S04 – RENEWABLE ENERGY

Construction of a 50 MW Photovoltaic Power Plant

Sponsored by **Société Nigérienne du Charbon d'Anou-Araren** (SONICHAR)
Mixed-ownership corporation with a board of directors



ESTIMATED PROJECT COST	LOCATION	FINANCING SOUGHT	RETURN ON INVESTMENT
EUR 76.22 million	**SONICHAR's Tefereyre concession, Anou-Araren, Agadez Region: 45 km northwest of Agadez and 180 km south of Arlit**	**Public-private partnership, EPC contract, or other partnership structures**	**Project amortization over 25 years; loan term: 15 years**

SONICHAR's own contribution: 20% of the amount from its own funds. Funding sought from investors: at least 80% of the amount, or the full amount. All monetary figures are in EUR. Converted estimates are indicative and rounded; source estimates may use different valuation bases.

Investment opportunity

SONICHAR operates two coal-fired generating units, each with a capacity of 18.8 MW. Electricity is supplied to SOMAÏR and NIGELEC to serve Arlit, Agadez, and Tchirozérine. As an independent power producer, SONICHAR has supplied electricity to the northern zone since 1981; this zone is not interconnected with the rest of the national grid.

With energy demand now exceeding available supply, SONICHAR plans to build a new 2 × 25 MW coal-fired plant near the existing plant. This future plant will be hybridized with a 50 MW photovoltaic plant to diversify and optimize the site's energy mix.

The project area benefits from exceptional sunshine, with average annual solar irradiation estimated at 2,400 kWh/m² in Tchirozérine Municipality. Integrating solar energy will increase electricity generation, particularly at peak times. Combining the two energy sources will meet regional power needs and could allow exports to other parts of the country.

No energy storage system is planned.

AT A GLANCE

PROJECT SPONSOR	Société Nigérienne du Charbon d'Anou-Araren (SONICHAR)
CAPACITY	50 MW photovoltaic power plant
REFERENCE	F2IN catalog, project EN-006

PROJECT STATUS

- **Studies** : Feasibility studies for a 5–10 MW plant conducted in 2017 with consulting engineer Charbonnage de France Ingénierie (CdFI)
- **Site** : Available within SONICHAR's concession

Objectives

Secure electricity supply for Arlit, Agadez, Tchirozérine, and mining companies in Agadez Region through construction of a new 50 MW photovoltaic power plant

- Create direct and indirect jobs for young people
- Generate tax revenue at local, regional, and national levels
- Improve the trade balance, increase energy sector value added, and reduce foreign currency outflows
- Meet mining company and public electricity needs in the short term
- Support national efforts to improve public access to reliable, affordable electricity
- Increase the share of renewable resources in Niger's electricity generation

Components

1. Microcrystalline photovoltaic panels on fixed structures
2. Substations: inverters, transformers, communications, and power controller
3. Electrical substations and power lines
4. Civil works, site fencing, and gate
5. Manual and truck-based cleaning system

Expected outcomes

- Direct and indirect jobs created for young people
- Improved trade balance, increased energy sector value added, and reduced foreign currency outflows
- Mining company and public electricity needs met
- Improved public access to a reliable, affordable energy source
- Increased share of renewable resources in Niger's electricity generation

Strategic alignment

The project falls under pillar 3 of the Republic's Refoundation Program, focused on developing production capacity for economic sovereignty, particularly in energy services.

Business model

Revenue streams

- Electricity sales to regional mining companies and NIGELEC for public supply
- Current customers: SOMAÏR and NIGELEC; potential customers: SOMIDA and SOMINA

Profitability assumptions

- Profitability assumptions are based on data from the feasibility study for a 10 MW photovoltaic plant
- Average electricity selling price: EUR 0.09/kWh
- Internal rate of return: 28–38%

Partnerships sought

Technical partners

Participation in project implementation monitoring

Financial partners

Equity investment in SONICHAR through opening its share capital to investors and the private sector; EPC contract; other partnership structures

Government role

Sovereign guarantee, or guarantee backed by mineral or petroleum resources, for project financing, with the debt on-lent to SONICHAR

Risks and mitigation

RISK	PLANNED MITIGATION
Project environmental impact	Measures to be specified in the Environmental and Social Management Plan (ESMP), to be prepared during the project's Environmental and Social Impact Assessment

INVESTOR CONTACT

ANPIPS
(+227) 20 35 36 84
Email: service.courrier@anpips.ne
Website: www.anpips.ne

INVESTOR INTRODUCTIONS

ANPIPS is the single point of contact: it connects investors with the project sponsor and arranges B2B meetings at F2IN 2026.