

Africa's resilience against climate change goes through renewable energy

Climate change and its consequences are affecting every corner of the world. And yet, it is the continent which least contributed to it that is paying one of the highest tolls: Africa. According to the [African Development Bank \(AFDB\)](#), seven of the 10 countries most exposed to climate change are African, while not a single state from the continent is ranked among the major global emitters.

Nowadays' global challenge is to keep the temperature growth within 1,5°C: nonetheless, managing to respect this threshold could be not enough for the African regions, which might undergo severe environmental consequences. According to an [analysis](#) conducted by the *United Nations*, a 2.0 °C warming level will be associated with a rainfall decrease of about 20% in Southern Africa, with a consequent growth of dry days and a shrink around 5-10% in the water volume of major basins, such as the Zambesi. Completely failing to implement appropriate mitigation measures could result in a 4°C temperature rise in the MENA region, which would see many of its cities becoming uninhabitable by 2100. Moreover, the average sea level increase of African coastline is already floating around 3-4 millimetres per year, which might expose to its consequences 108–116 million people by 2030, and cause the displacement of 85 million people, according to the [World Bank](#).

Africa's environmental vulnerability is amplified by low levels of socioeconomic growth but, at the same time, it represents one of the major factors that cause them. According to the [World Meteorological Organization \(WMO\)](#), extreme meteorological phenomena have the power of decreasing food security by 5-20% in regions belonging to Sub-Saharan Africa (with 281 million people being undernourished and an additional 5.9 million children becoming underweight in 51 countries, since 2016), while also causing the severe destabilisation of local markets both in terms of investments and production. Moreover, if timely measures are not taken, water-related impacts on agriculture, health and income could bring about a decline in the GDP of manifold countries; in the MENA region, it could shrink up as much as 6% by 2050.

These economic shocks have an impact on more complex and stratified macro-issues: insufficient access to quality education, higher unemployment rates, worsened long-term national and personal income, increased gender unevenness and marginalisation of young segments of the population. The data are clear: Africa's unemployment rate is 6.8%, compared to the world's average of 5%. All this, despite a huge reservoir of potential workforce, with 20 million people entering the working age every year, but just 2-3 million jobs being created yearly, according to the [last Flagship Publication](#), jointly worked by RES4Africa, [UNECA](#) and [IRENA](#).

This gap affects the most marginalised social categories which, especially in Africa, already suffer from unequal access to basic rights and opportunities: women and youth. For instance, just in the MENA region, 27% of young people and 45,07% of women were unemployed in 2017 and 2019, according to the findings of RES4Africa's [Connecting the Dots](#). Women and young people are also

particularly exposed to other indirect effects of climate change, such as the consequences of migration and displacement (gender-based violence, developmental issues, exploitation, etc.).

It is hence necessary not only to contrast the rise of the average global temperature, but also to build resilience and adaptability to climate change and its aftermaths. In this sense, a strong ally for Africa is represented by renewable energy. Let's talk numbers: renewables provide around 8.1 million job positions worldwide, with Africa accounting to just 2% of them. And yet, green energy is deemed to be a highly labour-intensive industry, considerably more than fossil fuels, and just taking into account the direct employment opportunities: for example, according to a [census](#) by *Powerforall*, direct RE sectoral employment in Nigeria is expected to boom more than 10-fold by 2022-23, offering around 52,000 jobs. If we consider job positions which are created indirectly, or stem from energy transition plans outlined by African governments, the numbers increase: in a 1.5 °C scenario, Africa would be able to generate, by 2050, around 8 million jobs in the REs industry, (RES4Africa's 2022 Flagship Publication).

In comparison, the fossil fuels industry generates, for every million-dollar spent, a third of the job positions created by the renewable energy sector, which can also bring about greater social resilience. REs solutions have the power to kickstart a positive multiplier effect, even greater for the case of off-grid solutions that can provide about 5 times ([Powerforall](#)) the jobs directly created with large-scaled energy projects, reaching also households and businesses in remote and/or rural areas. Renewables can also provide new opportunities to tackle gender inequality and promote youth involvement, since access to energy means new possibilities for entrepreneurial initiatives, safer urban and peri-urban environments, more rapid and cleaner cooking procedures, and so on.

Finally, renewable energy means more empowered local communities, thanks to its aforementioned decentralised nature, but also to widespread abundance and independence from major fluctuations in offer and demand, reducing Africa's reliance on imported energy and decreasing the probability of displacements and other social hazards.

In conclusion, renewable energy has the potential of being one of the most effective means to tackle the environmental effects of climate change, while neutralising the related socioeconomic issues and challenges. A systematic and well-planned deployment of sustainable energy sources is Africa's biggest chance to improve the living conditions of its population, doing so in a sustainable way and paving the road for a competitive and green future.



affordable electricity access, enabling job creation and socio-economic progress of all African businesses and societies.