

# Ghana

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# **Ghana: Current Path**

Ghana: Current Path forecast

Demographics: Current Path

• Economics: Current Path

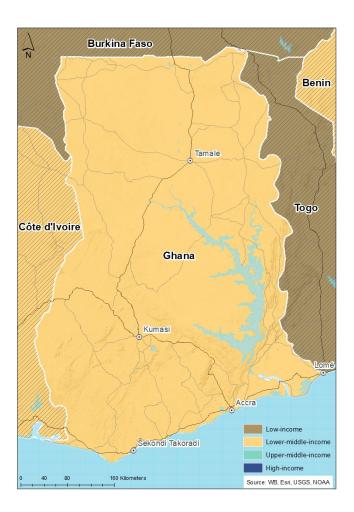
Poverty: Current Path

Carbon Emissions/Energy: Current Path



# **Ghana: Current Path forecast**

Chart 1: Political map of Ghana



This page provides an overview of the key characteristics of [Ghana] along its likely (or Current Path) development trajectory. The Current Path forecast from the International Futures forecasting (IFs) platform is a dynamic scenario that imitates the continuation of current policies and environmental conditions. The Current Path is therefore in congruence with historical patterns and produces a series of dynamic forecasts endogenised in relationships across crucial global systems. We use 2019 as a standard reference year and the forecasts generally extend to 2043 to coincide with the end of the third ten-year implementation plan of the African Union's Agenda 2063 long-term development vision.

Chart 1 shows the political map of Ghana, one of 23 lower middle-income countries in Africa. Ghana is located in West

Africa along the Gulf of Guinea, bordering Burkina Faso in the north, Cote d'Ivoire in the west and Togo in the east, all of which are members of the Economic Community of West African States. The national capital, Accra, is located in the Greater Accra Region of southern Ghana. The country has a total area of 238,535 km² and a tropical climate with two major seasons consisting of a rainy season and a dry season. The country is divided into six ecological zones, namely: Sudan savannah, Guinea savannah, Coastal savannah, forest/savannah transitional zone, deciduous forest zone, and the rain forest zone. Ghana has abundant natural resources such as gold, bauxite, diamonds, timber, manganese and oil, and it is the second largest producer of cocoa in the world. The country is divided into 16 administrative regions, after a 2019 referendum which increased the number from 10 to 16, consisting of 260 districts. The Northern Region is the largest in size, but the Greater Accra Region has the largest population of 5.446 million people, followed by the Ashanti region, with an estimated population of 5.432 million people. [1]



Chart 2: Population structure in CP, 1990–2043

By cohort and % of population



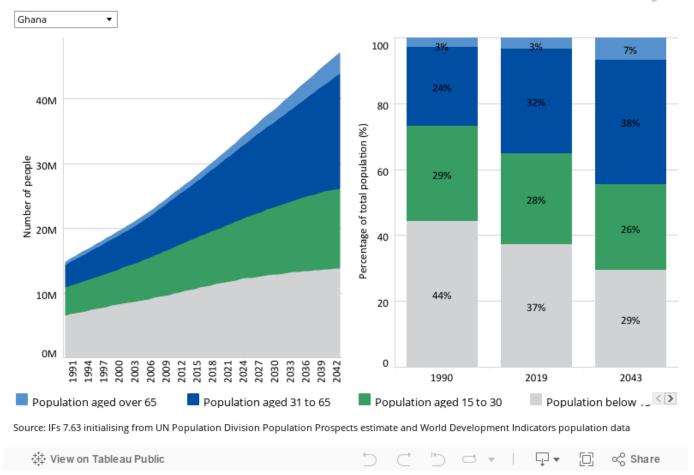
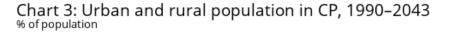
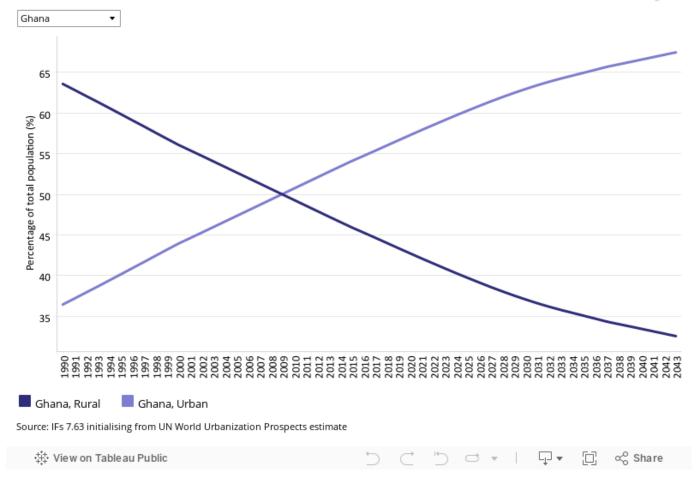


Chart 2 shows the population by cohort based on the Current Path forecast. Ghana is the second most populous country in West Africa after Nigeria and the seventh most populous in Africa, with an estimated population of 30.5 million in 2019, up from 15 million in 1990. It is expected that by 2043, the country's population will increase to 47 million, representing an approximate increase of 51.1% within the 23-year period. The current median age in Ghana is 21.7 years, indicating that the country has a relatively youthful population. This will increase slightly to 26.6 years by 2043. In addition, 37.2%, 27.6% and 31.9% are currently below 15-, 30- and 65 years of age, respectively. The relatively large cohort of children below the age of 15 constrains the materialisation of the demographic dividend. Within the next 24 years, it is projected that the number of people under 15-, 30- and 45 years of age will constitute 29.3%, 26,3% and 37.6% of total population, signalling the likelihood of a more adult population. This can be attributed to the expected decline in fertility rate from 3.8 births per woman in 2019 to 2.7 births per woman by 2043.







As evident in Chart 3, Ghana has had a history of rapid urbanisation. In 1990, 5.4 million people (representing 36.4% of the population) lived in urban areas. By 2010, the country had almost achieved parity in urban-rural settlement. In 2019, 56.6% of the population resided in urban centres, and this is further expected to rise to about 67.4% by 2043, which suggests that within the next 22 years, only 32.6% of Ghana's population is expected to live in rural areas. Generally, urbanisation can be sourced either from the development of more towns to the status of urban centres or as a result of rural-urban migration. It is not surprising that the Greater Accra Region is now the most populated region; however, rapid urbanisation can lead to problems such as the development of slums, pressure on social amenities, poor sanitation and large youth unemployment, among other issues, as are evident in the national capital of Accra.

Chart 4: Population density map for 2019

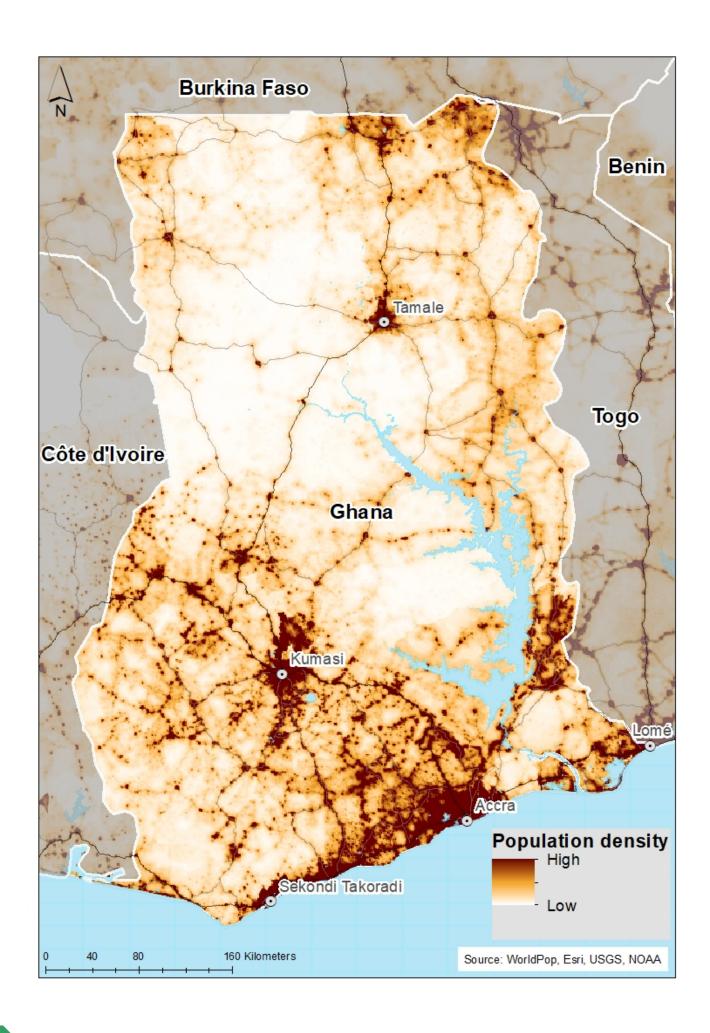


Chart 4 illustrates a map of the population distribution in Ghana. Ghana is the 13th most densely populated country in Africa and the 85th most densely populated in the world, with a population density of 136.6 people per km<sup>2</sup>. The concentration of Ghana's population has been around the southern part of the country, mainly the Accra-Kumasi-Takoradi triangle along the south of the Kwahu Plateau. The Greater Accra Region, where the national capital is located, is the most populous region and city, followed by Kumasi in the Ashanti Region. This is mainly due to the economic productivity of the region. Indeed, the south of Kwahu Plateau contains all the country's mining centres, timber-producing deciduous forests and cocoa-growing lands. The area is also linked to the coast through rail and road networks, thereby important for investment and labour movement. The south is also populated partly due to the influx of refugees from Liberia during the war, and many Togolese people who fled political violence settled along the Volta River Basin. Between 2019 and 2043, the rural population is projected to increase by additional 2.2 million people based on the Current Path forecast.



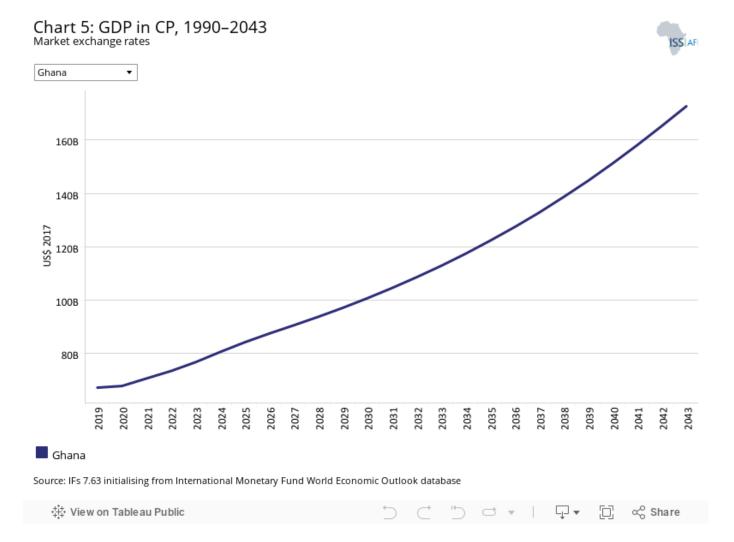
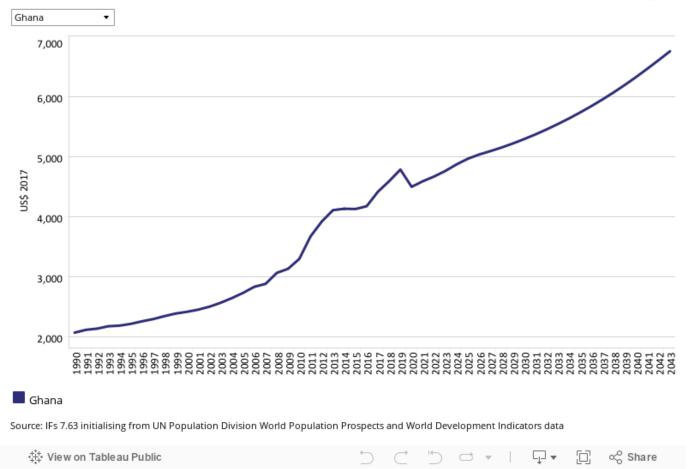


Chart 5 depicts projected gross domestic product (GDP) in the Current Path forecast from 1990 to 2043. Since 1990, the country has nearly quintupled its GDP from US\$14.1 billion in 1990 to US\$66.9 billion in 2019. From 1993 to 2019, the average growth rate was about 5.6%, which can partly be attributed to the political stability of the Fourth Republic and the liberalisation of the Ghanaian economy. Other factors that can explain this growth are the implementation of various internationally assisted economic reform programmes, such as the poverty reduction strategies, the Highly Indebted Country Initiative, and the various medium-term plans of the country. Over the next 22 years, GDP is estimated to increase to US\$172.7 billion by 2043 from its current figure, representing about a 145.3% increment within the period.







Although many of the charts in the sectoral scenarios also include GDP per capita, this overview is an essential point of departure for interpreting the general economic outlook of Ghana.

Chart 6 represents GDP per capita (PPP) projections in the Current Path forecast. Over time, GDP per capita has seen a steady increase despite Ghana's rapid population growth. From 1990 to 2020, the country has more than doubled its GDP per capita from US\$2 072 to US\$4 784. This is expected, given that the average GDP growth rate of 5.6% exceeds the average population growth rate of 2.5% over the period. By 2043, the average Ghanaian will be worth US\$6 751, suggesting that GDP per capita will have tripled from 1990 to 2043. Throughout this period, Ghana's GDP per capita is consistently below the average for lower middle-income countries on the continent.

Chart 7: Informal sector value in CP, 2015–2043



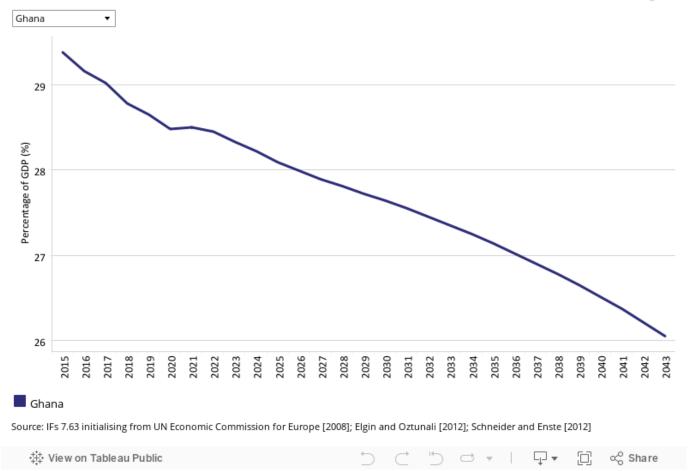
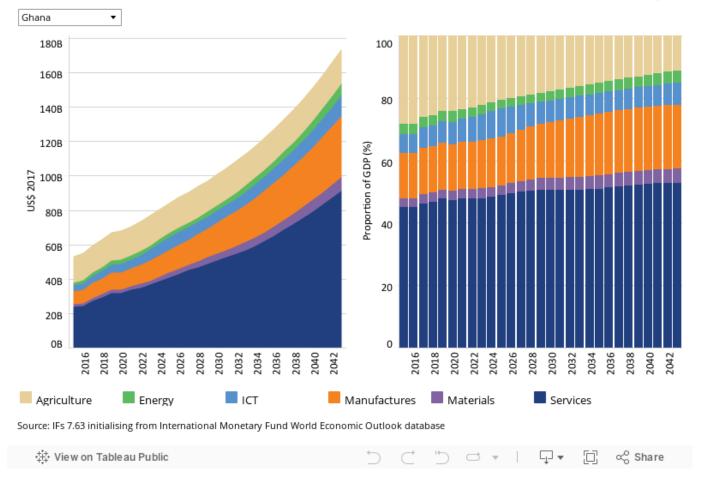


Chart 7 shows projections for the informal sector in the Current Path forecast. Ghana has a large informal sector that is neither taxed nor regulated by the government. The informal sector is usually found within the value chain of commodity distribution. As of 2021, the informal economy represented about 28.5% of the country's GDP, though this is expected to marginally decline to 26.1% by 2043, suggesting that despite efforts by successive governments to formalise the economy, a lot remains to be done to progress in that regard. Some of these efforts include the digitisation drive of the economy by the incumbent government through various initiatives such as a digital property addressing system, a paperless port system, a mobile payment interoperability platform and the issuance of national ID cards. Unfortunately, this is yet to reflect in the share of the informal sector in the country. The large size of the informal sector also signals a huge potential for increasing government revenue by monitoring and regulating the activities of the sector.

Chart 8: Value added by sector in CP, 2015–2043
Billions US\$ 2017 and % of GDP





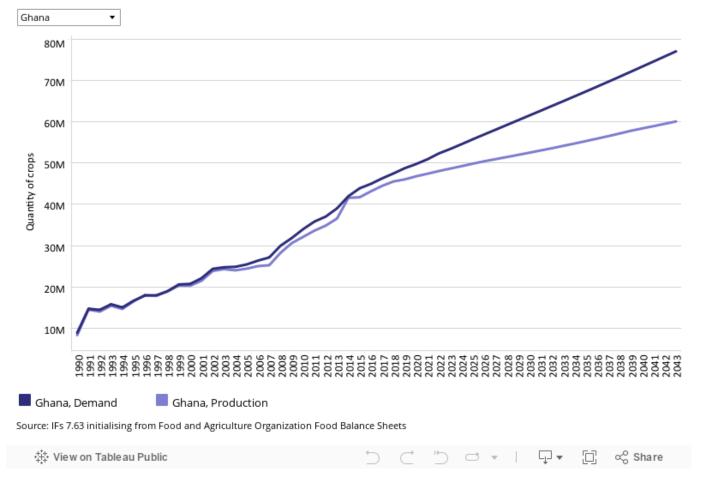
The IFs platform uses data from the Global Trade and Analysis Project (GTAP) to classify economic activity into six sectors: agriculture, energy, materials (including mining), manufactures, services and information and communications technology (ICT).

Chart 8 illustrates the value added by sector both in absolute and proportionate terms in the Current Path forecast. The biggest contributor to Ghana's GDP in 2020 was the service sector, contributing about US\$32 billion, representing 47.4% of GDP—a unsurprising figure given that the service sector employs about half of the total labour force in the country. This is expected to increase to US\$91 billion by 2043, representing 52.9% of GDP, implying that by then, more than half of the country's economic activity will come from the service sector. The agricultural sector is currently the second largest contributor to GDP at 24.3%, constituting US\$16 billion in 2020. Manufacturing is the third most significant contributor to GDP at 14.9%. However, it is expected that after 2030, the manufacturing sector will overtake the agricultural sector as the second largest contributor to GDP, so that by 2043, the manufacturing sector will contribute 9.2 percentage points more to GDP than agriculture. While this development is consistent with the structural transformation of an economy, the slow pace of growth of the manufacturing sector, which is key to broader economic transformation and to create decent and sustainable jobs, suggests that the country may still rely quite heavily on agriculture for job creation in coming years.

Chart 9: Agriculture production/demand in CP, 1990–2043

Crops million tons

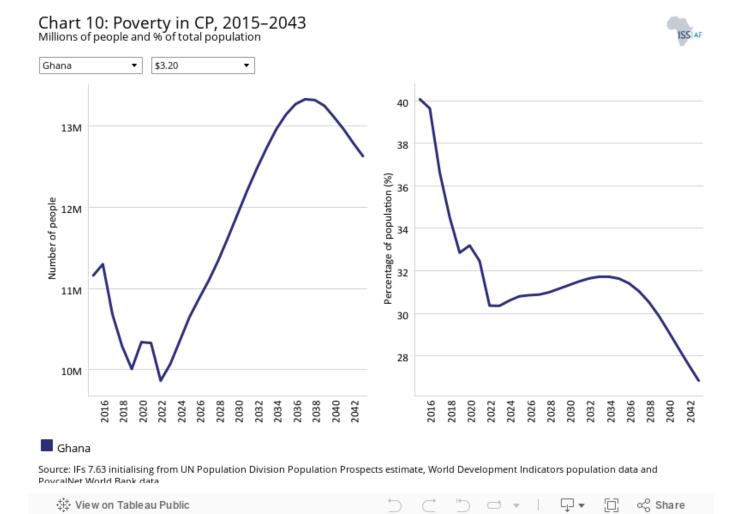




The data on agricultural production and demand in the IFs forecasting platform initializes from data provided on food balances by the Food and Agriculture Organization (FAO). IFs contains data on numerous types of agriculture but aggregates its forecast into crops, meat and fish, presented in million metric tonnes. Chart 9 shows agricultural production and demand as a total of all three categories.

Chart 9 displays estimations for agriculture production and demand in the Current Path forecast. Despite the vast land area and significant proportion of the population employed within the agricultural sector, Ghana continues to be a net importer of food. In 1990, Ghana's demand for agricultural products outstripped domestic production by 0.56 million metric tons and increased to 2.97 million metric tons in 2020. This can partly be attributed to the declining interest in the agricultural sector reflected in the share of total employment. For instance, between 1991 and 2019, the sector's share of total employment significantly reduced from 57.1% to 29.8%. Whereas both demand and production are expected to increase over the period, the rate of increase in demand far exceeds that of domestic production. By 2043, demand will outstrip supply by about 17 million metric tons representing a 471% increment over the period. This means that Ghana is yet to take advantage of new agricultural technologies to enhance productivity and to ensure food security.





There are numerous methodologies and approaches to defining poverty. We measure income poverty and use GDP per capita as a proxy. In 2015, the World Bank adopted the measure of US\$1.90 per person a day (in 2011 international prices), also used to measure progress towards the achievement of Sustainable Development Goal 1 of eradicating extreme poverty. To account for extreme poverty in richer countries occurring at slightly higher levels of income than in poor countries, the World Bank introduced three additional poverty lines in 2017:

- US\$3.20 for lower middle-income countries
- US\$5.50 for upper middle-income countries
- US\$22.70 for high-income countries.

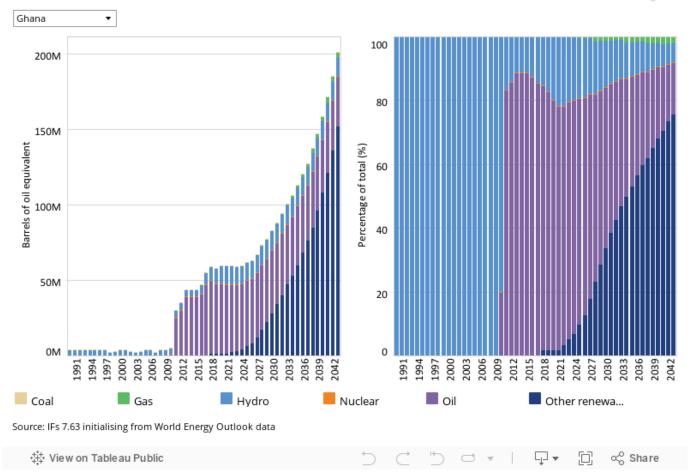
Charts 10 displays the number and the percentage of people living below the poverty line in the Current Path forecast. As a lower middle-income country, Ghana uses the US\$3.20 per day benchmark. However, Ghana's impressive growth rate over the last two decades has not translated into the expected reduction in poverty levels. High poverty levels can partly be attributed to the source of this growth. For instance, oil production, which appears to be driving this growth since 2011, employs an insignificant proportion of the population and only benefits a few. Also, inequality is growing such that poverty is prevalent among people who reside in rural areas and the northern part of the country. As of 2019, there were still over

10 million people (i.e. almost one-third of the population) who lived on less than US\$3.20 dollars per day. This is expected to marginally decline to 9.9 million people (30.4%) in 2022 before continuing on an upward trend until 2037, where it will peak with 13.3 million people living on less than US\$3.20 per day. By 2043, there will still be 12.6 million people (representing 26.8% of the population) who live on less than US\$3.20 per day. This means that, although the proportion of the extremely poor population will reduce by 6.1 percentage points, the total number of poor people in the country will be 2.6 million people greater over the next 23 years (2020–2043).



Chart 11: Energy production by type in CP, 1990–2043 Barrels of oil equivalent and % of energy production



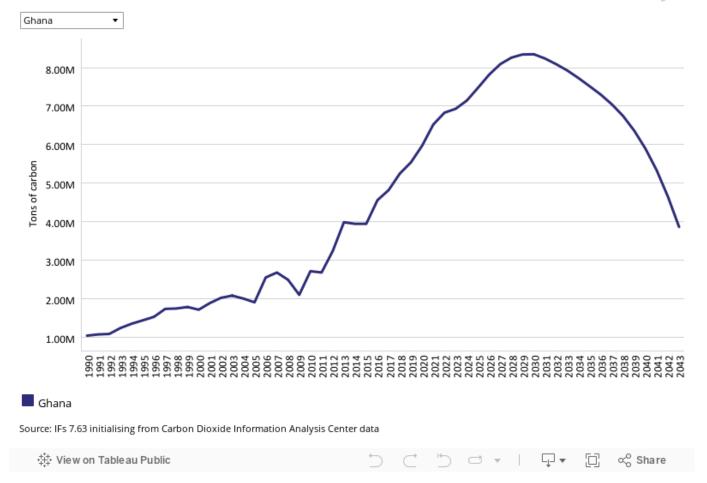


The IFs platform forecasts six types of energy, namely oil, gas, coal, hydro, nuclear and other renewables. To allow comparisons between different types of energy, the data is converted into billion barrels of oil equivalent. The energy contained in a barrel of oil is approximately 5.8 million British thermal units (MBTUs) or 1 700 kilowatt-hours (kWh) of energy.

Chart 11 represents energy production by type in barrels of oil equivalent (BBOE) and percentage of total in the Current Path forecast from 1990 to 2043. Between 1990 and 2009, hydro was the sole energy produced by the country. With Ghana discovering oil in commercial quantities and starting to commercialise production, oil became the second largest energy produced. By 2011, oil had become the dominant energy produced in the country, accounting for 80% of total energy produced in the country, which is equivalent to 0.05 BBOE. It is estimated that by 2043, oil contribution to total energy production will decline to 16.4% of the total energy production, equivalent to 0.03 BBOE. This reflects the depletion of oil deposits in the country over time and the global switch to renewable energy. Other renewable energies, such as solar and wind, are projected to be the dominant energy types produced in the country by 2043, with an estimated quantity of 0.15 BBOE, representing 75.5%.

Chart 12: Carbon emissions in CP, 1990–2043 Million tons of carbon (note, not CO2 equivalent)





Carbon is released in many ways, but the three most important contributors to greenhouse gases are carbon dioxide ( $CO_2$ ), carbon monoxide ( $CO_3$ ) and methane ( $CH_4$ ). Since each has a different molecular weight, IFs uses carbon. Many other sites and calculations use  $CO_2$  equivalent.

Chart 12 shows projections of tons of carbon emissions in the Current Path forecast. Ghana has significantly lower levels of carbon emissions compared to other lower middle-income African countries. This may be attributed to the low industrial activity, particularly manufacturing, in the country. However, carbon emissions have increased steadily from 1 million tons of carbon in 1990 to 6 million tons in 2019. The upward trend for carbon emission is forecast to continue until it plateaus at 8 million tons of carbon in 2030. After 2035, carbon emission will assume a downward trend, reducing to 4 million tons of carbon by 2043. The decrease in carbon emissions may partly be as a result of the switch to other renewable sources of energy that emit less carbon in the long-run. Growth in industry and agriculture will, however, impact upon carbon emissions.

## **Endnotes**

1. According to the provisional results from the 2021 Population and Housing Census. Ghana Statistical Service, 2021, Release of provisional results

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## About the authors

Mr Enoch Randy Aikins joined the AFI in May 2021. Before that, Enoch was a research and programmes officer at the Institute for Democratic Governance in Accra. He also worked as a research assistant (economic division) with the Institute for Statistical Social and Economic Research at the University of Ghana. Enoch's interests include African politics and governance, economic development, public sector reform, poverty and inequality. He has an MPhil in economics from the University of Ghana, Legon.

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