SAVANNAH ENERGY

Why we do what we do

To make a difference you have to do things differently

Our core beliefs

1. **We are focused on energy as we believe it is the critical enabler of human activity.**
2. **We are focused on Africa as we believe the continent's energy poverty is one of the most urgent and important problems facing the world today.**
3. **We invest in hydrocarbons AND renewables as we believe both will be critical components of the 2030-50 energy mix.**
4. **We believe all Africans have the right to benefit from economic development.**
5. **We believe that trade and private sector investment are essential for economic development.**

Our purpose

We are a pan-African energy and resources company seeking to deliver excellent performance for our stakeholders. We want to meaningfully contribute to the economic development of the countries in which we operate through the development of businesses and projects that make a material difference to those countries. We will continue to evolve to achieve our purpose. We are seeking to pursue ***Projects that Matter***.

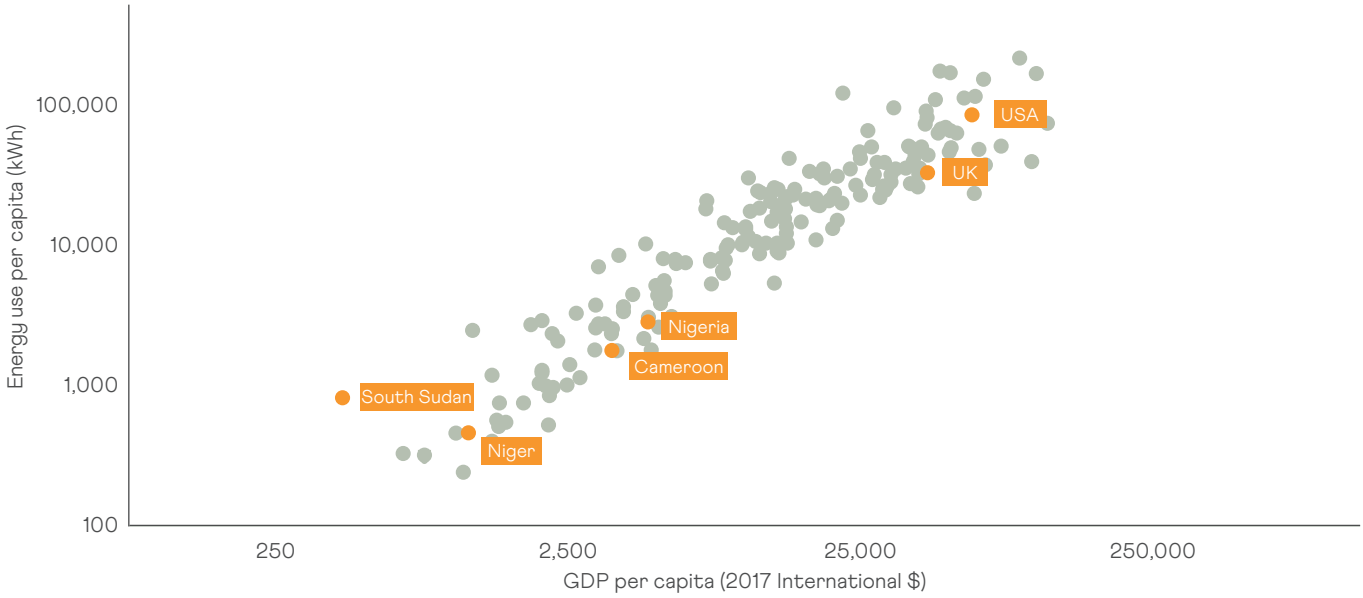
What makes us special

We are passionately focused around the achievement of our corporate purpose. We operate in jurisdictions which are often viewed as challenging by peers. We embrace these challenges as opportunities and understand that these are the jurisdictions where we can have the greatest impact. We have a growth/cash flow re-investment orientated mindset. We take a patient and long-term view as to business performance and development. We believe in human talent development. We operate and hold ourselves accountable to high standards of performance and behaviour. We make things happen.

1 We are focused on energy as we believe it is the critical enabler of human activity.

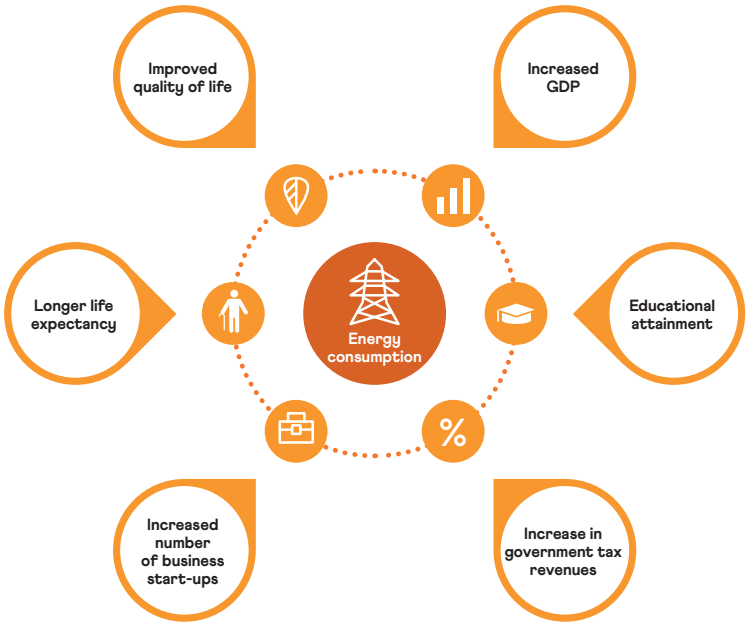
Access to energy is essential for economic development and human progress. The chart below demonstrates the strong correlation between GDP per capita and energy consumption per capita, using a data set which includes data from 187 countries. It clearly shows that: (1) people who have access to energy are generally wealthier than those who do not; and (2) it appears almost impossible for a country to meaningfully develop without access to power. For example, using international dollars, Niger has a GDP per capita of US$1,187 and energy consumption per capita of 410 kWh while the United States has a GDP per capita of US$63,670 and energy consumption per capita of 76,989 kWh, 5,266% and 18,689% higher respectively. Further, energy access is positively correlated with many other key human development metrics including those associated with educational attainment, life expectancy and quality of life. Energy is clearly therefore the critical enabler of human activity.

Correlation between GDP and energy use per capita: energy poverty drives economic poverty
(Note: logarithmic scale)



Source: Our World in Data based on BP & Shift Data Portal, World Bank (2021).

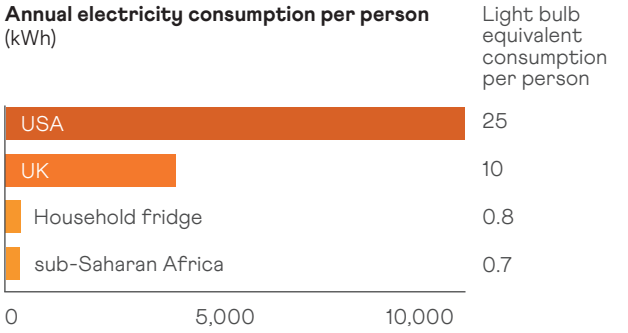
Energy consumption as a driver of economic and human development



2 We are focused on Africa as we believe the continent's energy poverty is one of the most urgent and important problems facing the world today.

Africa is home to 18% of humanity but only 57%, amounting to 600 million of her people, are estimated to have access to grid connected electricity (in any form). Despite her size and low electricity access, Africa is estimated to receive only 5% of all global energy investment[1].

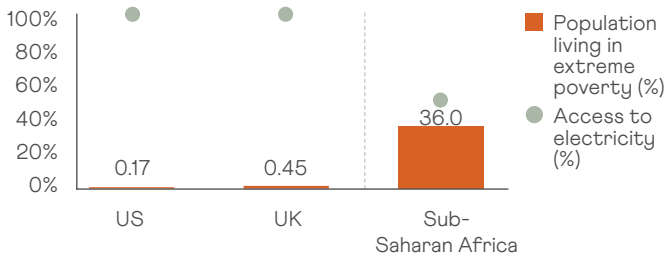
Annual electricity consumption per person (kWh)



Source: World Bank, EIA, The Economist.

In sub-Saharan Africa, aggregate electricity consumption per person is estimated to be less than that consumed by a standard US household fridge, 8% of what an average UK citizen is estimated to consume or 3% of what an average US citizen is estimated to consume.

Percentage of population below World Bank extreme poverty rate (2022)

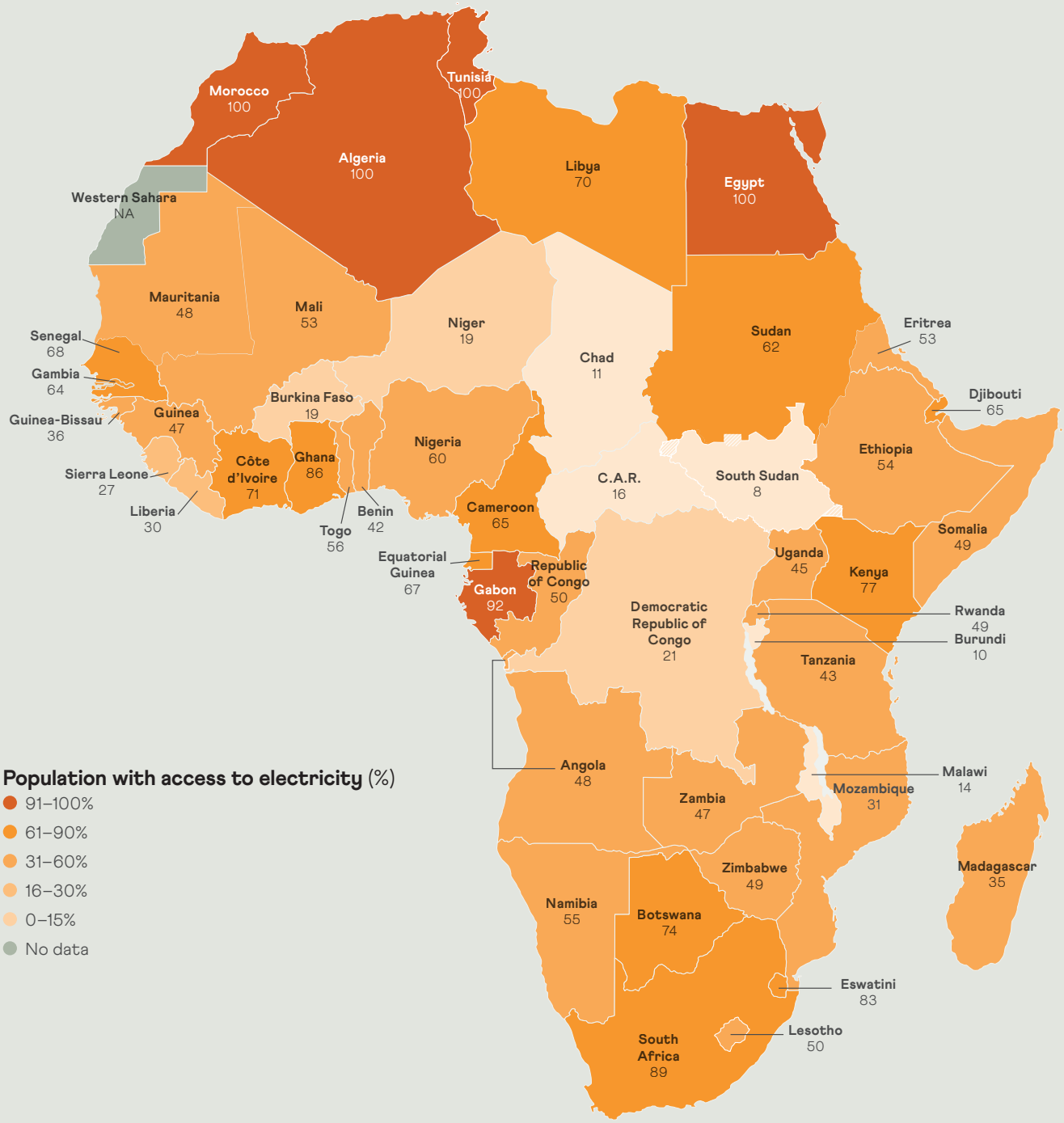


Source: World Bank, Gapminder (2022).

The impact of energy poverty in Africa is clear to see; 36% of those people living in sub-Saharan Africa are estimated by the World Bank to be living in extreme poverty (i.e. earning less than US$2.15 per day).

L-R: Otu Inyang, Senior Instrument Technician; Michael Okonkwo, Operations Lead, Ibom Gas Receiving Facility, Nigeria

African population with access to electricity (%)

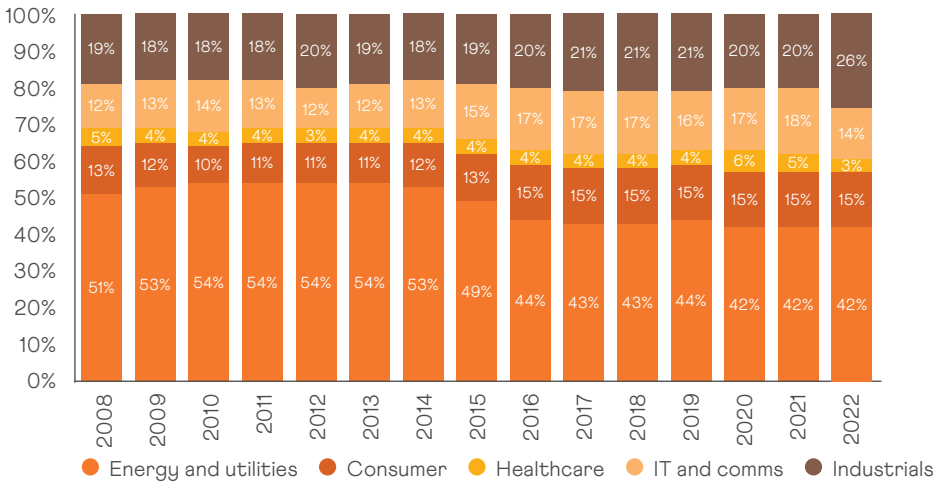


Source: World Bank.

3 We invest in hydrocarbons AND renewables as we believe both are critical components of the 2030-2050 energy mix.

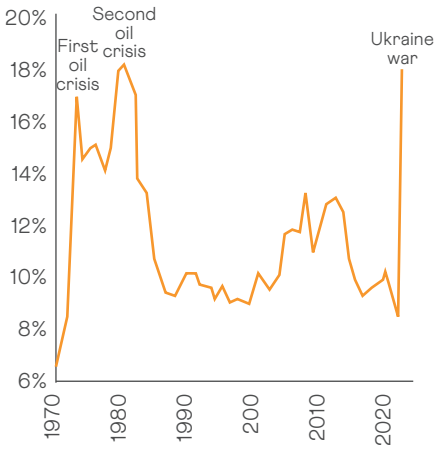
Energy dominates global capital and operating expenditures

Share of global non-financial corporate CAPEX by sector



Source: S&P Global Market Intelligence, S&P Global Ratings. Universe is Global Capex 2000.

Estimated share of OECD GDP spent on energy end use



Source: OECD

Over 75% of today's global energy mix is provided by hydrocarbons, 53% of which is from oil and gas. Approximately 42% of all global capital expenditures relate to energy projects. Similarly, 18% of OECD GDP is spent on energy end use. It is therefore clear that: (1) oil and gas production is a critical contributor to the current functioning of the global economy and the maintenance of human living standards; and (2) this is clearly evidenced by the money people are prepared to spend to sustain their "status quo" quality of life.

Energy transitions take (a lot of) time

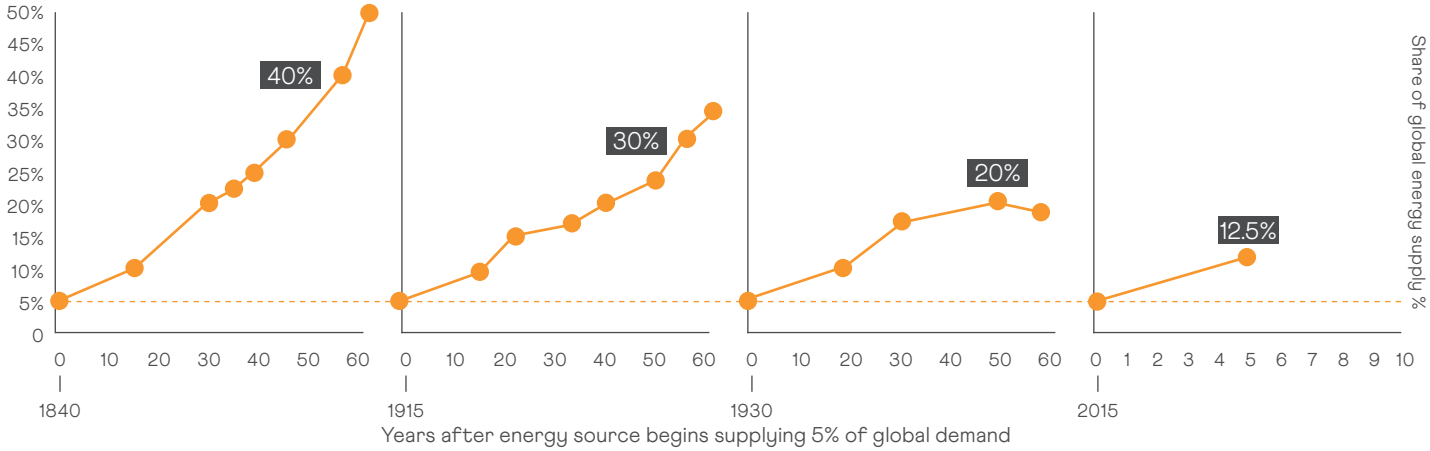
It has taken decades for major energy sources to provide a significant share of global supply:

Coal
50 years to contribute 40% of the global energy mix

Crude oil
50 years to contribute 30% of the global energy mix

Natural gas
50 years to contribute 20% of the global energy mix

Modern renewables
Still contribute only 12.5% of the global energy mix



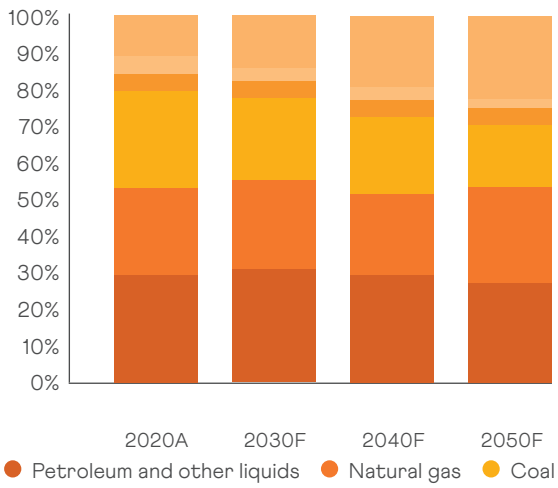
Sources: Vaclav Smil. Modern renewables include: wind, solar, and modern biofuels; Bill Gates: How to Avoid a Climate Disaster, IEA.

Previous energy transitions took over 50 years, and the modern renewable energy transition only began around 2015. The extent to which the world requires oil and gas in the future will depend on the absolute and relative rate of renewable energy and carbon mitigation technological improvements. While it is reasonable to suggest that these processes are generally faster today than in earlier periods, it would also seem reasonable to recognise that the pace of the global energy transition is likely to take a relatively long time (and it would be foolish for the world to plan on a different assumption). Further, it is important to note that previous energy transitions have not resulted in the complete displacement of older energy sources with, for example, coal still providing around 26% of the global energy mix in 2022.

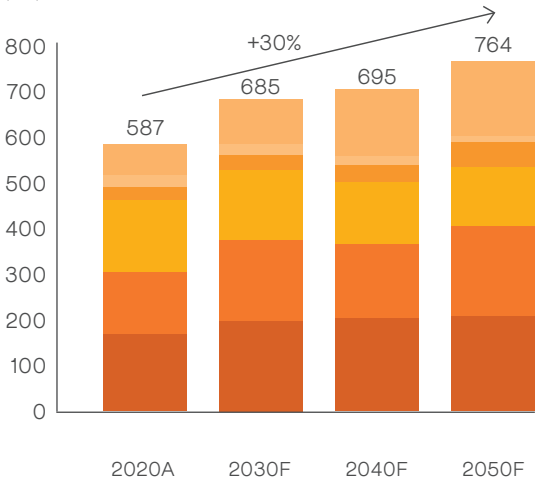
Forecast energy mix and supply: trend case scenario

On a current trend basis the International Energy Agency ("IEA") estimates that global energy consumption will grow by 30% 2020A to 2050F, from 587 exajoules ("EJ") to 764 EJ, with oil and gas' share of the global energy mix remaining stable between 52% to 54% in this period. In absolute terms this would see oil production rising by 21% and gas production rising by 46% respectively over the period.

Total energy supply



Total energy supply
(EJ)



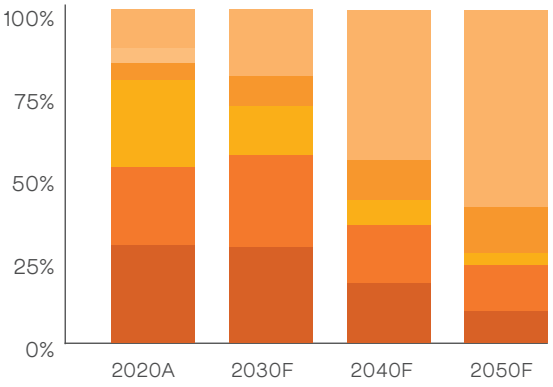
Petroleum and other liquids · Natural gas · Coal · Nuclear · Biomass · Renewables

Source: IEA.
A denotes actual
F denotes forecast

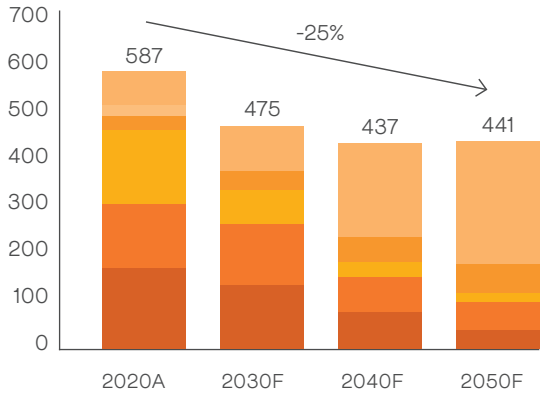
Forecast energy mix and supply: net zero emissions scenario

To meet the net zero standard by 2050, the International Energy Agency ("IEA") estimates that oil and gas' share of the global energy mix would have to fall from 53% to 23%. In absolute terms this would see oil production falling by 76% and gas production falling by 56% over the period.

Energy mix in net zero emissions scenario



Total energy supply in net zero emissions scenario
(EJ)



Petroleum and other liquids · Natural gas · Coal · Nuclear · Biomass · Renewables

Source: IEA.
A denotes actual
F denotes forecast

4 We believe that all Africans have the right to benefit from economic development.

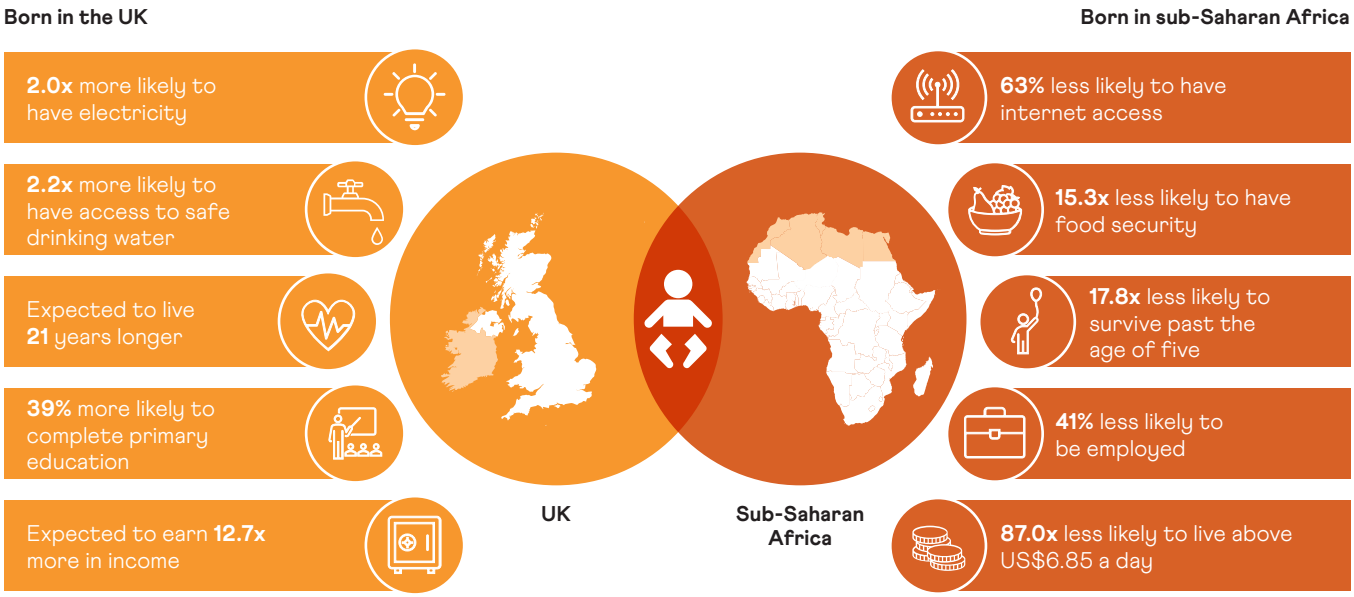
In principle, we are willing to invest in any African country where projects will meet our investment criteria (i.e. financial, legal structure, social impact and materiality) as we believe:

That all Africans have the right to reap the benefits of economic development.

That jurisdiction and associated project risks can be identified and mitigated down to acceptable tolerance thresholds (including through diversification) – which are typically higher than those of jurisdictions and projects being conducted in the OECD.

In our own ability to build highly motivated teams, capable of delivering projects in such environments.

UK vs. sub-Saharan Africa: expected life outcomes at birth

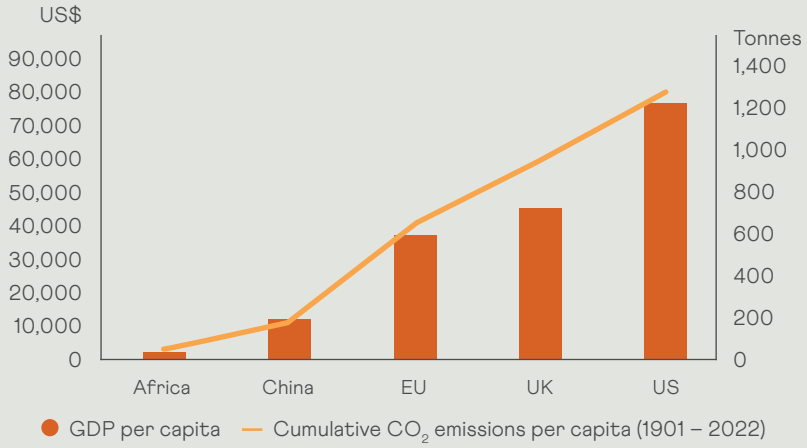


Source: World Bank.

Carbon use has driven economic development

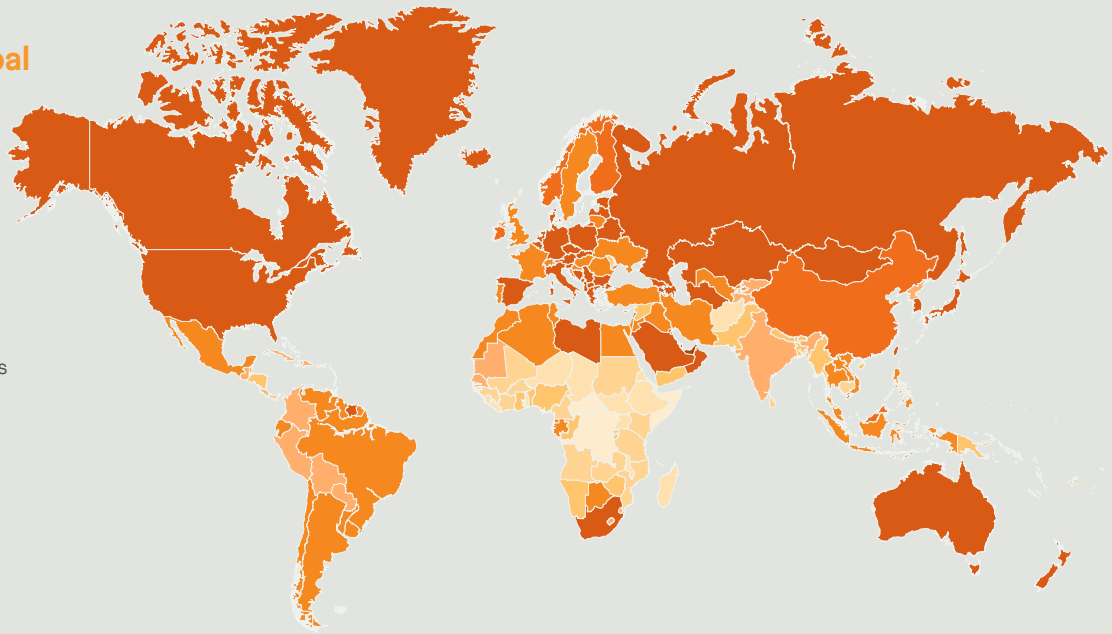
Rich industrial countries developed through the consumption of carbon. The US, the UK, the EU and China have accounted for over 60% of cumulative carbon emissions to date, with Africa having contributed only 3%.

GDP/capita vs. cumulative annual CO_2 emissions per capita



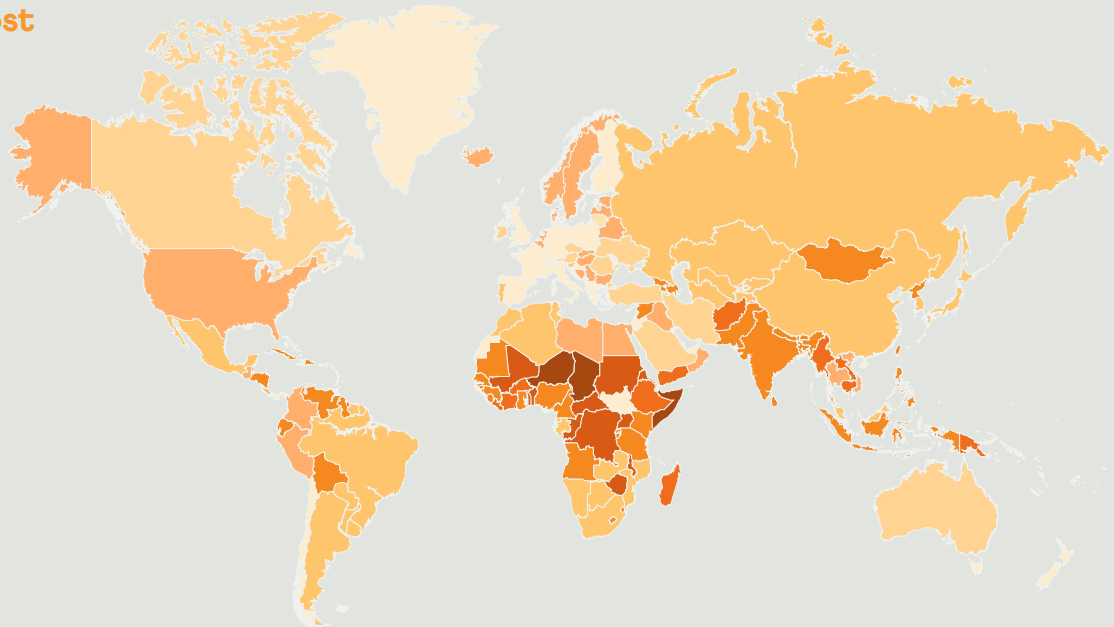
Source: Our World in Data, IMF.

Africa is by far the lowest global CO_2 emitter...



Source: Our World in Data, based on the Global Carbon Budget, 2023.

... and is the most vulnerable to climate change

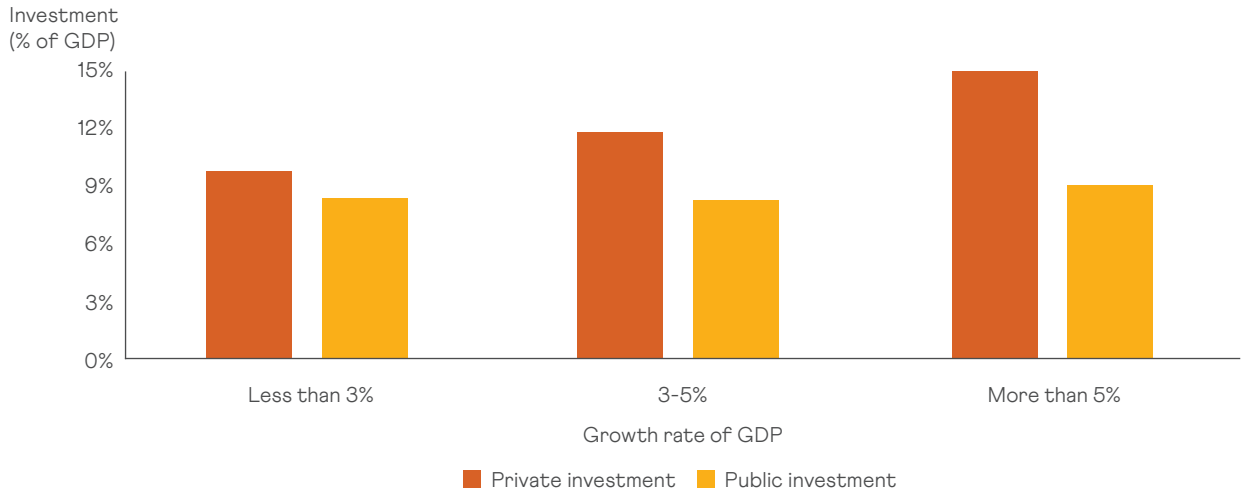


Source: Notre Dame Global Adaptation Initiative.

5 We believe that trade and private sector investment are essential for economic development.

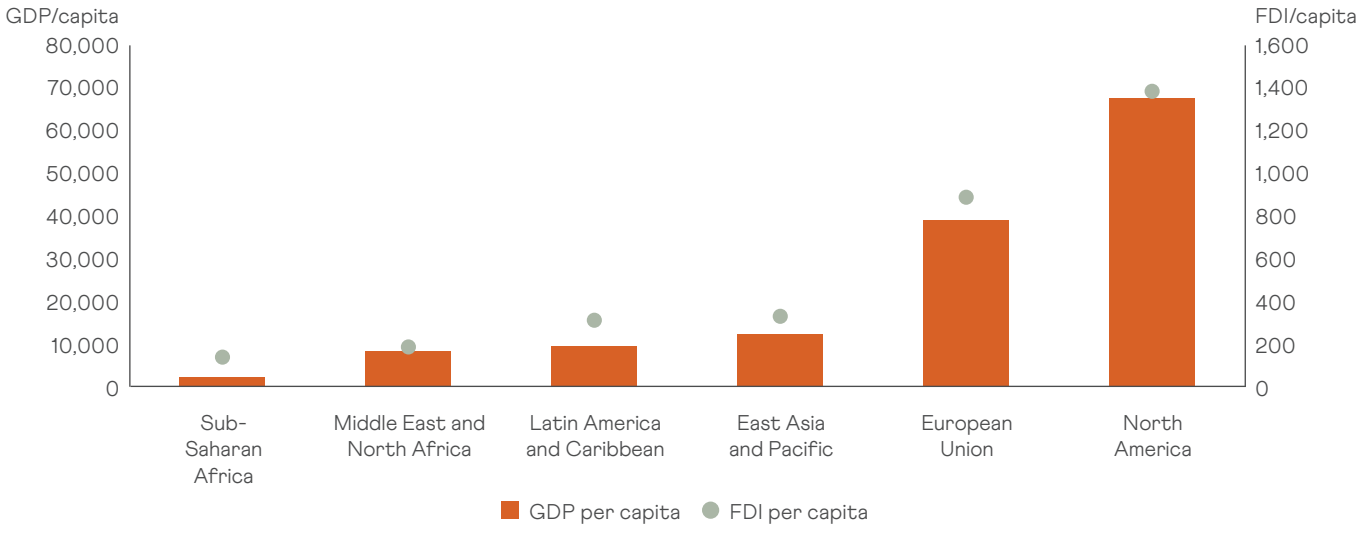
Private sector investment and trade, inter alia, stimulate economic growth, enhance the efficiency of resource allocation, facilitate technology transfer, create jobs, reduce poverty, generate government revenue and foster market integration and stability.

Investment and economic growth in selected developing countries



Source: IFC, Bouton and Sulinski, "Trends in Private Investment in Developing Countries," IFC Discussion Paper Number 41.

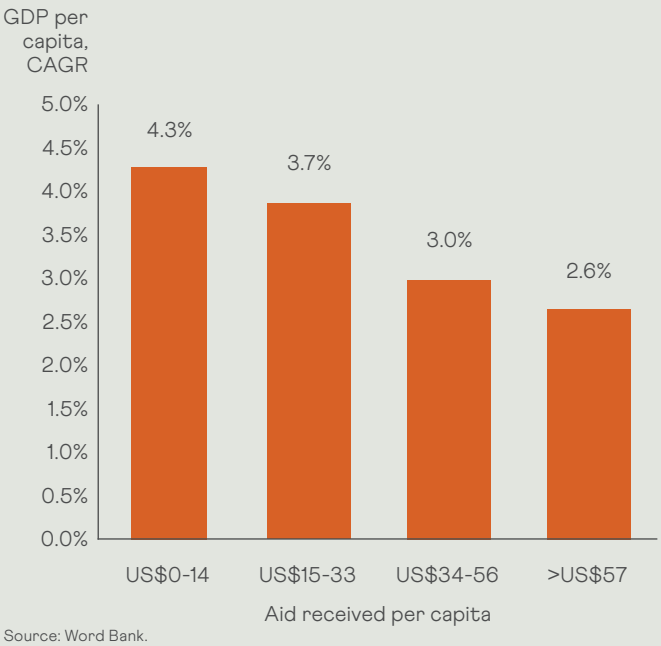
GDP per capita vs. Foreign Direct Investment ("FDI") per capita
(US$)



Source: World Bank.

In contrast, while potentially essential in times of real crisis, long-term aid programmes create dependency traps, crowd out private sector investment and are associated with the enablement of corruption.

Aid received vs. economic growth rates (2011-2021)[2]



Source: Word Bank.

> Give a person a fish, and you feed them for a day. Teach a person to fish, and you feed them for a lifetime."
>
> **Anonymous**

> There is nothing in the history of aid that suggests that aid promotes economic growth. Countries that have managed to sustain high rates of growth... have done through the free market[3]."
>
> **Baroness Dambisa Moyo**
> Developmental economist and author

> We cannot solve poverty without wealth creation. We cannot solve wealth creation without business, and we cannot create business without efficient and effective free markets[4]."
>
> **Baroness Dambisa Moyo**
> Developmental economist and author

DFIs' key products and services

Development Finance Institutions ("DFIs") provide key products and services to enable trade and private sector investment in the emerging and developing world and, in our view, are a necessary part of today's development solution.

Footnotes

1. Source: Gapminder.org.
2. Data is representative of the top 111 countries (with a population over 1 million) based on the amount of official aid received. Economic growth rates have been adjusted for inflation over the period.
3. Source: Interview with the Telegraph, 2013.
4. Source: Dead Aid: Why Aid is not working and how there is a better way for Africa.