

Africa-EU Renewable Energy Cooperation Programme

Creating opportunities for renewable energy



Fact File

SUPPORT TO THE IMPLEMENTATION OF THE RENEWABLE ENERGY LAW SENEGAL

Background

The project consisted of helping the Government of Senegal implement the Renewable Energy Law ('the Law'), which is a key component for achieving the vision that the Government of Senegal has established for the electricity sector in Senegal. At the time of the Project's inception, Senegal's power sector had been suffering from major crises for years. Power shortages were frequent, due to a lack of investment in new capacity and difficulties in maintaining installed capacity. Electricity production was expensive, due to the high cost of rental diesel power plants and peaking plants used for satisfying electricity demand. The rate of energy independence (excluding biomass) was estimated at between 1 and 3% only, and more than 90% of electricity was produced using fossil fuels.

The Government of Senegal established a vision for the electricity sector to have "electric power that is available in both quantity and quality, that is competitive, and produced from a diversity of technologies including coal, gas, hydropower, wind power, and solar power".¹ As a step to realize this vision, the Government passed the Renewable Energy Law and two implementing decrees in 2011. The Law and decrees define the regulatory framework for the production and sale of renewable power from independent power producers and auto-producers. However, by end 2012, neither of the decrees had fully been implemented.

Objectives

The specific objective of the Project was to support the Government of Senegal in the implementation of the Senegalese Renewable Energy Law, through the development of:

- » energy scenarios highlighting the potential contribution of renewable energy to the mix under different assumptions
- » appropriate renewable energy tariff structure and calculation of tariff levels for independent power producers and auto-producers
- » enhanced capacity of the regulator CRSE for future iteration of scenarios and assessment, monitoring, and adaptation of appropriate tariffs schemes for renewable energy
- » model power purchase agreements
- » enhanced capacity to undertake calls for tenders specified in the Renewable Energy Law.

The overall objective of the assignment was to increase the use of grid-connected renewable energy in Senegal, and thereby contribute to:



PROJECT OVERVIEW

Country	Senegal
Project partners	Ministry of Energy & Energy Sector Regulatory Commission (CRSE)
Term	December 2012 – April 2014

- » increased and more reliable power supply on the network
- » decreased vulnerability to price volatility of conventional power generation
- » a medium-term increase in access to energy services and socio-economic development.

Activities

The activities conducted were as follows:

- » **Project initiation:** Consultation with a wide range of stakeholders through interviews and the implementation of an Initial Workshop in April 2013, preparation of an Initial Report that summarizes the situation of the sector and the approach for completing the Project.
- » **Preparation of energy scenarios:** Preparation of a model to analyze energy scenarios, implementation of a workshop to discuss the results of the analysis, and preparation of a report presenting the results.
- » **Preparation of tools for implementing the Renewable Energy Law:** These tools included a methodology for setting and reviewing ceiling tariffs for independent power producers and tariffs for auto-producers, as well as tender procedures, and model power purchase agreements for renewable energy.
- » **Training on tools and finalization of tools:** During a training workshop held with key project stakeholders (including the CRSE, the Ministry of Energy, and the electric utility) in November 2013 and February 2014, the project team presented, trained on and finalized the tools.
- » **Project conclusion:** Implementation of a Final Workshop in February 2014 (gathering approximately 50 sector stakeholders), and preparation of a Final Report.

¹) Ministry of Energy (October 2012). Lettre de Politiaue du Développement du Secteur de l'Énergie. p.14.



Results

Outputs:

- » energy scenarios model and analysis
- » tender processes describing the different steps of the process and responsibilities for each step
- » methodology for setting and revising ceiling tariffs for independent power producers, and tariffs for auto-producers
- » model power purchase agreements, and training on standard offer contracts for purchase of surplus power from auto-producers.

Outcome: an improved Government capacity to implement the Renewable Energy Law, including a better understanding of what is needed, how to do it, and who is responsible for what long-term effects: increase in grid-connected renewable energy (including both independent power producers and auto-producers).

The way forward

Proposed actions to be taken forward for the further implementation of the Renewable Energy Law:

- » **Implement a first renewable energy tender** – the Government can implement the first tender using the tender procedures and model power purchase agreements developed. This could start with a well-defined and well-structured tender for a limited capacity.

- » **Implement a program for the purchase of surplus power from auto-producers** – this would involve defining the scale of the program, determining the eligibility criteria, rules, and conditions, developing a standard offer contract, as well as developing capacity for installing, maintaining, and financing small-scale renewable energy systems at the national level.
- » **Define a grid integration strategy for renewable energy** – this would require completing grid stability studies, preparing a site map, defining a limit on the share of renewable energy capacity that can be integrated on the grid, developing a sector plan that integrates the defined limit, and preparing a grid code.
- » **Establish an institutional framework to support the implementation of the Renewable Energy Law** – by institutionalizing the Steering Committee that was established in the context of this Project, defining objectives for cooperation in the energy sector and coordination with donors, and evaluating technical assistance and capacity reinforcement needs.
- » **Establish accompanying measures to support renewable energy development** – such as a national support system for renewable energy, processes to ensure the full use of available public and private financial instruments, and sharing knowledge on good practices for renewable energy.

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