



## Niger Solar Electricity Access Project (NESAP) (P160170)

AFRICA | Niger | Energy & Extractives Global Practice |  
IBRD/IDA | Investment Project Financing | FY 2017 | Seq No: 6 | ARCHIVED on 31-Mar-2020 | ISR40941 |

Implementing Agencies: Government of the Republic of Niger, Société Nigerienne d'Electricité (NIGELEC), Ministère de l'Energie du Niger, Agence Nigérienne pour la Promotion de l'Électrification Rurale (ANPER), Centre National d'Énergie Solaire (CNES), Direction Générale des Opérations Financières et des Réformes (DGOFR) - Ministry of Finance

### Key Dates

#### Key Project Dates

Bank Approval Date: 07-Jun-2017

Effectiveness Date: 01-Dec-2017

Planned Mid Term Review Date: 20-Jan-2020

Actual Mid-Term Review Date: 20-Jan-2020

Original Closing Date: 31-Jan-2024

Revised Closing Date: 31-Jan-2024

### Project Development Objectives

Project Development Objective (from Project Appraisal Document)

The objective of the project is to increase access to electricity through solar energy in rural and peri-urban areas of the Republic of Niger.

Has the Project Development Objective been changed since Board Approval of the Project Objective?

No

### Components Table

Name

Component 1:Market Development of Stand-alone Solar Systems:(Cost \$7.00 M)

Component 2: Rural Electrification through Service-based Solar Hybrid Mini-grids:(Cost \$10.00 M)

Component 3: Solar PV Hybridization of Isolated Thermal Mini-grids and Expansion of Access:(Cost \$25.00 M)

Component 4: Implementation Support and Technical Assistance:(Cost \$7.89 M)

### Overall Ratings

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	<span style="color: #ffc000;">□</span> Moderately Satisfactory	<span style="color: #ffc000;">□</span> Moderately Satisfactory
Overall Implementation Progress (IP)	<span style="color: #ff0000;">□</span> Moderately Unsatisfactory	<span style="color: #ffc000;">□</span> Moderately Satisfactory
Overall Risk Rating	<span style="color: #ff0000;">□</span> High	<span style="color: #ff0000;">□</span> High

### Implementation Status and Key Decisions

The findings below are based on the Bank's mid-term review mission from January 20-31, 2020. Overall, the implementation progress is considered to be moderately satisfactory due to the progress made under Components 2 (Rural Electrification through Service-based Solar Hybrid Mini-grids) and 3 (Solar PV Hybridization of Isolated Thermal Mini-grids and Expansion of Access).

**Component 1. Market Development of Stand-alone Solar Systems.** The Line of Credit is operational and the participating financing institutions were able to disburse 755 M FCFA to date with new loan requests being analyzed. The communication campaign has been launched and is



expected to increase the demand for the high-quality solar kits through better population awareness. Technical Assistance is being provided to both participating financial institutions and participating firms. The Bank team will continue to monitor closely the support activities such as TA to financial institutions, the communication campaign and more targeted support to solar companies.

**Component 2. Rural Electrification through Service-based Solar Hybrid Mini-grids.** The expected date for the contract award for mini-grid operators is the end of June 2020.

**Component 3. Solar PV Hybridization of Isolated Thermal Mini-grids and Expansion of Access.** The award of contracts for hybridization of existing diesel powered min-grids is expected by end March 2020.

## Risks

### Systematic Operations Risk-rating Tool

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	Substantial	Substantial	Substantial
Macroeconomic	Substantial	Substantial	High
Sector Strategies and Policies	Substantial	Substantial	Substantial
Technical Design of Project or Program	High	High	High
Institutional Capacity for Implementation and Sustainability	High	High	High
Fiduciary	High	High	High
Environment and Social	Moderate	Moderate	Moderate
Stakeholders	Moderate	Moderate	Moderate
Other	Low	Low	Low
Overall	High	High	High

## Results

### PDO Indicators by Objectives / Outcomes

To increase access to electricity through solar energy in rural and peri-urban areas of Niger				
► People provided with new or improved electricity service (Corporate Results Indicator) (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	16,114.00	399,000.00
Date	31-Mar-2017	31-Oct-2019	23-Mar-2020	31-Jan-2024



□of which females (percentage) (Percentage, Custom Supplement)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	50.00	50.00

To increase access to electricity through solar energy in rural and peri-urban areas of Niger				
▶ Generation capacity of energy constructed or rehabilitated (Corporate Results Indicator) (Megawatt, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	9.50
Date	31-Mar-2017	31-Oct-2019	23-Mar-2020	31-Jan-2024

### Intermediate Results Indicators by Components

Component 1:Market Development of Stand-alone Solar Systems				
▶ Number of Lighting Africa-certified solar products sold (Component 1) (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	2,030.00	100,000.00
Date	31-Mar-2017	31-Oct-2019	23-Mar-2020	31-Jan-2024
▶ People provided with electricity access from solar standalone systems (Component 1) (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	16,114.00	300,000.00
Date	31-Mar-2017	31-Oct-2019	23-Mar-2020	31-Jan-2024
▶ Number of solar companies financed by the Project (Component 1) (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	4.00	10.00
Date	31-Mar-2017	31-Oct-2019	23-Mar-2020	31-Jan-2024
▶ Number of farmers acquiring solar pumps through solar companies financed by the Project (Component 1) (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target



Value	0.00	0.00	55.00	1,000.00
Date	31-Mar-2017	31-Oct-2019	23-Mar-2020	31-Jan-2024
<b>► Volume of Project Funding: Line of Credit - Solar Energy Sector (Households and Enterprises) (Component 1) (Amount(USD), Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	500,000.00	1,018,509.00	7,000,000.00
Date	31-Mar-2017	31-Oct-2019	23-Mar-2020	31-Jan-2024

<b>Component 2: Rural Electrification through Service-based Solar Hybrid Mini-grids</b>				
<b>► Number of households provided with electricity access from new solar mini-grid systems (Component 2) (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	6,000.00
Date	31-Mar-2017	31-Oct-2019	23-Mar-2020	31-Jan-2024
<b>□ of which women headed households (percentage) (Percentage, Custom Supplement)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	16.00
<b>► Annual electricity output from renewable energy (Component 2) (MWh/year, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	3,300.00
Date	31-Mar-2017	31-Oct-2019	23-Mar-2020	31-Jan-2024
<b>► Number of Private operators managing solar mini-grids in rural areas (Component 2) (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	10.00
Date	31-Mar-2017	31-Oct-2019	23-Mar-2020	31-Jan-2024
<b>□ of which percentage of women workers of the operators (percentage) (Percentage, Custom Supplement)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	15.00



Component 3: Solar PV Hybridization of Isolated Thermal Mini-grids and Expansion of Access				
<b>▶ Households provided with new electricity access from solar hybridization of existing NIGELEC mini-grids (Component 3) (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	7,500.00
Date	31-Mar-2017	31-Oct-2019	23-Mar-2020	31-Jan-2024
<b>□ of which women headed households (percentage) (Percentage, Custom Supplement)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	16.00
<b>▶ Households provided with additional hours of electricity from solar hybridization of existing NIGELEC mini-grids (Component 3) (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	3,000.00
Date	31-Mar-2017	31-Oct-2019	23-Mar-2020	31-Jan-2024
<b>□ of which women headed households (percentage) (Percentage, Custom Supplement)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	16.00
<b>▶ Annual electricity output from renewable energy (Component 3) (MWh/year, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	12,700.00
Date	31-Mar-2017	31-Oct-2019	23-Mar-2020	31-Jan-2024
<b>▶ Average electricity generation cost (US\$/kWh) of isolated grids in hybridized mini-grids (Component 3) (Amount(USD), Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.38	0.38	0.38	0.24
Date	31-Mar-2017	31-Oct-2019	23-Mar-2020	31-Jan-2024
<b>▶ Number of productive users provided with electricity access from mini-grid systems (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	675.00



Date	31-Mar-2017	31-Oct-2019	23-Mar-2020	31-Jan-2024
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Component 4: Implementation Support and Technical Assistance

► Project-related grievances registered under the project grievance redress mechanism and addressed (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	100.00
Date	31-Mar-2017	31-Oct-2019	23-Mar-2020	31-Jan-2024

► ANPER published reports on beneficiary feedback and how it has been incorporated in the Project (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	No	No	Yes
Date	31-Mar-2017	31-Oct-2019	23-Mar-2020	31-Jan-2024

Data on Financial Performance

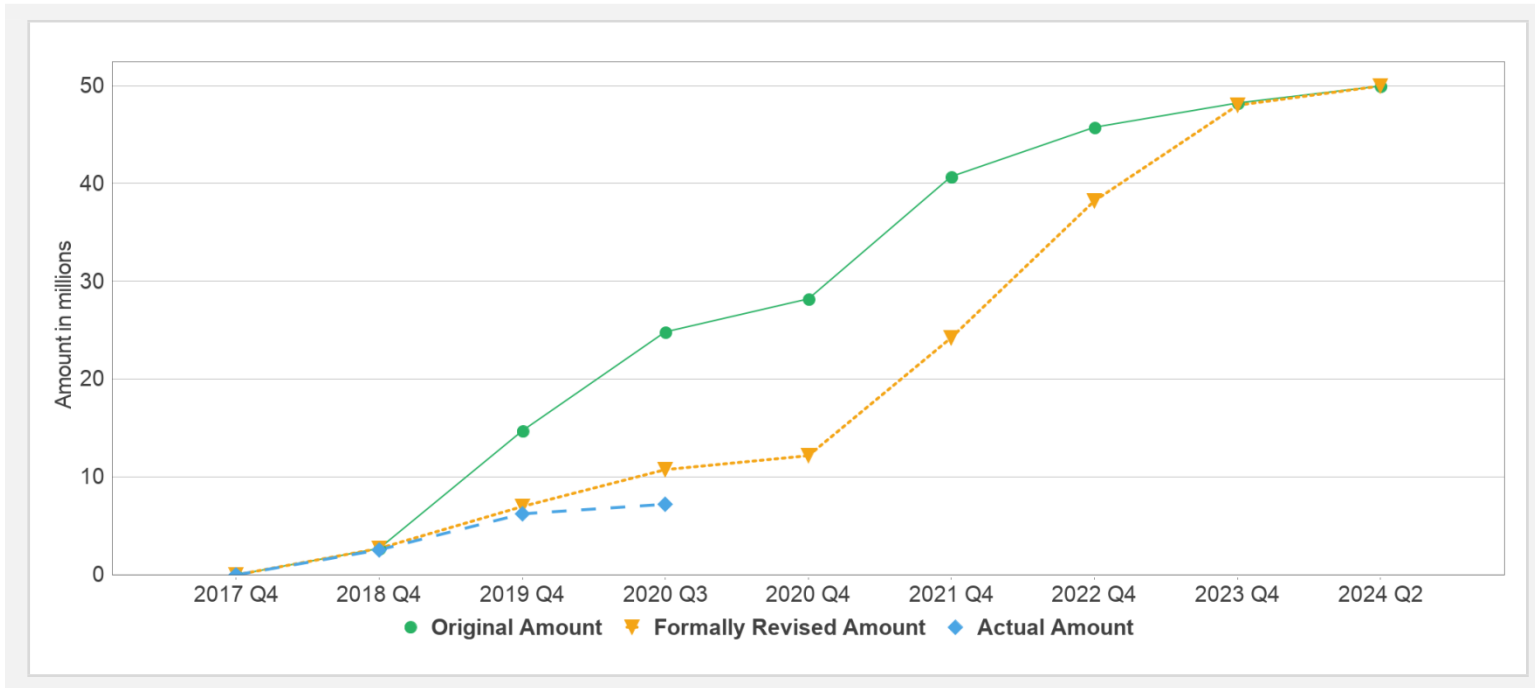
Disbursements (by loan)

Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P160170	IDA-60820	Effective	USD	45.55	45.55	0.00	7.19	39.41	15%
P160170	IDA-D1980	Effective	USD	4.30	4.30	0.00	0.00	4.54	0%

Key Dates (by loan)

Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date
P160170	IDA-60820	Effective	07-Jun-2017	27-Jun-2017	01-Dec-2017	31-Jan-2024	31-Jan-2024
P160170	IDA-D1980	Effective	07-Jun-2017	27-Jun-2017	01-Dec-2017	31-Jan-2024	31-Jan-2024

Cumulative Disbursements



### Restructuring History

Level 2 Approved on 11-Jun-2018

### Related Project(s)

There are no related projects.