ISS AFRICAN FUTURES

Guinea

Guinea: Scenario Comparisons

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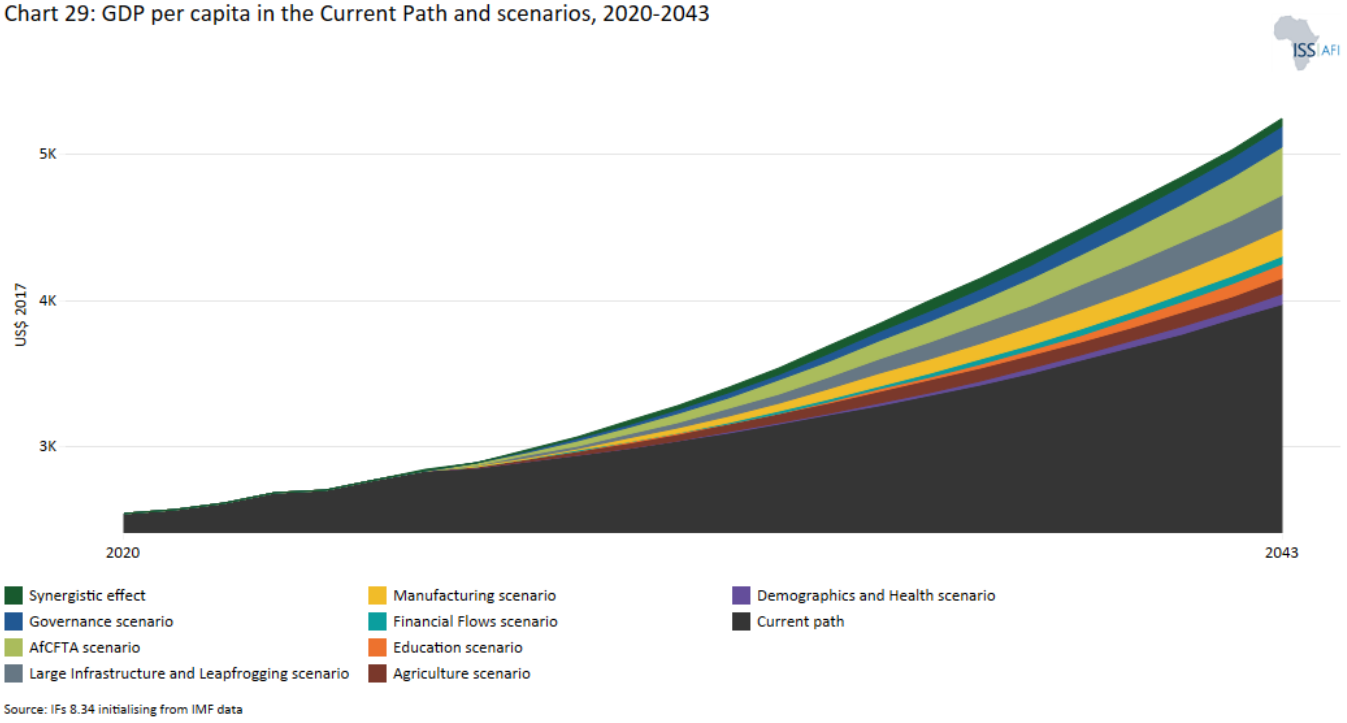
Chart 29: GDP per capita in the Current Path and scenarios, 2020-2043



Source: IFs 8.34 initialising from IMF data

Chart 29 presents GDP per capita in purchasing power parity (PPP) in the Current Path and each of the eight sectoral scenarios, plus the synergistic effect and the Combined scenario. The data is from 2020 with a forecast to 2043.

The Combined scenario combines all eight sectoral scenarios: Governance, Demographics and Health, Education, Large Infrastructure and Leapfrogging, Agriculture, Manufacturing, AfCFTA, and Financial Flows.

In the Combined scenario, Guinea's GDP per capita will be 4.7% larger than the Current Path, equivalent to about US$139 by 2030. By 2043, it will be 29.4% larger than the Current Path, equivalent to about US$321.

The remainder of this section compares the impacts of each sectoral scenario on GDP per capita.

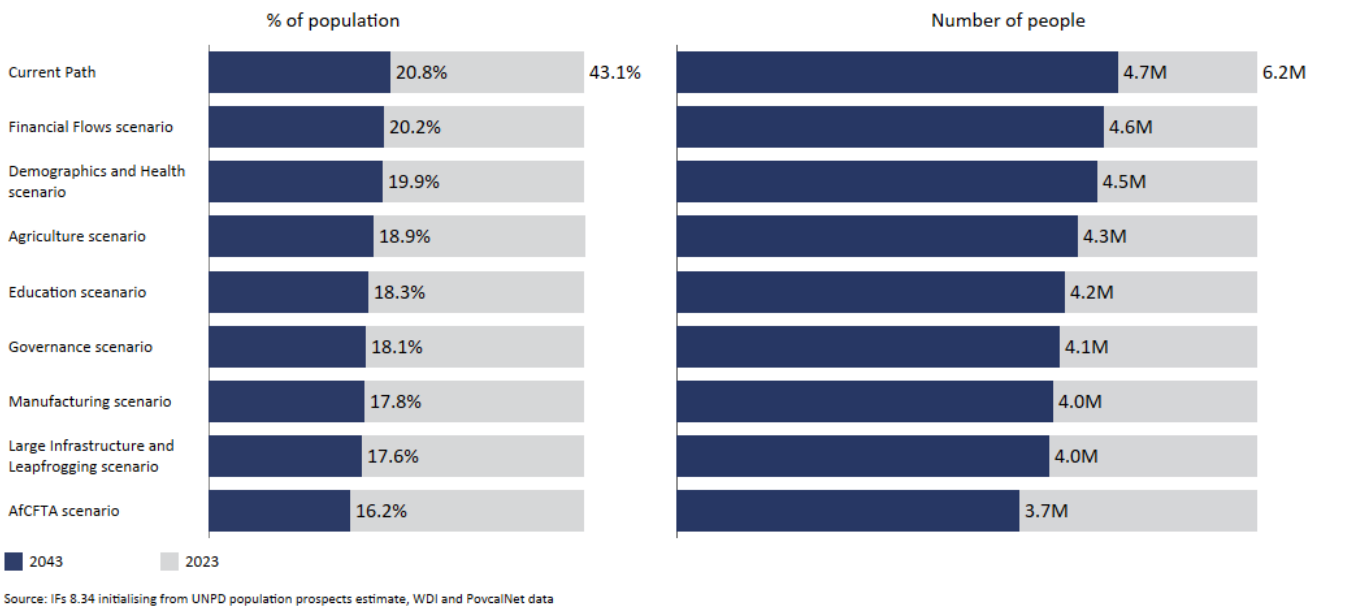
The AfCFTA scenario is having the most significant positive impact in both the short term (2030) and the long term (2043). The AfCFTA will increase Guinea's GDP per capita by approximately US$50 in 2030 and US$236 by 2043 compared to the Current Path – representing increases of 1.7% and 8.1% larger than the Current Path values in 2030 and 2043, respectively. This highlights the significant potential benefits of the AfCFTA for Guinea, aligning with its broader goals of boosting economic growth, enhancing regional integration, and diversifying its economy. Given Guinea's heavy reliance on mining, particularly gold and aluminium, the country stands to benefit by expanding its export composition basket to include agricultural products, manufactured goods, and services.

In the short term (2030), the AfCFTA scenario will be followed by the Agriculture, Large Infrastructure and Leapfrogging, Manufacturing, and Governance scenarios. The Agriculture scenario will increase Guinea's GDP per capita by 1.2% relative to the Current Path, while the Large Infrastructure and Leapfrogging, Manufacturing, and Governance scenarios would increase by 0.9%, 0.8%, and 0.6%, respectively.

In the long term (2043), the AfCFTA scenario will be followed by the Large Infrastructure and Leapfrogging, Manufacturing,

Governance, and Agriculture scenarios. The Large Infrastructure and Leapfrogging scenario will increase Guinea's GDP per capita by 5.9% above the Current Path, while Manufacturing will increase by 4.6%, Governance by 3.8%, and Agriculture by 2.6%.

Chart 30: Poverty in the Current Path and scenarios, 2023-2043



Source: IFs 8.34 initialising from UNPD population prospects estimate, WDI and PovcalNet data

Chart 30 presents poverty in the Current Path and for each scenario, from 2020 to 2043. The user can select the number of extremely poor people or the percentage of the population.

All the scenario interventions contribute to extreme poverty reduction at US$2.15, with the exception of the Financial Flows scenario, which will increase poverty in the short term due to net FDI inflows which tends to increase inequality given that benefits acrue to better skilled as opposed to unskilled labour. As previously mentioned in the Financial Flows section, net FDI inflows in Guinea are also predominantly directed toward the mining sector, which has limited economic integration with the broader economy. Consequently, the benefits of these net FDI inflows, such as income generation and infrastructure development, are unlikely to reach the wider population in the short term (by 2030).

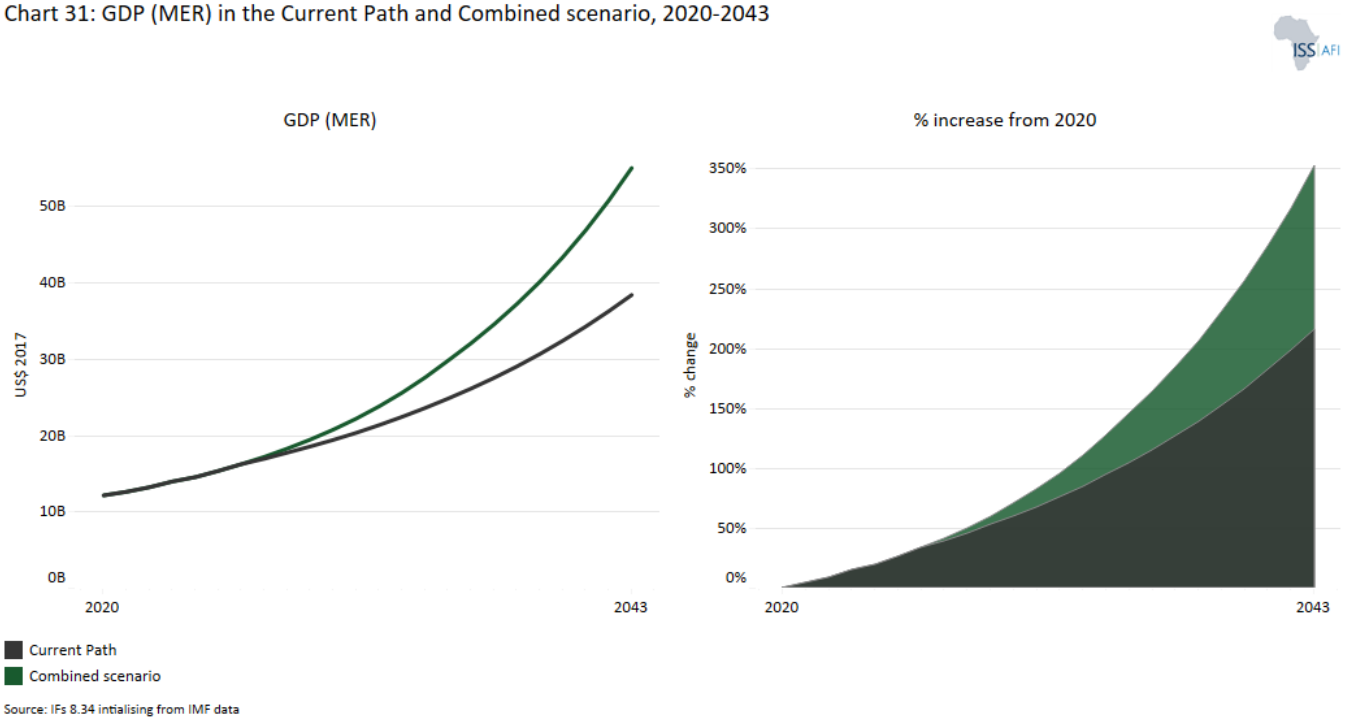
In the short term (2030), the Agriculture scenario will have the most significant impact on reducing extreme poverty. The poverty rate will decrease to 12.2%, representing a 0.5 percentage point reduction (85 560 fewer people) compared to the Current Path. This highlights the agriculture sector's crucial role in alleviating extreme poverty in Guinea, particularly in rural areas where both population and poverty rates are high. Investments in agriculture create employment opportunities for smallholder farmers and other workers along the agricultural value chain, providing stable incomes and reducing poverty.

Following the positive impact of the Agriculture scenario on poverty reduction by 2030, are the Governance, AfCFTA, and Manufacturing scenarios.

In the Combined scenario, extreme poverty in Guinea will decrease to 11.3% which will be equivalent to 241 142 fewer people relative to the Current Path in 2030. By 2043 the Combined scenario will eradicate extreme poverty, equivalent to 572 589 fewer people compared to the Current Path in 2043.

Amongst the eight sectoral scenarios, the AfCFTA scenario will contribute most significantly to reducing extreme poverty by 2043. Thus, by reducing tariffs and trade barriers, Guinea can diversify its economy away from heavy reliance on mining by exporting agricultural products, manufactured goods and services, leading to job creation, improved living standards, and more inclusive and sustainable economic growth. In the AfCFTA scenario, the poverty rate will decline to 1.9%, 234 200 fewer people relative to the Current Path of 2.9% by 2043. The AfCFTA scenario is followed by the Education, Manufacturing, Large Infrastructure and Leapfrogging, and Governance scenarios in reducing extreme poverty.

Chart 31: GDP (MER) in the Current Path and Combined scenario, 2020-2043



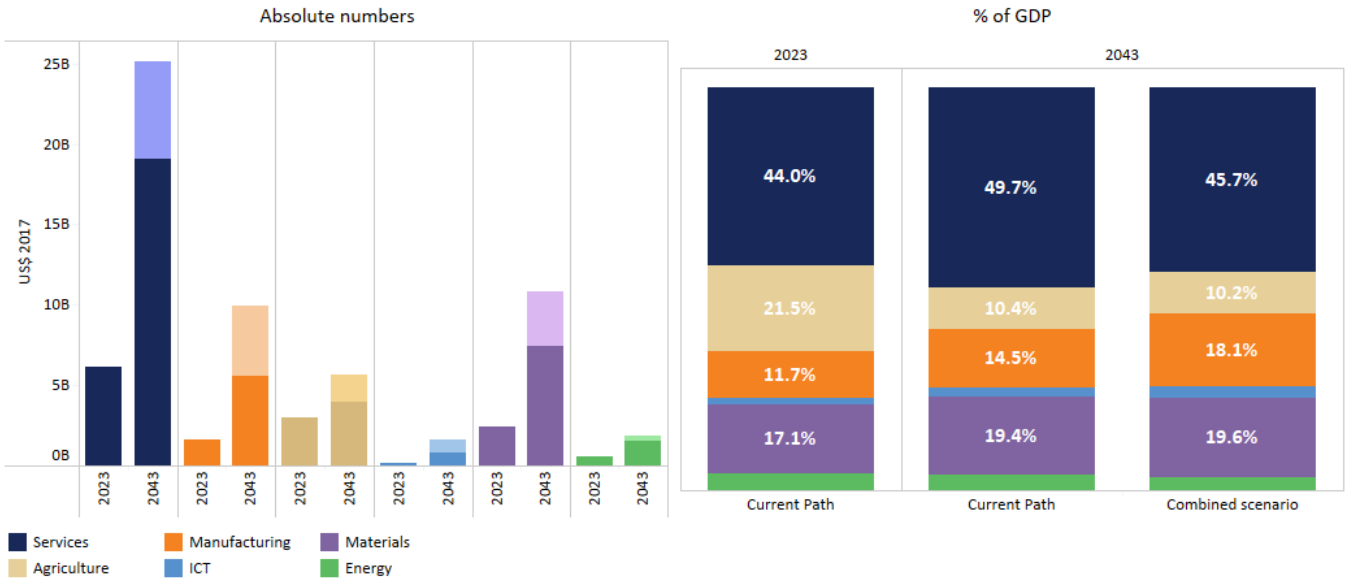
Source: IFs 8.34 intialising from IMF data

Chart 31 presents GDP in the Current Path and in the Combined scenario, from 2020 to 2043. The data is in US$ 2017 and at market exchange rates (MER).

If the Combined scenario is implemented, Guinea is likely to experience a significant boost in its growth prospects. In this Combined scenario, the average growth rate between 2026 and 2030 will reach approximately 6.2%, compared to 4.8% on the Current Path. Over the longer term, from 2026 to 2043, the average growth rate will rise to about 7.3%, significantly higher than the 5.3% anticipated on the Current Path for the same period.

The size of Guinea's economy measured in GDP (MER) will be about US$1.4 billion larger than the Current Path by 2030 and US$16.6 billion larger compared to the Current Path by 2043.

Chart 32: Value added by sector in the Current Path and Combined scenario, 2023-2043



Source: IFs 8.34 initialising from IMF World Economic Outlook data

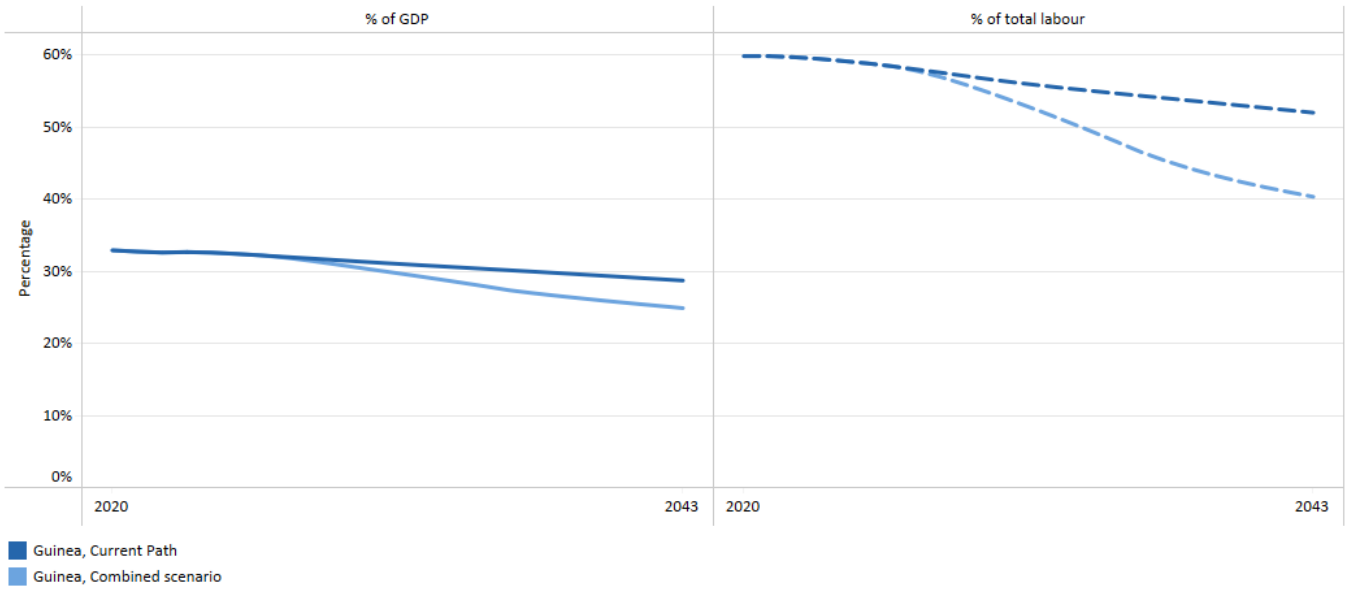
Chart 32 presents the value added by sector in the Current Path and in the Combined scenario, for 2023 and 2043. The data is in US$ 2017 and as a percentage of GDP.

Our modelling provides forecasts in six economic sectors namely agriculture, energy, materials (including mining), manufactures, services and ICTech.

At US$2017 prices, the implementation of the Combined scenario will increase the value-added across all sectors—agriculture, energy, ICT, manufacturing, materials and services—compared to the Current Path in both the short and long term. In comparison across sectors, the agriculture and service sectors will experience the most significant growth in the short term by 2030. The value-added in these sectors will increase by around US$583 million and US$490 million, respectively, compared to the Current Path in 2030. In the long run, the services and manufacturing sectors will experience the most significant growth by 2043. The accumulated value-added in all sectors by 2043 will be about US$16.6 billion larger than the Current Path of around US$38.4 billion.

As a percentage of GDP, the agriculture and ICT sectors will see an increase in value-added by 2030. The agriculture sector's value-added will rise to nearly 19% of GDP, reflecting a 1.5 percentage point increase compared to the Current Path in 2030. By 2043, only the material, manufacturing and ICTech will see an increase as a percentage of GDP. The manufacturing will increase by 3.6 percentage points, while ICTech and material will increase by 0.8 and 0.2 percentage points relative to the Current Path in 2043.

Chart 33: Informal sector in the Current Path and Combined scenario, 2020-2043



Source: IFs 8.34 initialising from Elgin and Oztunali (2008), and Schneider and Enste (2012) data

Chart 33 presents the size of the informal sector as percentage of the total economy in the Current Path and in the Combined scenario, from 2020 to 2043.

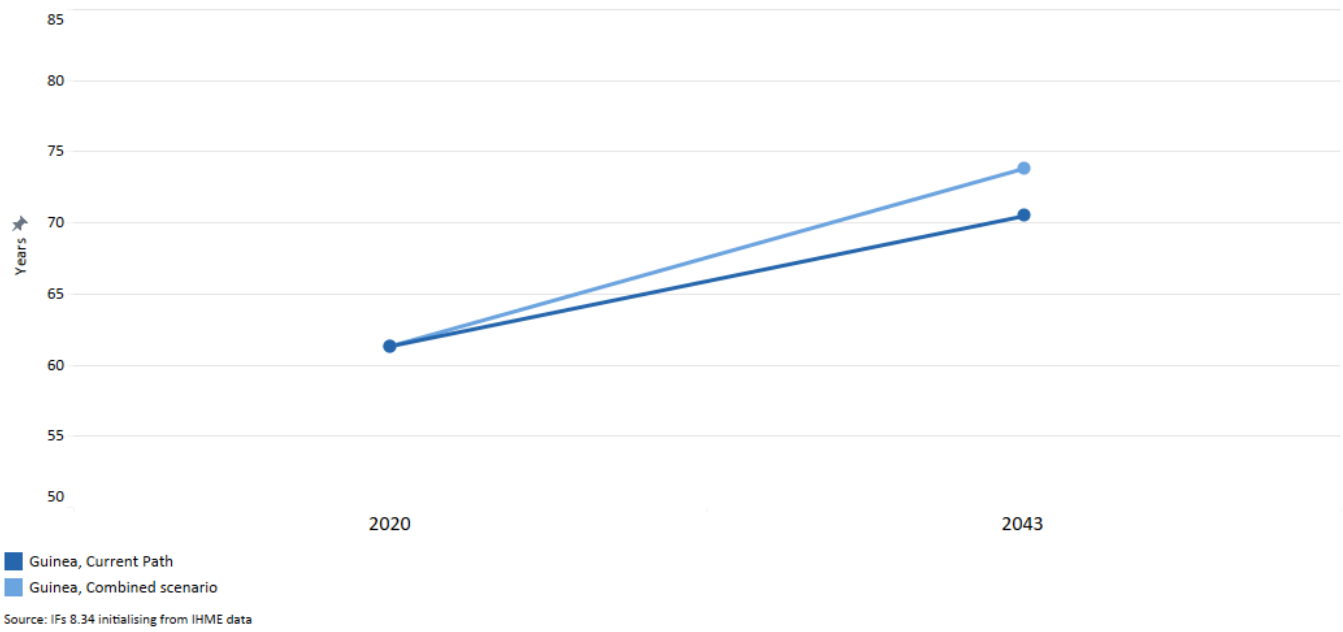
The informal sector operates outside formal regulatory frameworks, with many enterprises avoiding or unable to meet tax obligations, thereby reducing government revenue. The sector also generally does not adhere to the country's labour laws.

The sector enables income for individuals who lack access to formal job opportunities, including youth, women, and unskilled workers. Productivity in the sector is generally lower than in the formal sector due to limited access to modern technology, credit, and markets.

The informal sector in Guinea is large contributing significantly to employment and livelihoods, particularly for low-income and rural populations. The informal sector accounts for a large share of employment, especially in trade, small-scale manufacturing and services. In 2023, the sector accounted for 59.9% of total labour and contributed about 32.7% to GDP.

On the Current Path, Guinea's informal sector will decline to 31.2% of GDP in 2030 and to 28.7% by 2043. In the Combined scenario, it will decline to 30.5% of GDP in 2030 and to 24.9% in 2043.

Chart 34: Life expectancy in the Current Path and Combined scenario, 2020-2043



Source: IFs 8.34 initialising from IHME data

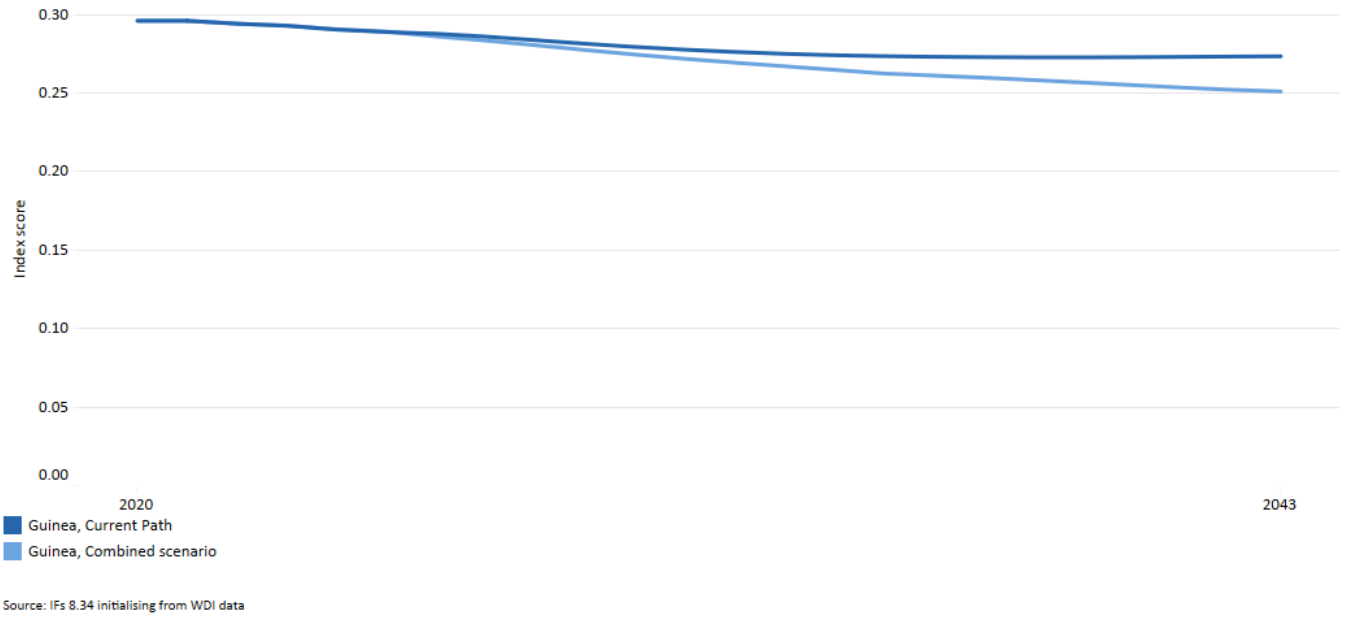
Chart 34 compares life expectancy in the Current Path with the Combined scenario from 2020 to 2043.

Since gaining independence, life expectancy in Guinea has improved significantly, with females consistently outliving males. As of 2023, the average life expectancy was nearly 63 years, with 64.6 years for females and 61.3 years for males. However, these figures are significantly lower than the average for lower-middle-income African countries.

In the Current Path, life expectancy will rise to 66 years by 2030, with 67.8 years for females and 64.3 years for males. By 2043, it will increase further to 70.5 years, reaching 72.5 years for females and 68.5 years for males.

In the Combined scenario, life expectancy will increase to 67.6 years by 2030, with 69.4 years for females and 65.9 years for males. By 2043, it will reach 73.8 years, comprising 75.8 years for females and 71.9 years for males.

Chart 35: Domestic Gini in the Current Path and Combined scenario, 2020-2043



Source: IFs 8.34 initialising from WDI data

Chart 35 compares the Gini coefficient in the Current Path with the Combined scenario for 2023 and 2043.

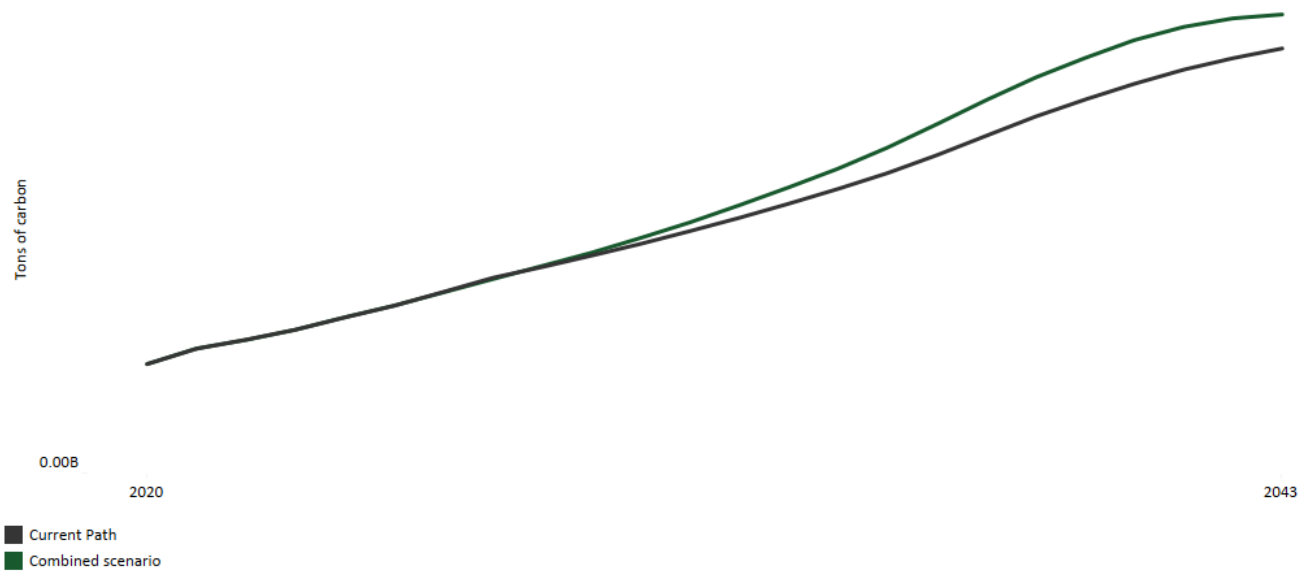
The Gini index measures a country's level of income inequality by assessing the distribution of income or wealth among its population. The coefficient of the Gini index ranges from 0 (or 0%) to 1 (or 100%), with 0 representing perfect equality and 1 representing perfect inequality. With a Gini coefficient of 0.29 in 2023, Guinea has lower inequality than most other African countries, given its status as one of the poorest countries in the world, ranking 2nd out of 54 - only above Algeria.

Wealth distribution is, however, highly unequal, with a significant portion of the country's wealth concentrated in the hands of a small elite. According to IMF data, the richest 10% of households in Guinea capture around 42% of total income, while the bottom 50% only receive 17%.

On the Current Path, income inequality in Guinea will slightly decrease to 0.28 in 2030 and further to 0.27 by 2043. The Combined scenario would, however, generate more inclusive growth and improve income distribution in the country. In the Combined scenario, the Gini index will decline to slightly above 0.27 by 2030 and decline further to 0.25 by 2043.

Chart 36: Carbon emissions in the Current Path and Combined scenario, 2020-2043

Million tons of carbon (note, not CO2 equivalent)



Source: IFs 8.34 initialising from Carbon Dioxide Information Analysis Center data

Chart 36 compares carbon emissions in the Current Path with the Combined scenario from 2020 to 2043. Note that the data is in million tons of carbon, not CO_2 equivalent.

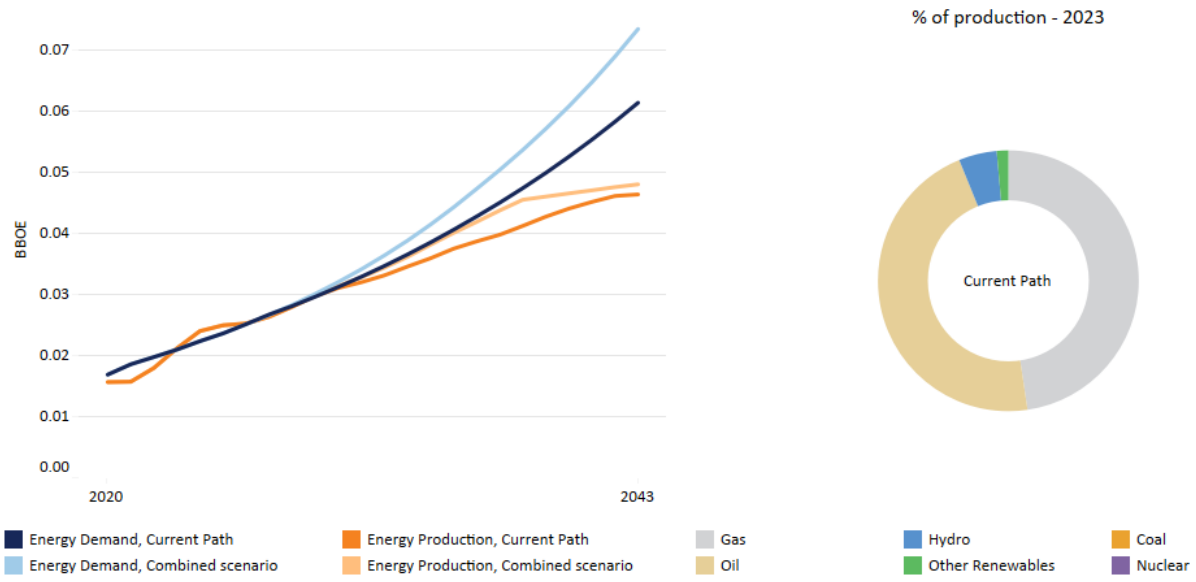
For more insights, also refer to the Climate theme.

In 2023 Guinea released about 1.8 million tons of carbon, which accounted for about 0.4% of Africa's total carbon emissions in that year. On the Current Path, Guinea will emit 2.9 million tons of carbon by 2030 and nearly 5.5 million tons by 2043.

The Combined scenario will increase Guinea's carbon emissions by 3 million tons by 2030 and 5.9 million tons by 2043. The AfCFTA, Agriculture, Manufacturing and Governance scenarios will have the largest contribution to carbon emissions, respectively by 2030. By 2043 it will be the AfCFTA, Manufacturing, Governance and Agriculture scenarios.

Although carbon emissions in Guinea are expected to increase with economic growth, the country's emissions is very low in absolute terms. Similar to many other African nations, Guinea will disproportionately bear the impacts of climate change despite its minimal contribution to global emissions. Nonetheless, it is crucial for Guinea to reduce its emissions and transition to renewable energy sources to support sustainable development and contribute to global climate change mitigation efforts.

Chart 37: Energy demand and production by type in the Current Path and Combined scenario, 2020-2043



Source: IFs 8.34 initialising from World Energy Outlook data

Chart 37 compares energy demand and production in the Current Path with the Combined scenario from 2020 to 2043. Production is done in nine types, namely oil, gas, coal, hydro, nuclear, solar, wind, geothermal and other renewables. The data is converted into billion barrels of oil equivalent (BOE) to allow for comparisons. Note that energy production could be for domestic use or for export.

Guinea's economy does not rely much on energy imports, as the country possesses significant potential for energy self-sufficiency, driven by its abundant natural resources, particularly hydroelectric capacity and mining reserves (oil and gas). However, inadequate infrastructure poses significant challenges to its energy production and distribution, and electricity access remains limited, especially in rural areas. In 2023, total energy produced in Guinea stood at 21.3 million barrels of oil equivalent (BOE) compared with a total energy demand of nearly 21 million BOE, creating a surplus production of about 0.3 million BOE.

Currently, gas and oil are the primary energy sources in Guinea. However, renewable energy production, particularly from hydro and solar, has been gradually increasing, though from a very low base. Guinea has the 7th-largest potential hydropower in Africa, estimated at 6.1 GW. However, only a fraction of this potential has been developed, leaving significant room for expansion. On the Current Path, gas and oil will remain Guinea's dominant energy sources, with hydro leading as the primary renewable energy source until 2031, when solar is forecast to take the lead.

The country's total energy demand will continue to increase as the economy grows. By 2030 energy demand will increase to 31.2 million BOE, while production will increase to slightly below 31.2 million BOE, creating a deficit of about 80 thousand BOE. By 2043, energy demand will reach 61.4 million BOE against production of 51.3 million BOE, thus creating a deficit of about 9.2 million BOE.

In the Combined scenario, energy demand will increase to about 32 million BOE (a 2.6% increase relative to the Current Path) by 2030, while production will increase to 31.6 million BOE (a 1.3% increase compared to the Current Path). By 2043, Guinea's energy deficit will be 46% larger than in the Current Path as demand increases to 73.5 million BOE against production of 60.1 million BOE.

As a result, Guinea is forecast to face energy insecurity and will need to rely more heavily on energy imports. This shift could have significant economic and social consequences, including a higher cost of living driven by increased dependence on costly imported energy.

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Dr Blessing Chipanda joined the African Futures and Innovation (AFI) programme in January 2023. Before joining the ISS he worked as an assistant lecturer/ research assistant at the University of Pretoria, Department of Economics. He is particularly interested in tasks within the wider realm of international trade, development economics, public policy, monetary policy, and econometric modelling. Equally interested in economic and socio-economic activities that impact social welfare. Blessing has a PhD in economics from the University of Pretoria, South Africa.

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