

### REGIONAL PROJECT ON SUSTAINABLE ENERGY FOR THE SAHEL

**ENERGY4SAHEL** 

Regional Project for the 10 Sahel countries: Burkina Faso, Cameroon, Chad, Guinea, Mali, Mauritania, Niger, Nigeria, Senegal, The Gambia



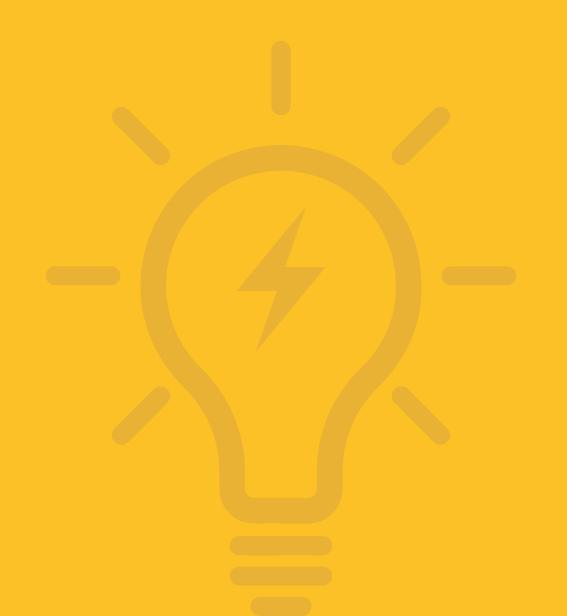
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**United Nations Development Programme** Sub-Regional Hub for West and Central Africa Point E, Complexe Citamil, Immeuble E Dakar - Senegal

## RATIONALE





Despite being endowed with a tremendous renewable energy potential, the Sahel is one of the world's regions with the highest energy poverty rates. It is estimated, that among the 342 million inhabitants of the 10 Sahel countries



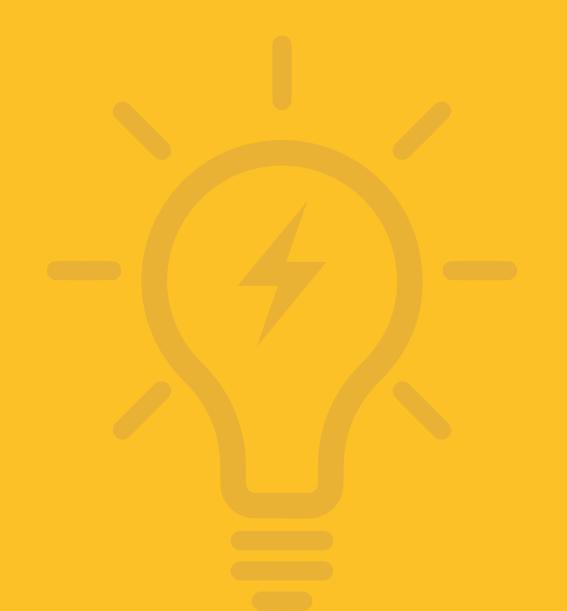
These numbers reveal that the Sahel stands in the middle of a fundamental energy crisis – a crisis that is tightly interlinked with the precarious humanitarian, governance, security, economic and environmental situation in the region. Particularly vulnerable to and affected by this crisis are the rural populations, as well as the increasing number of refugees and internally displaced people in the region. Lacking access to modern energy services further impairs their already difficult living conditions, as almost all prospects of sustainable development – jobs, health, education and even security, ultimately depend on energy.

Until today, the benefits of these positive interlinkages between access to clean energy services and the Sustainable Development Goals (SDGs) are far from being fully exploited. The reasons lie in various barriers including crisis-related challenges (e.g., volatile security situation) and more structural obstacles (e.g., unfavorable policy and regulatory framework, weak institutions's capacity, etc.). The current COVID-19 crisis places a further strain on the deployment of clean energy access solutions in the Sahel, limiting the capacity of public and private actors to invest in these capital- intensive technologies.



## **PROJECT OVERVIEW**





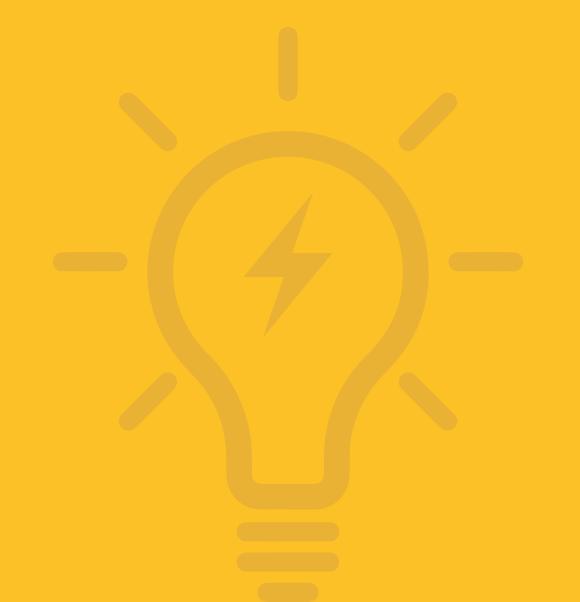
**Energy is one of the three core components of UNDP's programmatic offer for the Sahel region, besides Governance and Youth.** UNDP intends to complement and augment the various energy initiatives that are already being undertaken by national governments, regional organizations, finance institutions and development agencies in the Sahel. By collaborating with these institutions, and by leveraging its own network of Country Offices and UN partners, UNDP will provide a further impetus for the region's effort to push forward clean energy access for its populations as a driver for socio-economic development in a fragile post COVID-19 recovery context.

The UNDP Regional Project on Sustainable Energy for the Sahel (Energy4Sahel) will place particular emphasis on innovations and advanced concepts with potential for high impacts, especially those being developed by creative communities and young entrepreneurs from the region. The overall objective of the project is to trigger sustainable socioeconomic growth and poverty reduction through increased access to clean energy in the Sahel.

The strategy has a clear scope, focused on (1) off-grid renewable electrification and (2) clean cooking, as well as enabling activities related to these interventions. Based on the underlying paradigm that renewable energy should primarily contribute to productive use and income generating activities, as well as the provision of basic services such as health and education, UNDP will support governments develop policy and financial derisking instruments to mobilize public and private funding for energy access projects at scale. Tailored innovative technologies and business models for off-grid electrification and clean cooking solutions will be demonstrated and deployed through an integrated approach to low carbon development in vulnerable communities.

## PROJECT PERIOD AND GEOGRAPHICAL SCOPE





Over the 5-year project period,technical assistance and investment will be channeled through regional and national level interventions to the 10 countries targeted by the project: Burkina Faso, Cameroon, Chad, The Gambia, Guinea, Mali, Mauritania, Niger, Nigeria and Senegal. As such, this project will constitute a sub-regional operationalization of UNDP's scaled-up offer on energy – the Sustainable Energy Hub – currently being rolled out at global level.



Geographic coverage of UNISS and this project

The lifespan of the Energy4Sahel Project is

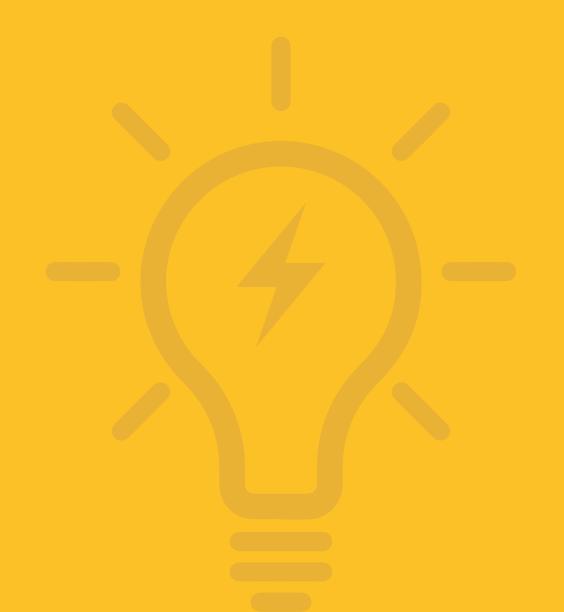


with a project period covering

01 January 2022 - 31 December 2026

# **KEY OUTCOMES**







#### Outcome 1

Enhanced enabling environment for the deployment of clean energy access solutions



#### Outcome 2

Improved public services through accelerated access to sustainable energy in vulnerable communities



#### Outcome 3

Increased socio-economic development in rural areas through access to green productive use of energy and the promotion of the ecovillage model

#### Outcome 4

Priority communities in the Sahel have an increased access to clean cooking fuels and technologies



**Outcome 1: Enhanced enabling environment for the deployment of clean energy access solutions:** Through this component UNDP will contribute to the improvement of the enabling conditions for investments in sustainable energy in the Sahel, specifically by delivering four main outputs. First, inclusive platforms will be created or strengthened to increase partnerships and stakeholders' coordination on off-grid electrification and clean cooking in the Sahel, thus promoting co-created and more impactful interventions. A number of in-depth diagnosis and market analysis will also be conducted on both off-grid electrification and clean cooking to identify the optimal basket of policy and financial derisking instruments to be recommended to the governments, and support will be provided – leveraging on the above-mentioned stakeholders' platforms – to the governments to enforce and implement these measures. The third output will support innovation, entrepreneurship and skills building in the clean energy access sector. Finally, governmental institutions will be enabled to access and manage reliable and up-to-date data on rural electrification to support their planning and policy design.



**Outcome 2: Improved public services through accelerated access to sustainable energy in vulnerable communities:** Through this component, the project will provide direct and sustainable access to clean energy services to a critical mass of target vulnerable communities, with an objective to trigger a ripple-effect and demonstrate a scaled-up approach that can be further replicated to benefit other communities in the Sahel. With an objective to complement existing interventions by other actors and implement the principle of Leave No One Behind, the project will target in this outcome the improvement of public services related to health and education primarily in the most vulnerable communities) with the mandate to provide these services will be closely involved and strengthened through the project. To the extent possible, the private sector will also be associated to these activities, for instance through innovative PPP schemes, building on existing models developed by UNDP (e.g. Solar4Health).



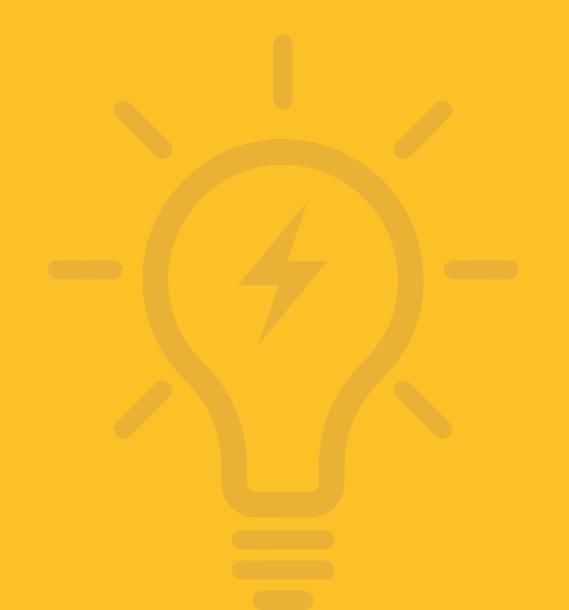
Outcome 3: Increased socio-economic development in rural areas through access to green productive use of energy and the promotion of the ecovillage model: This outcome will look particularly at "green productive use" opportunities offered by clean energy, i.e. solutions enabled by renewable energy that have the potential to increase economic productivity and generate income and jobs in rural areas. The project will promote a range of approaches such as renewable energy mini-grids in Sahelian villages when feasible (leveraging on the Africa Minigrids Program implemented by UNDP), and stand-alone renewable energy solutions to improve rural value chains in particular for agricultural activities. The project will also transcend the idea of productive use into a broader development vision: renewable-energy powered Ecovillages, as well as the creation of prototypes of agro-industrial production clusters, so-called Green Economic Hubs.



**Outcome 4: Priority communities in the Sahel have an increased access to clean cooking fuels and technologies:** This outcome will aim at improving access to clean cooking for the population in the Sahel, building on Outcome 1 (enabling environment) and following a private sector-based approach, where particularly local entrepreneurs will be encouraged to develop and disseminate clean cooking technologies at scale. Due to the very context-specific and diverse nature of the clean cooking sector and its related business structures, the technologies as well as business models and dissemination strategies will be adapted to the local features of consumer behavior and fuel availability. Baseline and market assessments will be conducted, and lessons learned from previous clean cooking projects in the region analyzed (through South-South exchange), in order to inform the development of public private partnership (PPP) programs specifically tailored to the support of local clean cooking companies and manufacturers in the Sahel.

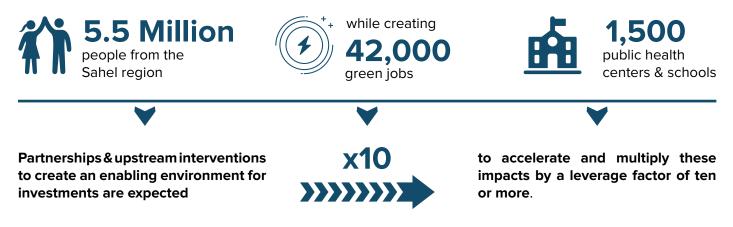
# **EXPECTED IMPACTS**







Overall, the Energy4Sahel project is expected to provide clean energy services to:







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