



## **PRESIDENTIAL INITIATIVE**

ON CLIMATE CHANGE, RENEWABLE  
ENERGY & FOOD SECURITY



## **SIERRA LEONE**

# **8 MW DODO - GOMA HYDROELECTRIC POWER**

## **PROJECT BACKGROUND**

### **Context and history**

Sierra Leone's energy transition is driven by the need to expand electricity access, which is currently only 28%, and diversify its energy mix. The regulatory environment, guided by the Electricity Act of 2011 and the National Renewable Energy Policy, is designed to foster private sector investment in renewables and boost energy generation. Hydropower plays a crucial role in the country's energy strategy, providing about 60% of the electricity mix.

Regulatory bodies like the Electricity and Water Regulatory Commission (EWRC) and the Sierra Leone Electricity and Water Authority (SLEWRC) oversee energy development, facilitating the integration of renewable energy sources. Hydropower is viewed as a key contributor to the national goal of increasing access to affordable and sustainable energy, and it aligns with the country's climate action plans under its Nationally Determined Contributions (NDCs). This creates a favourable context for new large-scale hydropower projects, which aim to enhance energy security and reliability while supporting Sierra Leone's broader development agenda.

### **Project objectives**

The Dodo/Goma Hydroelectric Power Plant, located in Simbaru/Dodo Chiefdom in Eastern Province, Sierra Leone, was originally commissioned in 1986 with a capacity of 4 megawatts (MW) and expanded to 6 MW in 2007. The plant is a crucial contributor to Sierra Leone's national energy grid, connected via a 127 kilometre (km) transmission line that links Bo and Kenema. Generating approximately 12.66 gigawatt hours (GWh) annually, the Dodo plant is set for an upgrade to 8 MW.

This will increase its generation capacity to 29.1 GWh per year, enhancing its contribution to the country's renewable energy mix. Sierra Leone's renewable energy framework, supported by policies like the National Energy Policy and the Renewable Energy Act, emphasises the role of hydropower in achieving energy security and reducing dependence on fossil fuels. These policies offer incentives such as tax breaks and subsidies to stimulate investment in renewable energy projects, particularly hydropower. As part of the country's energy transition strategy and in alignment with its Nationally Determined Contributions (NDCs), which aim to reduce greenhouse gas emissions by 25-30% by 2030, the Dodo plant plays a significant role in achieving these goals through clean, sustainable energy generation.

## Contribution towards Sustainable Development Goals (SDGs)

The Dodo/Goma Hydroelectric Power Plant aligns with several Sustainable Development Goals (SDGs), primarily enhancing Sierra Leone's renewable energy capacity in line with SDG 7 (Affordable and Clean Energy). By increasing the share of renewable energy in the national grid, the project promotes energy access and security.

Its infrastructure improvements contribute to SDG 7.3 (Energy Efficiency), maximising energy output while minimising losses. Additionally, by reducing reliance on fossil fuels, the project supports SDG 13 (Climate Action), aiding Sierra Leone in its commitment to lowering greenhouse gas emissions.

The initiative also fosters SDG 9 (Industry, Innovation and Infrastructure) by bolstering local infrastructure, which is vital for industrial growth. Moreover, the provision of reliable electricity enhances access to essential services, supporting SDG 6 (Clean Water and Sanitation) and SDG 3 (Good Health and Well-being). Employment opportunities created during the construction and operational phases will further contribute to economic growth, aligning with SDG 8 (Decent Work and Economic Growth). Overall, the Dodo/Goma Hydroelectric Power Plant serves as a key driver for sustainable development across multiple SDGs, transforming the socio-economic landscape of Sierra Leone.

## 1. PROJECT PROFILE

|                                  |                                                                                          |
|----------------------------------|------------------------------------------------------------------------------------------|
| <b>Project name</b>              | Dodo/Goma hydroelectric power station                                                    |
| <b>Project location</b>          | Sierra Leone                                                                             |
| <b>Technology</b>                | Hydropower                                                                               |
| <b>Project ownership</b>         | Public-private joint venture                                                             |
| <b>Total capacity installed</b>  | 8 MW (10 MW) on a turnkey basis, plus a 33 kilovolt sub-transmission line of about 58 km |
| <b>Total project cost</b>        | USD 30 million (United States dollars)                                                   |
| <b>Type of funding requested</b> | Debt: USD 21 million<br>Equity: USD 6 million                                            |

## 2. PROJECT PROPONENT

|                                                     |                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name of proponent</b>                            | Electricity Generation and Transmission Company (EGTC)                                                                                                                                                                                                                                                                                                                    |
| <b>Establishment year</b>                           | 1 January 2015                                                                                                                                                                                                                                                                                                                                                            |
| <b>Country of the entity</b>                        | Sierra Leone                                                                                                                                                                                                                                                                                                                                                              |
| <b>Relevant project development record and team</b> | The Electricity Generation and Transmission Company (EGTC) was created in 2011 through the Sierra Leone National Electricity Act and started operations on 1 January 2015. EGTC has an organogram with a governance structure that includes a highly trained, skilled and diverse team of professionals with extensive experience in their particular disciplines. EGTC's |

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Hydropower Department is functional and headed by a directorate supervising the operations of all government-owned hydroelectric power plants in the country. EGTC has previously collaborated with the supervising Ministry of Energy in the implementation of projects related to generation and transmission.

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