from deforestation and forest degradation as well as address threats that undermine ecosystem services and environmental integrity.⁸⁵

⁷³ Ghana Anti-Corruption Coalition (GACC), "Status of Implementation of the National Anti-Corruption Action Plan" (2019), at: http://www.gaccgh.org/publications/FINAL-%20Survey%20full%20report%20NACAP.pdf

⁷⁴ Transparency International, "Overview of corruption and anti-corruption in Ghana" (2018), at:

https://knowledgehub.transparency.org/assets/uploads/helpdesk/overview-of-corruption-and-anti-corruption-in-ghana-2018.pdf

⁷⁵ Transparency International, "Corruption Perceptions Index: Ghana", at : https://www.transparency.org/en/cpi/2017/index/gha

⁷⁶ Afrobarometer, "Ghana" (2019), at: https://afrobarometer.org/countries/ghana-1

⁷⁷ GIZ, "Climate Risk Profile: Ghana" (2019), at: https://www.pik-potsdam.de/members/gornott/climate-risk-profile-ghana.pdf

⁷⁸ World Bank, "3rd Ghana Economic Update – Agriculture as an engine of growth and jobs creation" (2018), at:

https://documents1.worldbank.org/curated/pt/113921519661644757/pdf/123707-REVISED-Ghana-Economic-Update-3-13-18-web.pdf

⁷⁹ African Development Bank "National Climate Change Profile – Ghana" (2018), at: https://www.afdb.org/en/documents/ghana-national-climate-change-profile

⁸⁰ Food and Agriculture Organization of the United Nations (FAO), "Impacts of climate change on fisheries and aquaculture" (2018), at: http://www.fao.org/fi/static-media/MeetingDocuments/CECAF/CECAF-SSC8/Inf.5e.pdf

⁸¹ World Resources Institute, "The World Lost a Belgium-sized Area of Primary Rainforests Last Year" (2019) at:

https://www.wri.org/insights/world-lost-belgium-sized-area-primary-rainforests-last-year

⁸² WWF, "Deforestation and forest degradation", at: https://www.worldwildlife.org/threats/deforestation-and-forest-degradation

⁸³ Global Mechanism of the UNCCD, "Country Profile of Ghana. Investing in Land Degradation Neutrality: Making the Case. An Overview of Indicators and Assessments" (2018), at: https://www.unccd.int/sites/default/files/inline-files/Ghana_3.pdf

⁸⁴ FAO, "National Climate-Smart Agriculture and Food Security Action Plan of Ghana (2016-2020)" (2015), at: http://extwprlegs1.fao.org/docs/pdf/gha169288.pdf

⁸⁵ Republic of Ghana, "REDD+ Strategy 2016-2035", at: http://extwprlegs1.fao.org/docs/pdf/gha178876.pdf



While these policies have significant implications for improving environmental protection and resilience to climate change, they also pose relevant challenges for implementation and resource allocation.

Impact of education

In 2020, youth (under 15) accounted for nearly 38% of Ghana's total population, which is estimated at approximately 31 million in total. Population growth estimates in Ghana predict the youth surge will inflate and peak in a decade. The fast-growing young population represents both positive and negative consequences for economic transformation and has created a challenge in that youth lack adequate education and skills to drive economic growth. The Ghana Statistical Service estimated that the overall unemployment rate in Ghana in 2015 was 11.9% and that 12.1% of youth were unemployed. Furthermore, it was estimated that 40% of Ghanaian youth have no educational qualification. In 2016 it was projected that 300,000 new jobs would have to be created each year to absorb the increasing number of unemployed young people. The country's current education system is not adequately addressing youth unemployment and the changing nature of work to equip young populations with the required skills to enter the labour market or pursue higher education. Despite important levels of public investments in education as well as compulsory and free education through junior high school, completion rates have been declining since 2015. The country has seen gains in enrollment with the implementation of free Senior High School ("SHS") in 2017-2018, and transition rates from the junior secondary level to the senior secondary level have increased – demonstrating a need for the sector to expand infrastructure to accommodate additional students.

The current guiding policy, the Coordinated Programme of Economic and Social Development Policies (2017–24): An Agenda for Jobs—Creating Prosperity and Equal Opportunity for All, places the issues of youth unemployment and underemployment at the center of national development. Furthermore, Ghana's Education Sector Analysis⁹² demonstrates consistent and growing public spending on education above international benchmarks. In its Education Strategic Plan 2018-2030⁹³, Ghana is targeting improved equitable access to quality Senior High School (SHS) Education to offer multiple pathways to enter the labour market or pursue higher education. While these reforms have significant implications for improving student learning outcomes, they also pose relevant challenges for implementation and resource allocation.

Sustainalytics notes the country's education reform agenda priorities as a positive development for strengthening human capital in future generations and is of the opinion that any subsequent capital allocation towards education initiatives will support the ambition of expanded access to quality education.

Importance of expanded access to essential health services

Ghana was one of the first countries in Africa to implement a National Health Insurance Scheme ("NHIS"). Established in 2003, the NHIS was explicitly designed to provide financial access to quality health care for residents in Ghana. However, despite the recent economic growth and important investments in the health sector 5, wide inequities exist in the delivery of essential health services in Ghana. Less than 2% of the poor are covered by the NHIS, and only one-third of the population benefit from the scheme with reliance on individual contributions.

⁸⁶ Statista, "Ghana: Age structure form 2010 to 2020" (2020), at: https://www.statista.com/statistics/447521/age-structure-in-ghana/#:~:text=This%20statistic%20shows%20the%20age,aged%200%20to%2014%20years.

⁸⁷ World Bank, "Population, total - Ghana" (2020), at: https://data.worldbank.org/indicator/SP.POP.TOTL?locations=GH

⁸⁸ World Bank, "Harnessing Youth Potential in Ghana - A Policy Note " (2016) at:

https://documents1.worldbank.org/curated/en/299731470375262940/pdf/106877-REVISED-WP-P156462-PUBLIC.pdf

⁸⁹ Ghana Statistical Service, "2015 Labour Force Report" (2016), at:

https://www2.statsghana.gov.gh/docfiles/publications/Labour_Force/LFS%20REPORT_fianl_21-3-17.pdf

⁹⁰ World Bank, "Youth Employment Programs in Ghana: Options for Effective Policy Making and Implementation" (2020), at: https://openknowledge.worldbank.org/handle/10986/34349?locale-attribute=en

⁹¹ Republic of Ghana, "Education Sector Performance Report" (2018), at:

https://www.globalpartnership.org/sites/default/files/document/file/2020-16-Ghana%20-%20ESP-IR.pdf

⁹² Republic of Ghana, "Education Sector Analysis" (2018), at: https://sapghana.com/data/documents/Ghana-Education-Sector-Analysis-2018.pdf

⁹³ Republic of Ghaha, "Education Strategic Plan 2018-2030" (2019) at: https://www.globalpartnership.org/sites/default/files/2019-05-education-strategic-plan-2018-2030.pdf

⁹⁴ National Health Insurance Scheme, "About us", at: http://www.nhis.gov.gh/about.aspx

⁹⁵ Republic of Ghana, "Medium Term Expenditure Framework (MTEF) for 2019-2022 – Ministry of Health" (2019), at: https://www.mofep.gov.gh/sites/default/files/pbb-estimates/2019/2019-PBB-MoH.pdf

⁹⁶ OXFAM, "Ghana: extreme inequality in numbers" (2017), at: https://www.oxfam.org/en/ghana-extreme-inequality-numbers

⁹⁷ World Health Organization, "Global Action Plan Signatory Agencies back Ghana's Health Financing Reforms" (2019), at:

The National Health Policy ("NHP")98 seeks to address health challenges through the following policy objectives, namely: (i) strengthen the healthcare delivery system to be resilient, (ii) encourage the adoption of healthy lifestyles, (iii) improve the physical environment, (iv) improve the socioeconomic status of the population, (v) ensure sustainable financing for health. Furthermore, the intent to improve the quality of care in the health system of the country led to the development and launch of a 5-year National Healthcare Quality Strategy (2017-2021).99 However, the Government of Ghana continues to face issues in financing healthcare objectives and ensuring equity in distribution and access across the country. 100

Amid the COVID-19 pandemic, the Government of Ghana has made a strong political commitment to Universal Health Coverage ("UHC") and prepared a UHC Roadmap to guide national work towards this goal. COVID-19 has highlighted the capacity gap in human capital and the need to address structural inequalities, particularly the quality of and access to public health services. Projects funded under the Framework are considered essential to advancing the health sector and making it more resilient in the face of the COVID-19 pandemic and future health emergencies. Sustainalytics notes that the success of measures will depend on the systemic and systematic implementation by the Government to ensure equity and inclusion.

Alignment with/contribution to SDGs

The Sustainable Development Goals (SDGs) were set in September 2015 and form an agenda for achieving sustainable development by the year 2030. The {FRAMEWORK} advance the following SDG goals and targets:

KPI/Category	SDG	SDG Target
Renewable Energy	7. Affordable and Clean Energy	7.1 By 2030, ensure universal access to affordable, reliable and modern energy services 7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
Energy Efficiency	7. Affordable and Clean Energy 9. Industry, Innovation and Infrastructure	7.3 By 2030, double the global rate of improvement in energy efficiency 9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities
Pollution Prevention and Control	11. Sustainable Cities and Communities12. Reponsible Consumption and Production	 11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management. 12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse
Environmentally Sustainable Management of Living Natural Resources and Land Use & Terrestrial and Aquatic Biodiversity Conservation	2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture	2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality

⁹⁸ Republic of Ghana, "National Health Policy" (2020), at: https://www.moh.gov.gh/wp-content/uploads/2020/07/NHP_12.07.2020.pdf-13072020-

⁹⁹ Republic of Ghana, "Ghana National Healthcare Quality Strategy (2017-2021) (2016), at: https://www.moh.gov.gh/wpcontent/uploads/2017/06/National20Quality20Strategy20Ghana.pdf

Dake, A. (2018), "Examining equity in health insurance coverage: an analysis of Ghana's National Health Insurance Scheme", International Journal for Equity in Health, at: https://equityhealthi.biomedcentral.com/track/pdf/10.1186/s12939-018-0793-1.pdf

	14. Life Below Water 15. Life on Land	14.4 By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics 15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems
Sustainable Water and Wastewater Management	6. Clean Water and Sanitation	 6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally. 6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.
Clean Transportation	9. Industry, Innovation and Infrastructure 11. Sustainable Cities and Communities	9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all 11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons
Climate Change Adaptation	13. Climate Action	13.2 Integrate climate change measures into national policies, strategies and planning
Green Buildings	9. Industry, Innovation and Infrastructure 11. Sustainable Cities and Communities	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities 11.c Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials
Access to Essential Services	Ensure healthy lives and promote well-being for all at all ages	3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births



		3.2 By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births 3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care
		services and access to safe, effective, quality and affordable essential medicines and vaccines for all
	4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes
Coning companie Advancement and	Decent work and economic growth	8.6 By 2020, substantially reduce the proportion of youth not in employment, education or training
Socioeconomic Advancement and Empowerment 10. Reduced inequalities		10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status
	Clean Water and Sanitation	6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations
	7. Affordable and Clean Energy	7.b By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, particularly LDCs and SIDS
Affordable Basic Infrastructure	Industry, Innovation and Infrastructure	9.A Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States.
	11. Sustainable cities and communities	11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons
Affordable Housing	11. Sustainable cities and communities	11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums
Employment Generation	8. Decent work and economic growth	8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value
Food Security and Sustainable Food Systems	2. Zero Hunger	2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge,

		financial services, markets and opportunities for value addition and non-farm employment
KPI 1 - Completion rate in senior high schools	4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes
KPI 2 - Hospital beds per capita	3. Ensure healthy lives and promote well-being for all at all ages	3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births 3.2 By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births 3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all

Conclusion

Ghana has developed the Sustainable Finance Framework under which it may issue use of proceeds and/or sustainability-linked bonds.

Under the green, social, sustainability bonds and/or loans Framework, proceeds may finance environmentally and/or socially beneficial projets that will advance the Country's sustainable development. Sustainalytics considers that the projects funded by the use of proceeds bond and/or loans are expected to provide positive environmental and social impact. The Sustainable Finance Framework outlines a process by which proceeds will be tracked, allocated, and managed, and commitments have been made for reporting on the allocation and impact of the use of proceeds.

Under the sustainability-linked instruments, Ghana intends to tie the Bond and/or Loan Characteristics to the achievements of the following SPTs:

- (1) Increase the completion rate in senior high schools, to 75% by 2030, approximately a 43% increase compared to the 2017/2018 academic year.
- (2) Increase hospital beds per capita to 14 per 10,000 population by 2030, approximately a 40% increase compared to 2019.

Sustainalytics considers the KPI 1- completion rate in senior high schools, to be very strong, and the KPI 2 - hospital beds per capita, to be strong given that they directly and indirectly measure performance on a relevant and material social issue for the country and their calculation methodology is clear and consistent. Sustainalytics considers the SPTs to be ambitious given that they present a significant material improvement compared to the country's baseline performance. Sustainalytics considers the reporting and verification commitments to be aligned with market expectations.

Furthermore, Sustainalytics believes that the Sustainable Finance Framework is aligned with the overall sustainability strategy of the Issuer.

Based on the above, Sustainalytics is confident that Ghana is well-positioned to issue green, social, and sustainability use of proceeds bonds and/or loans and sustainability-linked bonds and/or loans and that the Sustainable Finance Framework is in alignment with the Sustainability Bond Guidelines 2021, Green Bond Principles 2021, Social Bond Principles 2021, Green Loan Principles 2021, Social Loan Principles 2021, Sustainability-Linked Bond Principles 2020, and Sustainability-Linked Loan Principles 2021.



Appendix 1 Green Bond / Green Bond Programme - External Review Form

Section 1. Basic Information

Issu	uer name:	The Repu	ublic of Ghana
	en Bond ISIN or Issuer Green Bond nework Name, if applicable:	Sustainak	ble Financing Framework
Revi	iew provider's name:	Sustainal	ytics
Con	npletion date of this form:	October 1	12, 2021
Pub	lication date of review publication:		
Sec	tion 2. Review overview		
SCOF	PE OF REVIEW		
The fo	ollowing may be used or adapted, where a	ppropriate, to	summarise the scope of the review.
The re	eview assessed the following elements and	d confirmed th	eir alignment with the GBP:
\boxtimes	Use of Proceeds	\boxtimes	Process for Project Evaluation and Selection
\boxtimes	Management of Proceeds	\boxtimes	Reporting
ROLE	E(S) OF REVIEW PROVIDER		
	Consultancy (incl. 2 nd opinion)		Certification
	Verification		Rating
	Other (please specify):		
	Note: In case of multiple reviews / diffe	rent providers	s, please provide separate forms for each review.
EXEC	CUTIVE SUMMARY OF REVIEW and/or L	.INK TO FULL	_ REVIEW (if applicable)
Pleas	e refer to Evaluation Summary above.		
i			

Section 3. Detailed review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

1. USE OF PROCEEDS

Overall comment on section (if applicable):

The categories for the use of proceeds — Renewable Energy, Energy Efficiency, Pollution Prevention and Control, Environmentally Sustainable Management of Living Natural Resources and Land Use & Terrestrial and Aquatic Biodiversity Conservation, Sustainable Water and Wastewater Management, Clean Transportation, Climate Change Adaptation, Green Buildings, Access to Essential Services, Socioeconomic Advancement and Empowerment, Affordable Basic Infrastructure, Affordable Housing, Employment Generation, and Food Security and Sustainable Food Systems — are aligned with those recognized by the Use of Proceeds Principles and will, overall, lead to positive environmental and social impacts. Sustainalytics notes, however, that the Framework's criteria deviate substantially from market expectation in some areas, specifically in the areas of hydroelectric power generation and investments in hard-to-abate activities without defined thresholds. Sustainalytics considers this to be a limitation of the Framework.

Us	e of proceeds categories as per GBP:		
\boxtimes	Renewable energy	\boxtimes	Energy efficiency
\boxtimes	Pollution prevention and control		Environmentally sustainable management of living natural resources and land use
\boxtimes	Terrestrial and aquatic biodiversity conservation		Clean transportation
\boxtimes	Sustainable water and wastewater management		Climate change adaptation
	Eco-efficient and/or circular economy adapted products, production technologies and processes	\boxtimes	Green buildings
	Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBP		Other (please specify):
If a	pplicable please specify the environmental taxon	omy,	if other than GBP:
Use	of proceeds categories as per SBP:		
\boxtimes	Affordable basic infrastructure	\boxtimes	Access to essential services
\boxtimes	Affordable housing	\boxtimes	Employment generation (through SME financing and microfinance)
	Food security	\boxtimes	Socioeconomic advancement and empowerment
	Unknown at issuance but currently expected to conform with SBP categories, or other eligible areas not yet stated in SBP		Other (please specify):

If applicable please specify the social taxonomy, if other than SBP:

2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section (if applicable):

- The Issuer has established an Inter-Departmental Working Group to assess the eligibility of potential expenditures, including representatives from nine ministries as well four government institutions.
- Eligible programmes and projects will be communicated to the Ministry of Finance which will approve expenditures consistent with eligible projects; the Treasury and Debt Management Division will be charged with processing eligible payments.
- Based on the defined multi-step process integrating multiple key stakeholders, Sustainalytics considers this process to be in line with market practice.

Evaluation and selection

	Credentials on the issuer's environmental sustainability objectives	\boxtimes	Documented process to determine that projects fit within defined categories
\boxtimes	Defined and transparent criteria for projects eligible for Green Bond proceeds		Documented process to identify and manage potential ESG risks associated with the project
	Summary criteria for project evaluation and selection publicly available		Other (please specify):
nfo	rmation on Responsibilities and Accountab	ility	
	Evaluation / Selection criteria subject to external advice or verification		In-house assessment
	Other (please specify):		

3. MANAGEMENT OF PROCEEDS

Overall comment on section (if applicable):

- Net proceeds of eligible instruments will be deposited in a specific account with the Bank of Ghana, and tracked via internal processes. The Ministry's Cash Management and liquidity management policy will apply to proceeds pending disbursement and the Framework discloses that Ghana intends to achieve full allocation within three years of issuance.
- The Ministry of Finance is responsible for the management of proceeds, with the Treasury and Debt Management Division and Budget Division providing oversight.
- Based on the use of segregated accounts and the clear delegation of authority, Sustainalytics considers this process to be in line with market practice.

Tracking of proceeds:

- □ Green Bond proceeds segregated or tracked by the issuer in an appropriate manner
- Disclosure of intended types of temporary investment instruments for unallocated proceeds

	Other (please sp	ecify):		
Add	itional disclosure	9 :		
	Allocations to fut	ure investments only		Allocations to both existing and future investments
	Allocation to indiv	vidual disbursements		Allocation to a portfolio of disbursements
\boxtimes	Disclosure of por unallocated process			Other (please specify):
4. R	EPORTING			
Ove	rall comment on so	ection (if applicable):		
level may •	ived expenditures I descriptions may be used for each The Ministry of	and relevant KPIs, the agg be provided subject to conf category. Finance is charged with pro	gregate fidentia oducin	impact Report for its investors, including a list of projects which have the amount disbursed, and the balance of unallocated proceeds. Projectality concerns. The Framework provides examples of impact KPIs which any this report, which will be reviewed by an external verifier. and impact reporting, Sustainalytics considers this process to be in line
Use	of proceeds repo	orting:		
030		_		
	Project-by-project	ct		On a project portfolio basis
	Linkage to indivi	dual bond(s)		Other (please specify):
	Info	rmation reported:		
		Allocated amounts		☐ Green Bond financed share of total investment
		Other (please specify):		
	Fred	quency:		
\boxtimes	Annual			□ Semi-annual
	Other (please s	specify):		
Impa	act reporting:			
	Project-by-project	ct	\boxtimes	On a project portfolio basis
	Linkage to indivi	dual bond(s)		Other (please specify):

Informa	tion reported (expected or ex	-post):				
□ GH	G Emissions / Savings		Energy Savings			
□ Dec	crease in water use		Other ESG indicators (please specify): Defined per category, see Framework			
Frequer	псу					
⊠ Anr	nual		Semi-annual			
□ Oth	ner (please specify):					
Means of Disclosure						
☐ Information publish	ned in financial report		Information published in sustainability report			
	ned in ad hoc documents		Other (please specify):			
☐ Reporting reviewed	Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review):					
	e specify name and date of publeview provider methodology or		n the useful links section. als, to issuer's documentation, etc.)			
SPECIFY OTHER EXTER	NAL REVIEWS AVAILABLE, I	F APPF	ROPRIATE			
Type(s) of Review provid	led:					
☐ Consultancy (incl. 2 nd	opinion) \square C	ertificati	on			
☐ Verification / Audit	□ R	ating				
☐ Other (please specify	·):					
Review provider(s)): Date	of pu	ıblication:			

ABOUT ROLE(S) OF INDEPENDENT REVIEW PROVIDERS AS DEFINED BY THE GBP

- Second-Party Opinion: An institution with environmental expertise, that is independent from the issuer may issue a Second-Party Opinion. The institution should be independent from the issuer's adviser for its Green Bond framework, or appropriate procedures, such as information barriers, will have been implemented within the institution to ensure the independence of the Second-Party Opinion. It normally entails an assessment of the alignment with the Green Bond Principles. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability, and an evaluation of the environmental features of the type of projects intended for the Use of Proceeds.
- Verification: An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or environmental criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from Green Bond proceeds, statement of environmental impact or alignment of reporting with the GBP, may also be termed verification.

Second-Party Opinion: Ghana's Sustainable Finance Framework



- iii. Certification: An issuer can have its Green Bond or associated Green Bond framework or Use of Proceeds certified against a recognised external green standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.
- iv. Green Bond Scoring/Rating: An issuer can have its Green Bond, associated Green Bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialised research providers or rating agencies, according to an established scoring/rating methodology. The output may include a focus on environmental performance data, the process relative to the GBP, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material environmental risks.

Basic Information

Section 1.

 \times

Second Party Opinion

Verification

Appendix 2: Sustainability-Linked Bonds - External Review Form

Issuer name: The Republic of Ghana Sustainability-Linked Bond ISIN: Independent External Review provider's name for second party opinion pre-issuance (sections 2 & 3): Sustainalytics Completion date of second party opinion pre-issuance: October 12, 2021 Independent External Review provider's name for post-issuance verification (section 4): Completion date of post issuance verification: At the launch of the bond, the structure is: a step-up structure П a variable redemption structure Section 2. **Pre-Issuance Review SCOPE OF REVIEW** 2-1 The following may be used or adapted, where appropriate, to summarise the scope of the review. The review: X assessed all the following elements (complete review) only some of them (partial review) Selection of Key Performance Indicators (KPIs) X \times Bond characteristics (acknowledgment of) Calibration of Sustainability Performance Targets \times X Reporting (SPTs) X Verification X and confirmed their alignment with the SLBP. 2-2 **ROLE(S) OF INDEPENDENT EXTERNAL REVIEW PROVIDER**

Note: In case of multiple reviews / different providers, please provide separate forms for each review.

2-3 EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW (if applicable)

Under the sustainability-linked instruments, Ghana intends to tie the Bond and/or Loan Characteristics to the achievements of the following SPTs:

Certification

Scoring/Rating

- (1) Increase the completion rate in senior high schools, to 75% by 2030, approximately a 43% increase compared to the 2017/2018 academic year.
- (2) Increase hospital beds per capita to 14 per 10,000 population by 2030, approximately a 40% increase compared to 2019.

Sustainalytics considers the KPI 1- completion rate in senior high schools, to be very strong, and the KPI 2 - hospital beds per capita, to be strong given that they directly and indirectly measure performance on a relevant and material social issue for the country and their calculation methodology is clear and consistent. Sustainalytics considers the SPTs to be ambitious given that they present a significant material improvement compared to the country's baseline performance. Sustainalytics considers the reporting and verification commitments to be aligned with market expectations. Furthermore, Sustainalytics believes that the Sustainable Finance Framework is aligned with the overall sustainability strategy of the Issuer.

Based on the above, Sustainalytics is confident that Ghana is well-positioned sustainability-linked bonds and/or loans and that the Sustainable Finance Framework is in alignment with the Sustainability-Linked Bond Principles 2020, and Sustainability-Linked Loan Principles 2021.

Section 3. Detailed pre-issuance review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

3-1 SELECTION OF KEY PERFORMANCE INDICATORS (KPIS)

Overall comment on the section (*if applicable*): Sustainalytics overall considers KPI 1- completion rate in senior high schools to be very strong given that (i) it directly measures performance on a relevant and material social issue for the country that affects all citizens in the age cohort, and (ii) is clear and consistent.

Sustainalytics overall considers KPI 2 - hospital beds per capita, to be strong given that (i) it indirectly measures performance on a relevant and material social issue for the country, (ii) it covers its total population, (iii) the calculation methodology is aligned with the OECD methodology and hence supports benchmarking

Clear calculation methodology

List of selected KPIs:

|X|

• KPI 1 - completion rate in senior high schools

Clear definition of each selected KPIs

KPI 2 - hospital beds per capita

Definition, Scope, and parameters

	Other (please specify):		
Releva	nce, robustness, and reliability of the selected K	Pls	
	Credentials that the selected KPIs are relevant, core and material to the issuer's sustainability and business strategy.		Evidence that the KPIs are externally verifiable
\boxtimes	Credentials that the KPIs are measurable or quantifiable on a consistent methodological basis		Evidence that the KPIs can be benchmarked
		П	Other (please specify):

3-2 CALIBRATION OF SUSTAINABILITY PERFORMANCE TARGETS (SPTs)

Rationale and level of ambition

Overall comment on the section (if applicable): Sustainalytics considers the strategies to achieve the SPTs to align with Ghana's national sustainable development strategy and commitments and considers Ghana's SPTs to be ambitious given that they present a significant material improvement compared to the country's baseline performance.

\boxtimes	Evidence that the SPTs represent a material improvement		Credentials on the relevance and reliability of selected benchmarks and baselines				
\boxtimes	Evidence that SPTs are consistent with the issuer's sustainability and business strategy		Credentials that the SPTs are determined on a predefined timeline				
			Other (please specify):				
Benchr	narking approach						
			leguer's peers				
\boxtimes	Issuer own performance		Issuer's peers				
	reference to the science		Other (please specify):				
A dditio	nal disclosure						
Additio	nai disclosure						
	potential recalculations or adjustments description	\boxtimes	issuer's strategy to achieve description				
\boxtimes	identification of key factors that may affect the achievement of the SPTs		Other (please specify):				
3-3 E	BOND CHARACTERISTICS						
Overall comment on the section (if applicable): The Republic of Ghana has disclosed that failure to achieve the SPTs at the observation date will result in structural and/or financial implications to any Sustainability-Linked Bond or Loan under the Framework. These implications could include, but are not limited to, a coupon step-up or increased redemption fee. Should calculation of the KPI not be possible at the observation date the same penalty will be payable as had the SPT not been achieved. Overall, Sustainalytics considers this structure to be aligned with the SLLP and further notes positively that all SPTs need to be met to avoid a penalty payment.							
Financial impact:							
\bowtie	variation of the coupon						
N.	variation of the coupon						
Structural characteristic:							
	Other (please specify):						

3-4 **REPORTING**

Overall comment on the section (if applicable): Ghana commits to report on its performance on the KPIs annually and specifically at the relevant observation dates, with this information made available on the Ministry of Finance's website. The reporting will include at least up-to-date information on the performance of the KPIs, including the relevant baselines, the verification report, and any other information required to assist investors in assessing performance against the SPTs. Additionally, where feasible, information explaining the main factors contributing to the performance of the KPIs, data on positive

Frequency:

impacts associated with the performance improvements, and any re-assessments of KPIs or adjustments to baselines will be provided. This approach is aligned with the SLBP and SLLP.

Informa	tion reported:						
\boxtimes	performance of the selected KPIs	\boxtimes	verification assurance report				
	level of ambition of the SPTs		Other (please specify):				
_							
Freque							
\boxtimes	Annual		Semi-annual				
	Other (please specify):						
Means of Disclosure							
	Information published in financial report		Information published in sustainability report				
\boxtimes	Information published in ad hoc documents		Other (please specify):				
	Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review):						
Where a	appropriate, please specify name and date of publica	ation in t	he "useful links" section				
Where appropriate, please specify name and date of publication in the "useful links" section.							
Level o	f Assurance on Reporting						
\boxtimes	limited assurance		reasonable assurance				
			Other (please specify):				
USEFU	L LINKS (e.g. to review provider methodology or	creden	tials, to issuer's documentation, etc.)				
Cootion	4. Post-issuance verification						
Section	4. Post-issuance vernication						
Overall comment on the section (if applicable):							
	(4,7,,						
Information reported:							
	limited assurance	П	reasonable assurance				
Ш		_	Other (please specify):				
			Other (prease specify).				

Second-Party Opinion: Ghana's Sustainable Finance Framework



	Annual		Semi-annual		
	Other (please specify):				
Material change:					
	Perimeter		KPI methodology		
	SPTs calibration				



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