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Upper middle-income Africa
Upper middle-income Africa: Current Path

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Upper middle-income Africa: Current Path

Upper middle-income Africa: Current Path forecast

Chart 1: Political map of Upper middle-income Africa

Source: AFI, WB, ESRI, USGS, NOAA
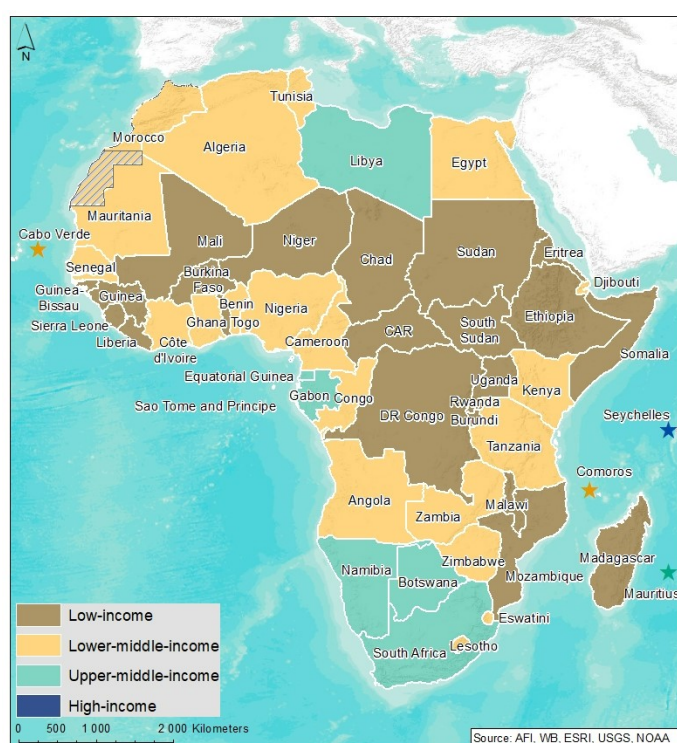
This page provides an overview of the key characteristics of upper middle-income Africa along its likely (or Current Path) development trajectory. The Current Path forecast from the International Futures forecasting (IFs) platform is a dynamic scenario that imitates the continuation of current policies 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.

Upper middle-income Africa is a group of seven countries, namely Mauritius, South Africa, Botswana, Namibia, Equatorial Guinea, Gabon and Libya, that have a gross national income per capita between US$4 096 and US$12 695 (as of July 2021).

In 2019, the population of the upper middle-income countries was 5.7% of the population of Africa with 87% of the population in South Africa. Libya, Namibia, Botswana and Gabon have individual populations of less than 3 million, while Mauritius and Equatorial Guinea have populations of less than 1.5 million. All the countries, except Libya, geographically lie

within sub-Saharan Africa, with South Africa, Botswana and Namibia in the Southern Africa region, Mauritius an East African island country in the Indian Ocean, Gabon and Equatorial Guinea situated on the west coast of Central Africa, and Libya in North Africa. The population density ranges from 6.3 persons per hectare in Mauritius to 0.03 in Namibia.

The climates of upper middle-income countries in Africa vary greatly, given the extent of the income group. Libya's climate is Mediterranean along the coast, becoming semiarid as it extends inland, and hot and arid to the south in the Sahara Desert; this climate dominates, though it is moderated by the coast of the Mediterranean Sea. In the summer, the influence of the Sahara is stronger, and from October to March westerly winds bring cyclonic storms and rains across the north. The Mediterranean climate has a cool, rainy winter and a hot, dry summer. In the Saharan zone, 200 consecutive rainless days per year are recorded.

Gabon has a tropical climate with dry and cool weather from June to August. Similarly, in Equatorial Guinea the climate is tropical with high temperatures and heavy rainfall which is higher on the coast than inland. Wet seasons in the continental region are from February to June and September to December.

Namibia has a subtropical desert climate with vast day and night temperature differences, and low humidity and rainfall. During the dry winter season, from May to October, there is no rainfall and humidity is low. In the summer, from November to April, heavy downpours occur in the afternoon with the temperature ranging from 30–40 °C.Inland, Botswana, like Namibia, has a semiarid climate, which is mostly hot and dry. The summer sees heavy, erratic and unpredictable rainfall.

South Africa has a cool and arid climate on the west coast near the Namib desert, a subtropical climate in the southern coast with dry summers in the westernmost part and no dry season in the eastern part, and the plateau with dry, sunny winters, more arid in the western part than in the eastern part. The temperature is mild all year round.
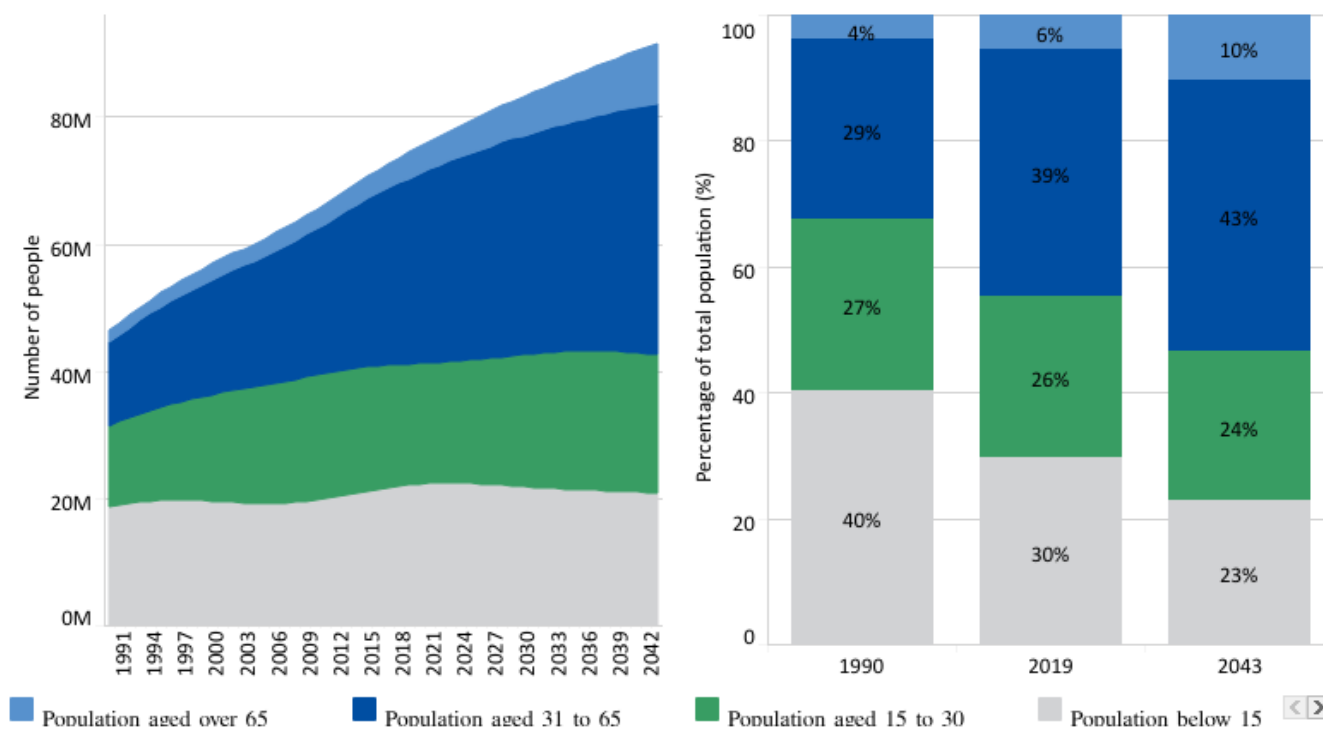
Demographics: Current Path

Chart 2: Population structure in CP, 1990–2043
By cohort and % of population

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■ Population aged over 65   ■ Population aged 31 to 65   ■ Population aged 15 to 30   ■ Population below 15

Source: IFs 7.63 initialising from UN Population Division Population Prospects estimate and World Development Indicators population data

⊞ View on Tableau Public

In 2019, the population of upper middle-income Africa stood at 74.4 million, representing 5.6% of Africa's population. Three-quarter of the population of upper middle-income Africa is in South Africa, but Equatorial Guinea (3%), Gabon (2.3%) and Namibia (2.2%) have the fastest-growing populations.

In 2019, about 55% of the population of upper middle-income Africa was under 30 years old, mainly as a result of the youthful population in South Africa, shrinking to 45% of the population by 2043. The elderly population (65 years and old) of 5.6% is set to increase by over 100% to 10.4% during the same period. The median age in 2019 was 27.3 years, significantly higher than the mean of 20 years for Africa. The total fertility rate of 2.5 live births per woman is set to decrease to the population replacement rate of 2.1 in 2039.

Life expectancy is low at 65 years in 2019 due to a remarkably high disease burden particularly from communicable diseases (mostly HIV/AIDS in South Africa and to a lesser extent in Botswana and Namibia) and increasingly also from non-communicable diseases as populations age. As the disease burden subsides, and access to improved sanitation increases, life expectancy is expected to improve to 70 years in 2043.

Whereas the gap in life expectancy between upper middle-income Africa and the global average for upper middle-income countries was almost 11 years in 2019, it will decrease to 9 years in 2043.

Chart 3: Urban and rural population in CP, 1990–2043
% of population

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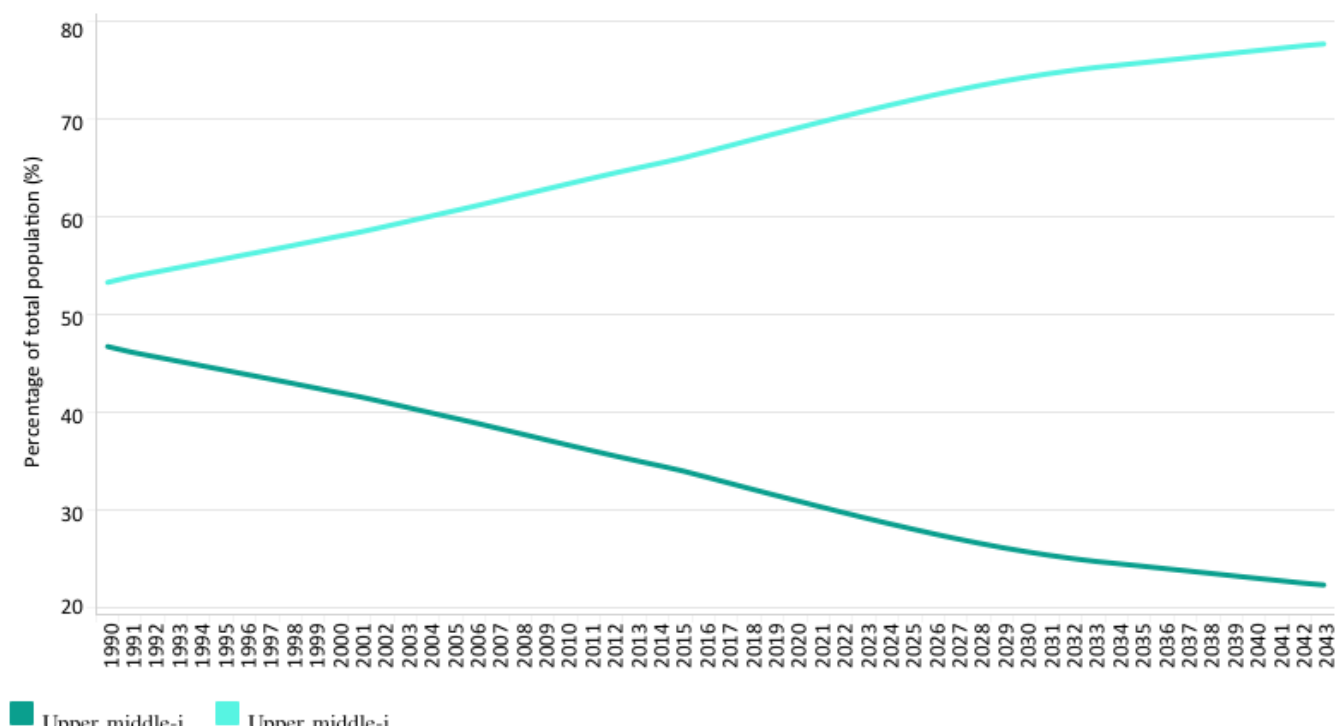
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Source: IFs 7.63 initialising from UN World Urbanization Prospects estimate

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The upper middle-income Africa group of countries is predominantly urban, with an urbanisation rate of 68.4% in 2019 — a 15 percentage point increase from 1990. In the Current Path forecast, the urbanisation rate will increase to 77.6% in 2043.

South Africa undoubtedly has some of the most long-standing modern cities that are centres of finance and trade in Southern Africa as well as attracting migration from neighbouring countries.

Chart 4: Population density map for 2019
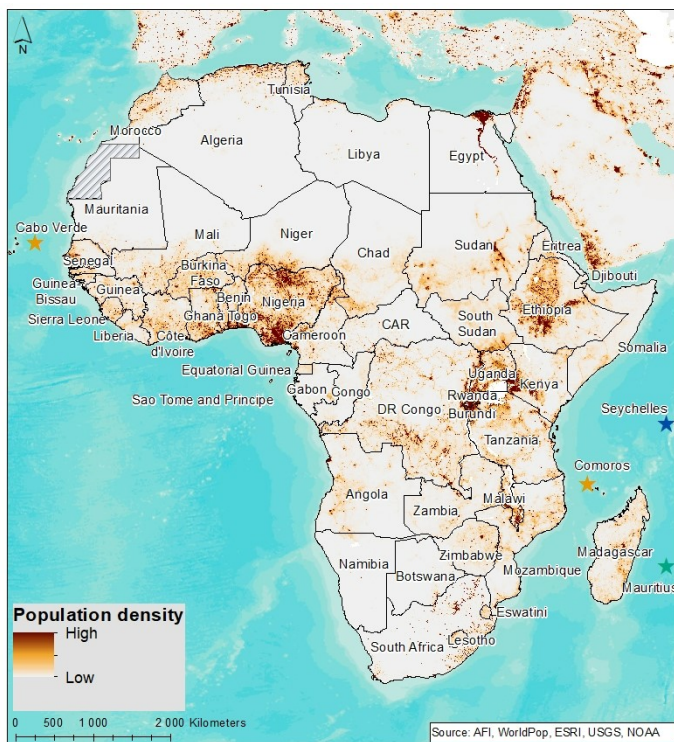
The seven upper middle-income African countries are among the most sparsely populated in Africa. Mauritius is the most densely populated in the group with 6.3 persons per hectare, and Namibia — a vast country with two deserts and few people — is the least densely populated in Africa at just 0.03 persons per hectare. Situated in the Sahel region with unfavourable climate conditions for living, Libya is the next most sparsely populated upper middle-income Africa country with a population density of 0.04 persons per hectare. Indeed Botswana (0.04) and Gabon (0.08) have low population densities, relatively lower than South Africa (0.48) and Equatorial Guinea (0.47).
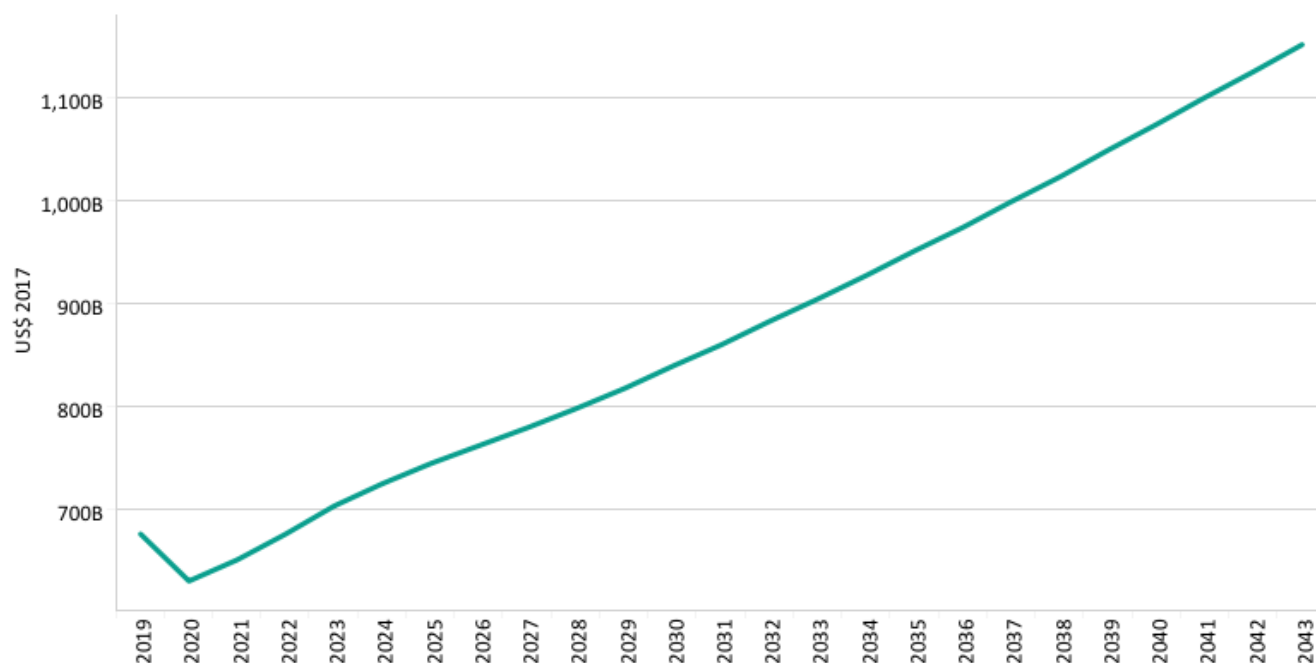
Economics: Current Path

Chart 5: GDP in CP, 1990–2043
Market exchange rates

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■ Upper middle-income Africa

Source: IFs 7.63 initialising from International Monetary Fund World Economic Outlook database
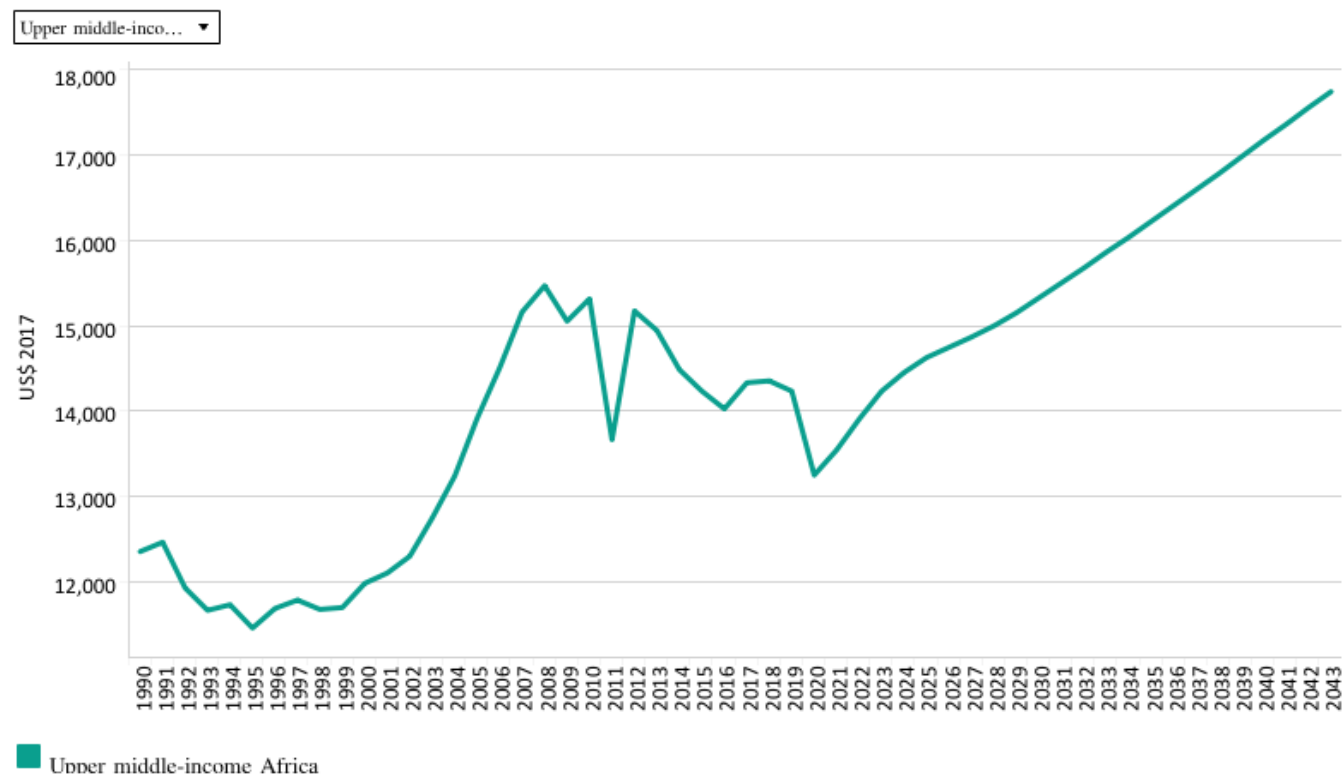
⁂ View on Tableau Public   ↺ ↻ ↶ ↷ ▼ | 🖵▼ 🔲 ⁰⁄₀ Share

In 1990, the GDP of upper middle-income Africa was US$354.3 billion, representing 33% of the GDP of Africa. From 1990 to 2019, the income group's economies managed to increase the collective size of by 90% to US$675.8 billion; however, their share of Africa's economy decreased to 22.1% as a result of more rapid growth in the lower-income and lower middle-income Africa income groups. Economic growth during this period was largely due to growth in the service and manufacturing sectors. In South Africa, economic growth averaged at 1.7% per annum due to the fall in investment and exports from 2007 to 2019.

In the Current Path forecast, the economy of upper middle-income Africa is set to grow to US$1 152.1 billion in 2043, representing 59% growth compared to 2019. The sectors that will increase their share of the economy from 2019 to 2043 are manufacturing (3 percentage points larger), materials (2 points) and ICT (1.4 points), whereas the services (3 percentage points smaller), energy (2.4 points), and agriculture (1.2 points) sectors will decrease their share of the economy in 2043.

Chart 6: GDP per capita in CP, 1990–2043
Purchasing power parity

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Upper middle-income Africa

Source: IFs 7.63 initialising from UN Population Division World Population Prospects and World Development Indicators data

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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 upper middle-income Africa.

From 1990 to 2019, the trend in GDP per capita is generally categorised into three phases. The GDP per capita fell marginally by US$654 during the 1990s, followed by a rapid increase in income per capita during the fast-growth period of 2000 to 2008. During this period, income increased by US$4 000 to US$15 467 on the eve of the financial crisis. About half of the income gain during the 2000 to 2008 period was lost in the 2010s due to the effect of the financial crisis and since 2020 the global COVID-19 pandemic. The impact of the various oil shocks are also evident with GDP per capita in Equatorial Guinea and Libya increasing rapidly during the 1990s and 2000s before falling more recently. Coming off a high base, the impact of the COVID-19 pandemic was particularly severe on GDP per capita in Mauritius. In the Current Path forecast, per capita income will increase rapidly from US$14 225 to US$17 734 in 2043.

In 2019, GDP per capita within the group was highest in Mauritius, followed by Equatorial Guinea and Libya. Namibia had the lowest GDP per capita within the group but, by 2043, will catch up with South Africa, the country with the second lowest GDP per capita in the group in 2019 and which is forecast to experience the slowest improvement among the upper middle-income countries to 2043.

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

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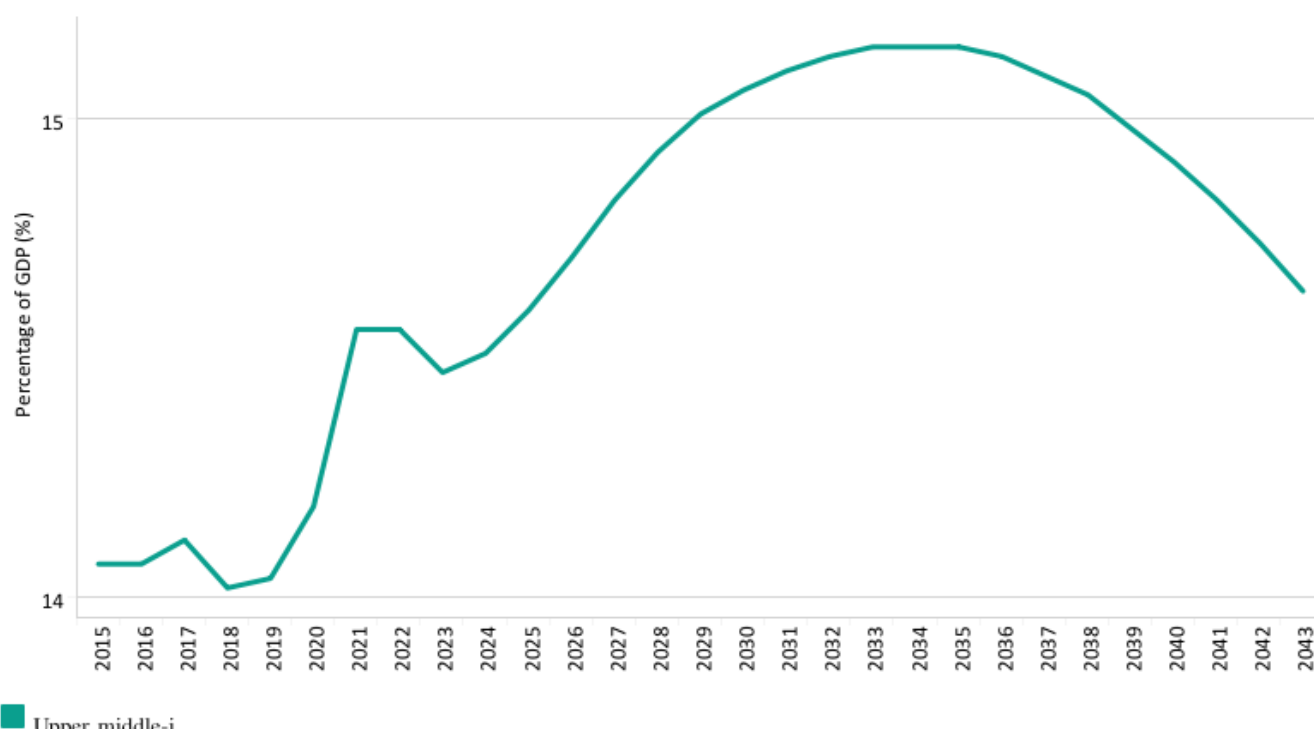
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Source: IFs 7.63 initialising from UN Economic Commission for Europe [2008]; Elgin and Oztunali [2012]; Schneider and Enste [2012]
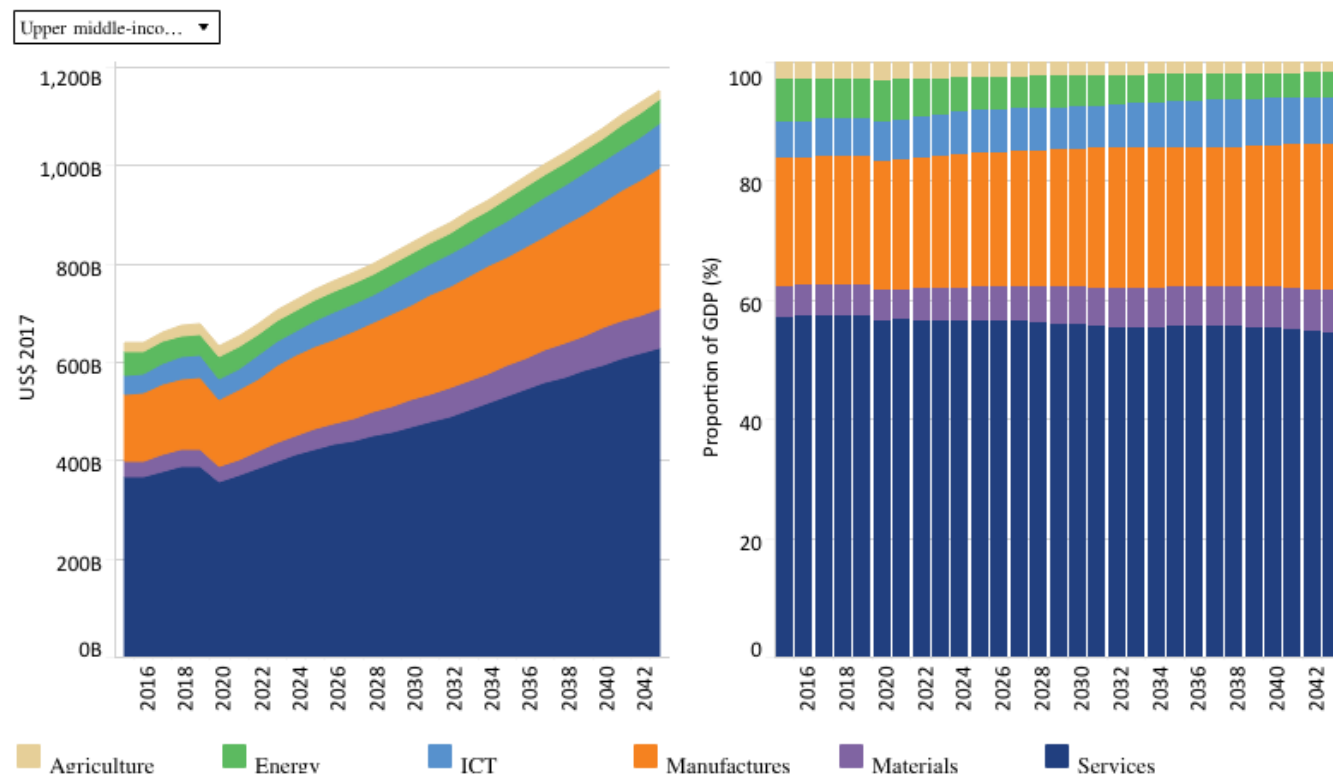
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In 2019, 14.04% of upper middle-income Africa operated in the informal sector, higher than the average for other upper middle-income economies of 7.6%. The informal sector was largest in Gabon, constituting a third of the economy, and lowest in Mauritius, at 8.6%, in 2019. South Africa (13%) and Libya (13.8%) were below the group average in 2019, while Botswana (18.7%) and Namibia (17%) had rates twice the average of other upper middle-income economies.

In the Current Path forecast, the informal sector will only marginally increase to 14.64% in 2043 due to the large share of the labour force that will continue to operate in subsistence agriculture in rural areas and the large dependency ratio across the region over time. In the 2043 Current Path forecast, all countries will experience a decline in the informal sector except South Africa, where it is set to increase from 13% in 2019 to 16.1% in 2043.

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

Source: IFs 7.63 initialising from International Monetary Fund World Economic Outlook database

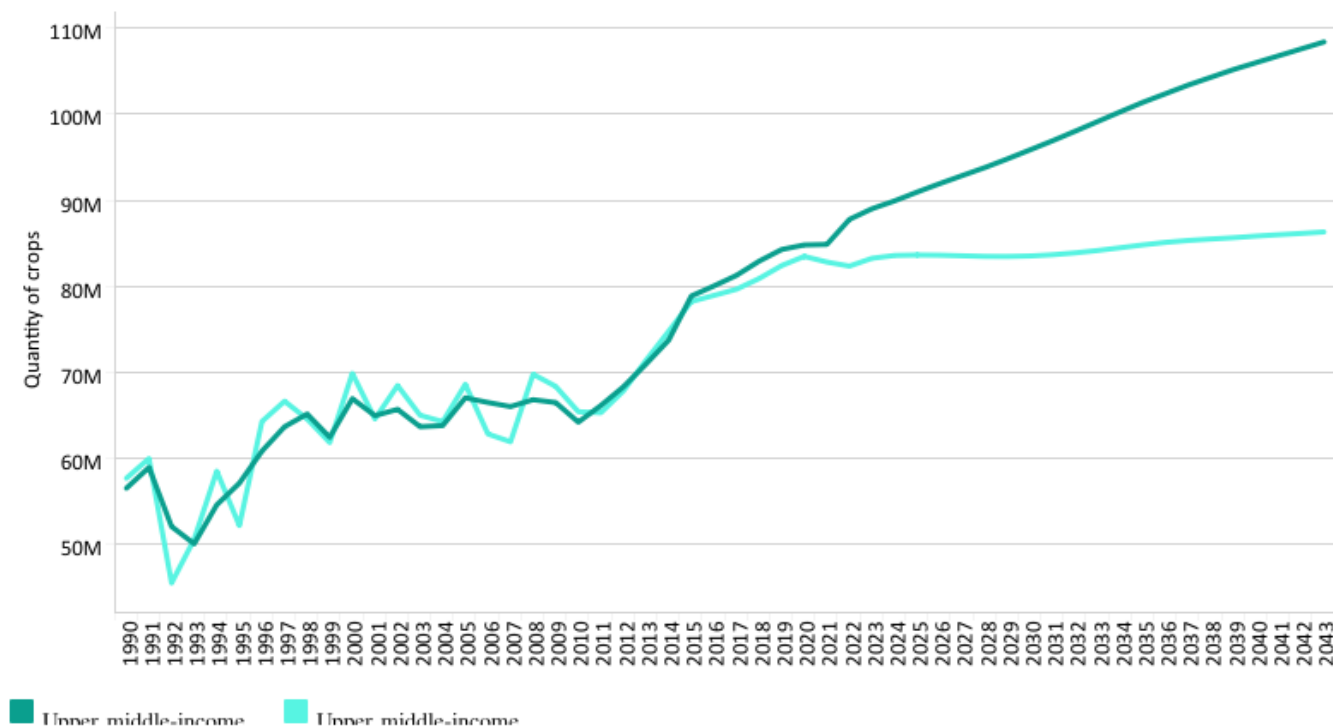⁜ View on Tableau Public   ↺ ↻ ↶ ↷ ▼ | 🖵▼ 🗖 ⤳ Share

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), manufacturing, services and information and communication technologies (ICT). Most other sources use a threefold distinction between only agriculture, industry and services with the result that data may differ.

The service sector is the most dominant sector in upper middle-income Africa, amounting to 57.4% of GDP (US$387.7 billion) in 2019. The contribution of the service sector will marginally decline to 54.5% (US$4 628.1 billion) in 2043. In 2019, the manufacturing sector contributed 21.7% (US$146.5 billion) to upper middle-income Africa's GDP against the projected 24.6% (US$283.6 billion) in 2043. The share of the agriculture sector in GDP is set to decline from 3% in 2019 to 1.2% in the Current Path forecast in 2043. The ICT and materials sectors will see increases in their quantities and shares of GDP between 2019 and 2043.

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

Source: IFs 7.63 initialising from Food and Agriculture Organization Food Balance Sheets

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The data on agricultural production and demand in the IFs forecasting platform initialises 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 tons. Chart 9 shows agricultural production and demand as a total of all three categories.

The agriculture sector contributed 2.8% of GDP in Africa in 2019 and is set to decline to 1.8% in 2043. The sector is therefore significantly smaller than the average for Africa as a whole, which stands at 15.6%. In 2019, upper middle-income Africa's yield per hectare, at 4.7 tons, was significantly lower than the global average of 9.2 tons for upper middle-income economies. Despite the small agriculture sector in upper middle-income Africa, food security is not a problem because agricultural production is about the size of agricultural demand.

In 1990, the gap between production and demand was 1.2 million tons and remained thereabouts in 2019 at 1.9 million tons. This is driven by South Africa's highly productive agriculture sector that produced 1.6 million tons in excess of demand in 1990 and 90 000 tons in 2019. Botswana and Gabon are the most food insecure countries in the income group, with demand being consistently higher than production.

In the Current Path forecast, as the share of the agriculture sector declines to 1.8% and the capacity to produce food decreases, and while population growth increases demand for food, excess demand will grow to 22.1 million tons in 2043.
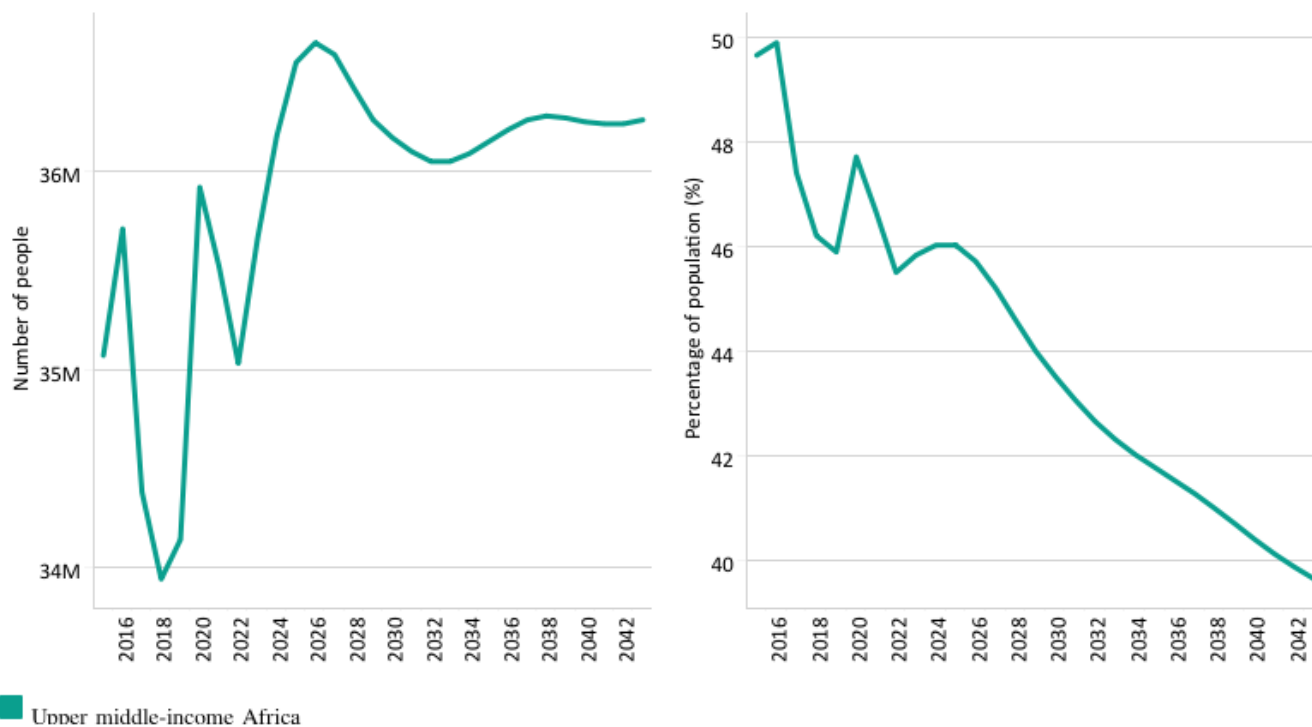
Poverty: Current Path

Chart 10: Poverty in CP, 2015–2043
Millions of people and % of total population

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■ Upper middle-income Africa

Source: IFs 7.63 initialising from UN Population Division Population Prospects estimate, World Development Indicators population data and PovcalNet World Bank data

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There are numerous methodologies for 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 per day (in 2011 international prices), also used to measure progress towards the achievement of Sustainable Development Goal (SDG) 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

In 2019, the number of the extremely poor people (using the US$5.50 per day measure) in upper middle-income Africa was 34.1 million, representing 45.9% of the population. This is more than double the average poverty rate in upper middle-income countries at 18.2%. In the Current Path forecast, the number of poor people will increase to 36.7 million in 2026 before declining to 36.3 million in 2043. At that point, 39.7% of the population of upper middle-income Africa will live in extreme poverty. The Current Path forecast poverty rate of 39.7% in 2043 is 34.5 percentage points higher than the average for upper middle-income peers.

The depth of poverty (using US$5.50) differs among the different upper middle-income countries in Africa, with rates in Namibia (65.8%) around 20 percentage points higher than South Africa (49.6%), Botswana (45.7%) and Gabon (43.5%). Rates in Libya (20.1%) and Mauritius (7.7%) are significantly lower. In the 2043 Current Path forecast, all countries will achieve at least a 10 percentage point decrease in poverty compared to 2019, except South Africa. South Africa will only reduce its poverty in 2043 by 3.5 percentage points to 46.1%, then marginally below Namibia at 47%.

The persistently high poverty rate in South Africa is due to the high unemployment rate, with sluggish economic growth, a relatively small informal sector and high levels of inequality.

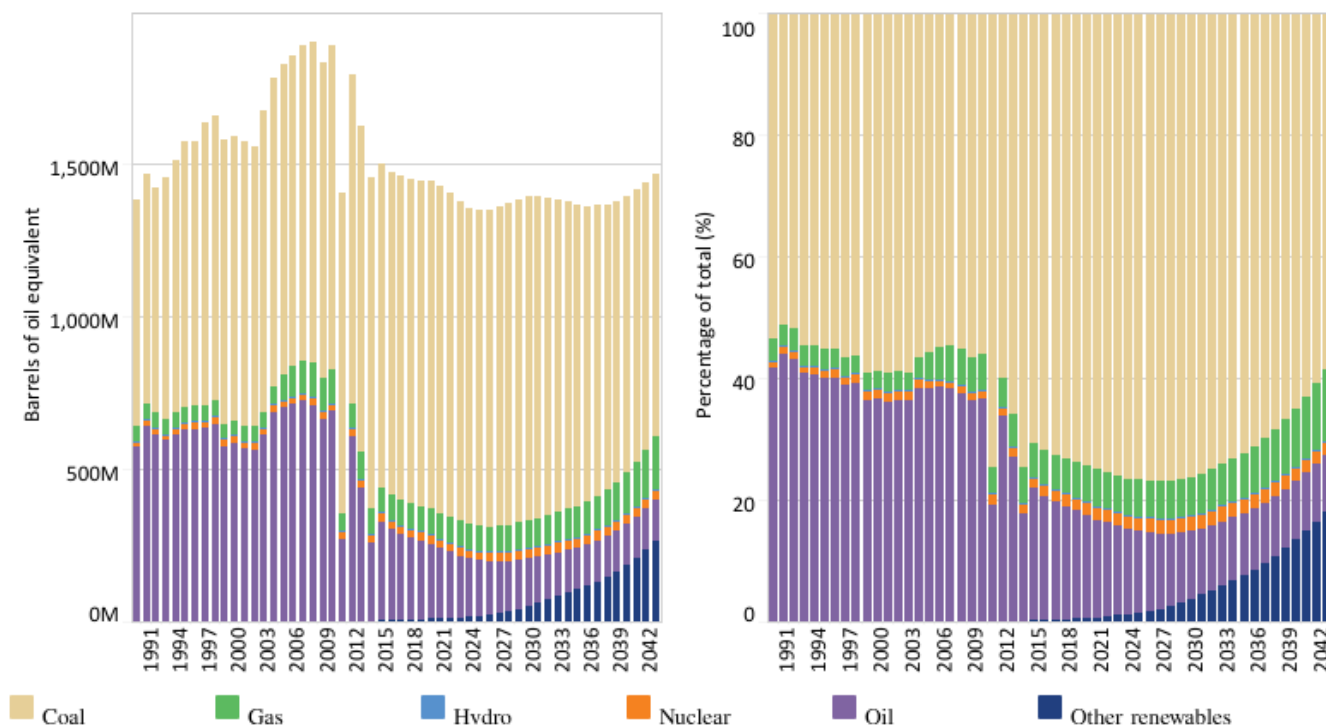## Carbon Emissions/Energy: Current Path

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

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Source: IFs 7.63 initialising from World Energy Outlook data

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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 (BBOE). 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.

In 1990, half (0.74 billion barrels) of the energy produced in upper middle-income Africa was coal, with South Africa as the largest coal producer in Africa. Oil was the next largest energy produced at 41.7% (0.58 billion barrels) on the back of oil production in Equatorial Guinea, and Gabon, with insignificant gas production during the same timeframe. Over time, both the quantity and share of oil produced decrease. In 2019, only 18.2% of the energy produced was oil while the share of coal produced increased to 73.8% (1.07 billion tons).

In the 2043, Current Path forecast, coal's share will decline to 58.7% and oil will cease to be the second largest energy produced. Other renewable energy (wind and solar) will significantly grow to 17.9% (0.26 billion tons) and gas will contribute 11.7%, higher than oil's share of 9.3%.
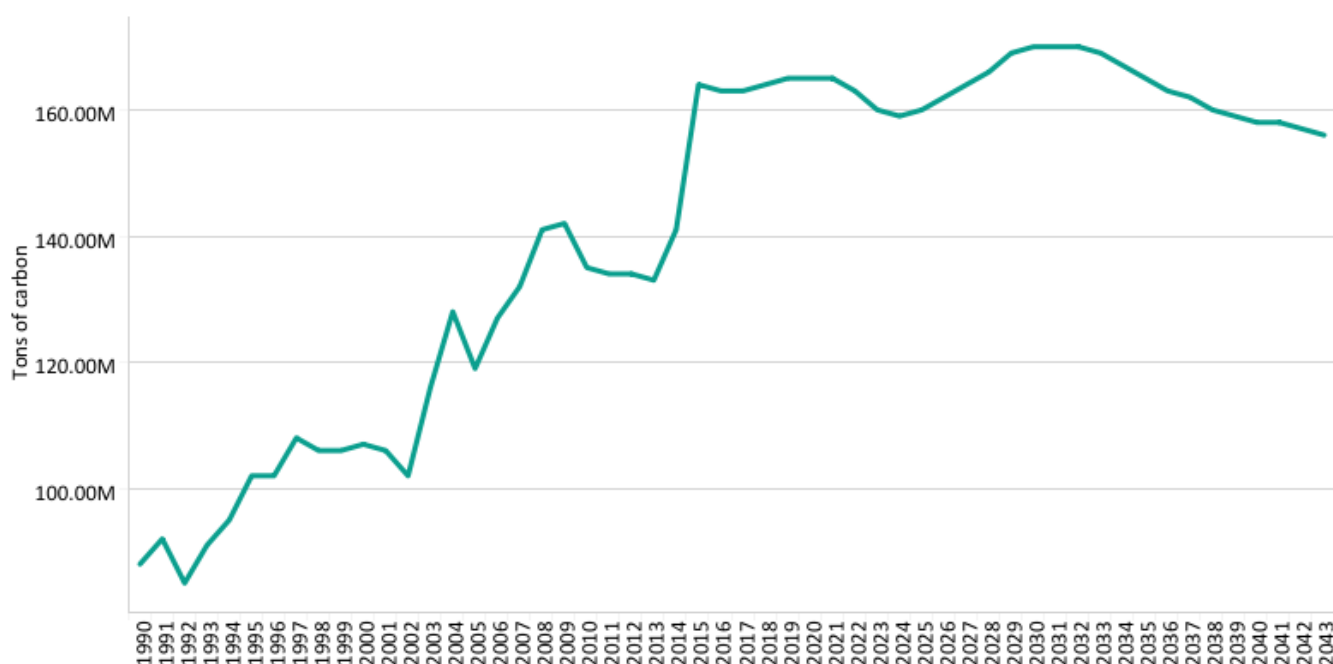
Most oil and gas is, however, exported and not refined or used domestically. In spite of the fact that upper middle-income Africa exports large amounts of energy, most of the income group's countries still struggle to provide a stable electricity supply.

Chart 12: Carbon emissions in CP, 1990–2043
Million tons of carbon (note, not CO_2 equivalent)

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■ Upper middle-income Africa

Source: IFs 7.63 initialising from Carbon Dioxide Information Analysis Center data

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Carbon is released in many ways, but the three most important contributors to greenhouse gases are carbon dioxide (CO2), carbon monoxide (CO) and methane (CH4). Since each has a different molecular weight, IFs uses carbon. Many other sites and calculations use CO2 equivalent.

Upper middle-income Africa's total carbon emissions steadily increased from 88 million tons in 1990 to 165 million tons in 2019 — 39.1% of Africa's emissions and 3.6% of global upper middle-income economies' emissions. Because of the size of its economy and its reliance on coal for electricity generation, South Africa contributed 80% of the total carbon emissions in upper middle-income Africa in 2019, followed by Libya with 15% of the emissions in the same year. Other upper middle-income Africa economies have relatively small carbon footprints.

As renewable technology is increasingly adopted and the share of other renewables increases in energy production to 17.9%, carbon emissions are set to decline to 156 million tons in 2043. In the Current Path forecast, the relative ranking in carbon emissions among the members of upper middle-income Africa does not change in 2043 compared to 2019.

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Mustapha Jobarteh joined the ISS in January 2022 as a Senior Researcher in the African Futures and Innovation programme in Pretoria. Before joining ISS, Mustapha was a senior lecturer and Head of the Department of Economics and Finance at the University of the Gambia and a research fellow with the Center for Policy, Research and Strategic Studies. His interests include macroeconomics, international trade and econometric modelling. Mustapha has a PhD in economics from Istanbul Medeniyet
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