# **Evaluation Summary**

## Secondary Cities Project

### Country: Burkina Faso

Sector: Energy

Evaluator: **Nodalis** Date of the evaluation: **November 2020** 

#### Key data on AFD's support

Projet numbers: CBF 3031

Amount: €32 million

Disbursement rate: 100%

Signature of financing agreement: 23 November 2010

Completion date: 15 July 2017

Total duration: 7 years

#### Context

In 2009, the rate of access to electricity in Burkina Faso stood at around 13%, well below the average of the ECOWAS countries (19%). The country's energy mix was highly dependent on thermal energy. The country then embarked on a proactive policy to improve access to energy services through a programme of affordable rural electrification and to develop its national high (90kV) and medium (33kV) voltage grid to reduce decentralised thermal power generation. Through project CBF3031, AFD supported this strategy, alongside the World Bank and BOAD, who financed other 33kV lines.

#### Actors and operating method

The contracting authority for the project was the national electric utility, SONABEL. The project was financed via a non-sovereign concessional loan to SONABEL. Given SONABEL's deteriorating financial situation following the rise in hydrocarbon prices, disbursements were suspended in 2012 and only resumed once a sovereign guarantee had been put in place mid-2015.

SONABEL itself financed the project component involving social compensation for people affected by the project.



#### Objectives

The project's overarching goal was to contribute to the Burkinabe policy of extending access to energy services for the population at a lower cost. The project's specific objectives were:

- Reduce SONABEL's operating costs
- Contribute to building up a 33kV target network so as to deliver reliable and broader access to electric power particularly for rural communities
- Provide communities with electricity services and more resource-efficient and cleaner energy

#### **Expected outputs**

- 90kV line Ouagadougou-Ouahigouya (170km)
- 33kV line Kaya-Dori
- 33kV line Kongoussi-Djibo
- Extension and densification of distribution networks at Ouahigouya, Gourcy, Yako, Séguénéga, Dori and Djibo
- Electrification of several localities: Pissila, Tougouri, Yalgo, Bani, Bourzanga and Namsiguia
- Implementation of the Environmental and Social Management Plan
- Support for a subsidised connection campaign
- Development of a pilot solar project and capacitybuilding

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#### Performance assessment

#### Relevance

The project's intervention logic was consistent with the sectoral strategy and the needs of SONABEL and the beneficiary populations.

Given the debates within the Burkinabe electricity sector, at the time of project appraisal, on the advantages of solar power, the development of pilot solar PV plants had relevance on paper. However, the delay in implementing this project and the progress made by the Zagtouli solar plant project obviated the usefulness of this component, which was logically cancelled.

#### Effectiveness

All the planned transmission and distribution works were completed. The 90kV Ouagadougou-Ouahigouya interconnection line provides a more efficient connection between the country's third largest city and the interconnected national network, while the 33kV lines completed the target network. Coupled with the extension and creation of distribution networks in 12 localities, these outcomes have made it possible to extend electricity access for these communities.

The subsidised connection campaign was successfully deployed. The project enabled the connection of 22,450 new subscribers, including 14,165 subsidised subscribers representing 63% of the total.

#### Efficiency

The budget and deadlines for completing the connection works were on the whole respected. The allotment of the works, the competence of the experts from the engineering consultancy and the companies' overall level of performance were key factors for carrying out the project. It should be noted that the assistance to the contracting authority was a little under-sized and that there is a need to strengthen SONABEL's capacities and resources in the areas of planning and monitoring–evaluation.

#### Impact

The project successfully extended more reliable access to electric power for the population, as is shown by the accelerating rate of connections in the post-project period. The project created new local economic dynamics and facilitated the hosting of internally displaced people by reinforcing the feeling of security and the opportunities for economic activities. With this new infrastructure, SONABEL was able to dramatically reduce generation in isolated thermal power plants by substitution with lower-carbon electricity from the interconnected national grid, which enabled the utility to reduce its operating costs. It was noted that the power plants that had accounted for over 3% of SONABEL's operating costs before 2017, represented only 0.08% of these in 2019.

#### Sustainability

The built infrastructure delivered satisfaction and helped to sustainably improve the beneficiary communities' access to energy. Vigilance is nonetheless required with respect to the issue of the collapse of pylons constructed by the project and lessons should be drawn from this for future projects and for the sizing of works in relation to the planning.

#### Added value of AFD's contribution

The AFD-funded project was complementary to the World Bank and BOAD interventions to support the development of the 33KV target network, even though there was no operational coordination between the projects of the three institutions. AFD's added value lies in its longstanding and trusting relationship with SONABEL, which enables problems to be solved pragmatically.

#### Conclusions and lessons learnt

The CBF3031 project, Secondary Cities, achieved its main objective, i.e. "contribute to the Burkinabe policy for the extension at a lower cost of the population's access to energy services". In addition to improving the access and quality of the service in an area impacted by the Sahelian crisis, the project also helped to reduce SONABEL's operating costs.

Beyond this success, the evaluation makes it possible to identify areas of progress for similar SONABEL projects in the future with respect to: monitoring environmental and social measures, sizing the assistance to the contracting authority and the team in charge of project monitoring, and strengthening the capacities and resources for studies and planning.

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Analysis of the subsidised connections campaign concludes that, to ensure better targeting of "vulnerable" populations, it is advisable to specify the target population and implementation conditions right from the project definition phase. In particular, it may be efficient to plan for connections to be made either simultaneously or at the time distribution networks are being built in the localities concerned, under the supervision of the same entrepreneur.

