



United Nations
Office of the Special Adviser
on Africa

Water and Energy in Africa: An History of Untapped Resources and Opportunities

To accelerate the achievement of the United Nations Sustainable Development Goals (2015-20230) and those of the African Union's Agenda 2063, https://www.uneca.org/eca-events/sites/default/files/eventdocumets/ARFSD2023_SDG_6_EN.pdf *The Africa Day* (19 July 2023) – a side event of the United Nations Economic and Social Commission (ECOSOC) High-Level Political Forum (10-19 July 2023) – will address the theme of " *Harnessing Water and Energy for Africa's Sustainable Industrialization and Inclusive Economic Transformation*" and will offer concrete recommendations to address challenges and opportunities.

The report by the United Nations Economic Commission for Africa on access to safe drinking water, sanitation, and [energy](#) paints a relatively bleak picture. Because of their inherent dryness, the numbers are often difficult to digest. However, on closer inspection, they can tell us a much more joyful story: the room for improvement is tangible and, above all, achievable. They show us a bright light – powered by renewable sources. - at the end of the tunnel.

What do these numbers tell us? In 2015, just over a third (36%) of Africa's population had access to safe drinking water. Five years later, this proportion increased slightly to 39% in 2020. In defense of this progress - which may seem minimal - it should be noted that it has been, in large part, absorbed by a 10% population growth, with Africa adding 134 million inhabitants over this period from 2015 to 2020. These figures also show us a huge gap between urban and rural populations. While nearly 60% of urban dwellers have access to drinking water, this proportion drops precipitously for villagers: only 22% have access to blue gold. To "leave no one behind" - as the slogan of the United Nations 2030 Agenda for Sustainable Development wants -, and to ensure access to safe drinking water for all, African countries, with the help of the international community, will have to intensify their efforts significantly. The room for maneuvering is there. It is just a matter of seizing the momentum.

Through its chosen theme, *The Africa Day* establishes a link between energy, industrialization, and water, three concepts that, at first glance, look disparate. A little explanation is required. In their preamble, the 17 Sustainable Development Goals of the United Nations define themselves as "indivisible and interconnected." Sanitation and water transport require energy, but water is a source of energy, especially in hydroelectric installations. Moreover, Africa's industrialization also requires reliable, low-cost, and, above all, renewable energy. The loop is, therefore, almost closed. A successful industry must be able to count on a skilled and healthy workforce. However, diseases caused by lack of access to safe drinking water or basic hygiene, such as cholera,

diarrhea, dysentery, hepatitis A, typhoid, and poliomyelitis, remain a major problem on the continent. According to [the World Health Organization](#), 842,000 people die yearly from diarrhea, including 361,000 children under 5. In addition to the unbearable human cost, the lack of access to safe drinking water and sanitation also adversely affects the economy. According to the [World Water Council](#), Africa loses 5% of its Gross Domestic Product each year due to the impact of water-borne diseases, amounting to US\$150 billion annually. The same report indicates that girls and women spend an average of three hours a day fetching water from distant wells, often depriving them of access to education or more productive activities. Better water means better health and a more economically productive population. A virtuous circle. The Sustainable Development Goals are closely linked and inseparable, but energy is the key factor at their core.

Energy: a huge potential to be exploited

Africa is home to 17% of the world's population but accounts for only 3.3% of global energy consumption, 1.1% of electricity generation, and 3% of global industrial energy consumption. The continent remains the least electrified region compared to other regions of the developing world. This energy "poverty" handicaps the prospects for industrialization and the mechanization of productive sectors, including value chains in agricultural sectors, and, ultimately, reinforces poverty, especially for women and rural populations. Transforming raw minerals, fossil fuels, or agricultural production into high-value-added finished products will require reliable energy in large quantities. To match the demands of this challenge, an annual investment of 120 billion will be necessary until 2040, which is four times the current investment in the energy sector. Regarding investments in the power generation sector, Africa currently accounts for 4% of global investments, most of the latter concentrated in a handful of countries across the continent.

In contrast, Africa enjoys a rich renewable energy potential, with almost unlimited solar, hydroelectric, wind, and geothermal energy sources. According to the [2021 Renewable Energy Report](#), Africa's installed hydropower capacity could reach 100 GW by 2030 compared to 55.2 GW in 2021, and hydropower potential is estimated at 1,750 GW, nearly 32 times the current reality! Wind and solar energy represent a potential of 20 GW, and all renewable energies combined (bio, geothermal, marine, and pumped storage) could produce 60 GW. In addition, Africa is home to 13% of the world's known natural gas reserves and 7% of oil resources. The potential is real and mostly untapped.

Africa is also fortunate to possess in its soil the rare metals essential for new technologies, especially for producing batteries for electric cars. This facilitated access to raw materials could contribute significantly to the continent's industrialization and help it make a technological leap towards advanced environmentally friendly technologies to make a smooth transition to an inclusive economy. With virtually unlimited access to renewable energy and rare metals, *The Africa Day* at the HLPF will propose concrete measures to make the most of these two comparative advantages and thus accelerate the continent's long-awaited industrialization, including through innovative financing mechanisms.

Africa Day 2023 in summary

The 2023 edition of *Africa Day* will focus on the seven African countries presenting their Voluntary National Reviews (VNRs): Burkina Faso, Central African Republic, Comoros, Democratic Republic of the Congo, Rwanda, Tanzania, and Zambia. That said, the overall theme of the High-Level Political Forum of " *Accelerating recovery from coronavirus disease (COVID-19) and full*

implementation of the 2030 Agenda for Sustainable Development at all levels" is relevant to the entire continent and its development partners. As part of the final sprint of the SDG Decade of Action 2020-2030 – a race against time that Africa and the international community must win – this year's HLPF will pay particular attention to Goal 6 (clean water and sanitation), Goal 7 (clean and affordable energy), Goal 9 (industry, innovation, and infrastructure), Goal 11 (sustainable cities and communities) and Goal 17 on partnerships for the goals.

In addition, HLPF 2023 prepares the groundwork for the 2023 SDG Summit – which will benefit from the participation of Heads of State and Governments and which will take place on 18-19 September 2023 at the United Nations Headquarters in New York – and for the High-Level Dialogue on Financing for Development, an initiative of the United Nations General Assembly to be held on 20 September 2023, also in New York.

The Africa Day, a side event of HLPF 2023, will be held in a virtual format in three distinct parts. The high-level opening segment will include welcoming remarks by a High Representative of Niger as the host country of the 9th African Regional Forum on Sustainable Development held in Niamey from 28 February to 2 March 2023, by the 78th President of ECOSOC, as well as a keynote address by the African Union Commissioner for Economic Development, trade, industry, and mining. This opening session will be followed by an interactive segment, engaging development partners with ministers and/or heads of delegations of countries presenting their voluntary reviews. As a reminder, the latter are Burkina Faso, the Central African Republic, the Comoros, the Democratic Republic of the Congo, Rwanda, Tanzania, and Zambia. This second part of the program will allow participants to share lessons learned and best practices from their experiences. In its third and final part, the event will conclude with an interactive session where a panel of experts will answer questions.

The digital version of the event's report will be available and accessible to the widest possible audience on the Office of the Special Adviser on Africa website. This report will summarize the discussions, present conclusions, and policy recommendations.