



# Ghana Energy Development and Access Program: Electricity Sector Reform and Extension

## Strengthening the capacities of the utilities and supporting the electricity distribution network to contribute to economic development and poverty reduction in Ghana

At the start of the program, about one-third of households nationwide did not yet have access to electricity. The Ghana Energy Development and Access Program (GEDAP III), funded by SECO through its Ghana Electricity Sector Support Project (GESSP), contributes to closing this gap. The program aims – in partnership with the Government of Ghana (GoG) and other stakeholders – to support the institutional strengthening of Ghana's electricity distribution utilities, finance the intensification of the electricity distribution network, demonstrate the feasibility of renewable energy through constructing three mini grids, and build capacities within the Ministry of Energy. Mini-grids can generate, distribute and store energy without being connected to the main grid and are therefore a preferred means to provide electrification to rural areas.

### Rationale

Only about two thirds of households nationwide have access to electricity, and urban growth is triggering a steep increase in electricity demand, putting additional pressure on the electric grid. The challenge of climate change additionally calls for innovative ways of generating energy by distancing itself from the traditional fossil fuels energy supplies. In view of these challenges, it is necessary to increase the sustainable electricity generation capacity in Ghana and to reinforce as well as extend the reach of the electricity distribution network. The GoG has shown commitment towards improving the electricity sector and imposed key structural reforms such as the unbundling of electricity generation from transmission and distribution services. It has set as an objective to improve the efficiency of the national power distribution system and to increase access to electricity in general.

This program supports Ghana's efforts to provide broader access to electricity. It does so by financing the extension of the electricity distribution network and by strengthening the managerial, commercial and technical capacities of the main actors in the public sector. The program also promotes energy efficiency and the development of renewable energy. The GESSP, SECO's contribution to the GEDAP III, is a continuation of Switzerland's support to the electricity sector in Ghana, which started in 2007, notably in consideration of the positive results achieved by the program so far.

Country/region

Ghana

Executing agency

Government of Ghana

Duration

2014 - 2023

Total budget

USD 514'400'000

SECO contribution

USD 21'000'000



## Objectives and activities

The program aims to maximise the number of people accessing electricity by financing the extension of the electricity distribution grid through targeted investments in infrastructure and policy dialogue. GEDAP III also intends to promote renewable energies and energy efficiency. The overall intended impact of the program is to promote sustainable economic development and reduce poverty.

Specifically, SECO's GESSP follows the same overall objectives as GEDAP III and is structured along the following three components:

1. **Improve the operations and financial situation of two electricity distribution companies:** improve billing and cashing systems of the Electricity Company of Ghana (ECG) and the Northern Electricity Distribution Company (NEDCo) through corporate development measures. Improve customer services, and prepare a technical and commercial loss study. NEDCo for example captured geographic data and developed an Enterprise Geographic Information System (eGIS) further improving its billing systems.
2. **Increase overall access to electricity:** finance and install new distribution equipment for the intensification of ECG and NEDCo grids in order to provide access to electricity to approximately 55'000 people in Ghana.
3. **Larger utilisation of renewable energy and energy efficient technologies:** pilot demonstration projects, including solar photovoltaic powered mini-grids, employing renewable energy technologies, early stage studies for renewable energy projects, and awareness raising on energy efficiency and use of more energy efficient technologies.

The Project Council, which includes the Embassy of Switzerland in Ghana and the Government of Ghana (Ministry of Energy), organises annual meetings involving all program partners (coordinator of GEDAP Secretariat, representatives from ECG, NEDCo, Renewable Energy Directory) to exchange and provide specific strategic steering to the program.

## Achievements

- Grid intensification project in Eastern Region for ECG has been completed. 11,419 households were newly connected to the grid, comparing to an original target of 7400.
- Successful piloting of a Strategic Business Unit for improving operational and financial efficiency of ECG in Ashanti. The SBU concept is set to be replicated throughout Ghana in the future.
- Completed feasibility study on the use of biomass for power production.
- Construction of three (3) solar – powered mini grids has begun and will provide electricity for inhabitants living on islands along the Volta Lake.
- Grid investment into the electricity network of NEDCo is ongoing. NEPLAN software to enhance the planning and operations of NEDCo has also been purchased. Capacity building of NEDCo staff was successful and has led to a reduction of the number of external consultants.
- Approval of additional financing to fund the replacement of old batteries with longer-lasting batteries for five (5) existing mini grids.

## Further information and contact details

At SECO: [info.wein.cooperation@seco.admin.ch](mailto:info.wein.cooperation@seco.admin.ch)

At the Swiss Embassy in Accra: [accra.economicsection@eda.admin.ch](mailto:accra.economicsection@eda.admin.ch)