



PROJECT FACT SHEET

80MW OMBURU SOLAR PV II POWER PROJECT



Executive Summary

The 80 MW Omburu Solar PV II Power Project is a strategic generation initiative by NamPower aimed at enhancing Namibia's energy security, reducing reliance on electricity imports, and supporting national renewable energy targets as outlined in the National Integrated Resource Plan (NIRP) 2022. The Project will be developed adjacent to the existing Omburu Substation, leveraging strong grid infrastructure and available land to deliver cost-effective solar energy into the national grid.

With an estimated capital cost of N\$1.3 billion and an expected annual energy yield of approximately 240 GWh (P50), the Project is positioned to provide competitively priced electricity while stabilising long-term tariffs under NamPower's regulated asset base model. The plant is being designed with future Battery Energy Storage System (BESS) integration capability to enhance dispatchability and grid stability.

The Project is currently in the establishment phase, with activities focused on consultancy procurement and initial engineering design. The Transmission Connection Offer has been received and accepted. Both the Engineering Consultant procurement and the Environmental Practitioner procurement are under evaluation. The imminent critical path dependent activities include completion of the ESIA and amended ECC, appointment of the Engineering Consultant, detailed engineering design, compilation of key-equipment procurement packages, and submission of the generation licence application.

Planned commercial operation is targeted for Q2 2029. Timely completion of environmental reports, engineering design and procurement activities are essential for progression into execution.

Project KPI Dashboard

Category	Metric	Value / Status
Project Technical Description	Size (Export Capacity)	80 MWac at a Power Factor of 0.9
	Annual Energy Yield (P50)	> 240 GWh
	Capacity Factor	> 35 %
	Performance Ratio	± 80%
	Availability	≥ 99%
	BESS Ready	Yes
	BESS Capacity	± 64MW/128MWh
Financials	Estimated CAPEX	N\$ 1.3 billion
	Cost Accuracy	-20% / + 30% (Class D)
Schedule	Planned COD	Q2 2029
	Current Phase	Establishment (Procurement focus)
Grid Integration	Connection Point	Omburu Substation (220kV)
	Grid Readiness	Transmission Connection Offer Accepted
Regulatory	Updated ESIA / Amended ECC	Not Yet Submitted. Q2 2027
	Gx License	Not Yet Submitted. Q3 2027
Procurement	Environmental Practitioner	Q4 2026
	Engineering Consultant	Q4 2026
	Key Equipment	Bidding documents in preparation
	Contractor Procurement	Bidding documents in preparation
Land	Site Availability	NamPower-owned



Introduction and Background

The Namibian Cabinet approved the updated [National Integrated Resource Plan \(NIRP\) 2022](#) in December 2022 to guide NamPower and other investors on least-cost generation investments and present a range of power-sector planning scenarios. NamPower is committed to supporting Government objectives set out in national planning policies, particularly the NIRP, the [Sixth National Development Plan \(NDP6\)](#), and the Ministry of Industries, Mines and Energy (MIME) [Strategic Plan 2025/26–2029/30](#), which emphasises energy sustainability, low-carbon energy solutions, and sustainable access to energy.

In pursuit of the NIRP target of achieving 80% self-sufficiency and improving security of electricity supply by 2028, the Minister of Mines and Energy directed NamPower to develop a total of 110 MW of new solar photovoltaic (PV) capacity on its balance sheet.

The new determination is split as follows:

- a) The 30 MW Rosh Pinah Solar PV Power Project capacity expansion will leverage development work undertaken for the 70 MW Rosh Pinah Solar PV Power Project and expedite the connection of additional capacity to the grid.
- b) The 80 MW Omburu Solar PV II Power Project will leverage development activities undertaken for the existing 20 MW Omburu Solar PV Power Project and connect at a strong node in the transmission network.

NamPower is thus advancing the development of the proposed 80 MW Omburu Solar PV II Power Plant.

The targeted land is fully owned by NamPower and is conveniently situated next to the Omburu S/S, with ample evacuation capacity via the 220 kV backbone network.

Considering Namibia's abundant solar resource, the objectives set out in the NIRP and NamPower's strategic roadmap to expand the penetration of renewables within the energy mix, PV power plants are considered ideal for providing energy at competitive tariffs in Namibia.

Project Objective and Rationale

The primary objectives of the 80 MW Omburu Solar PV II Power Plant, hereinafter referred to as the “Project”, are to:

- Contain pressure on NamPower tariffs through the integration of affordable renewable-energy technologies into the Namibian grid.
- Support the renewable-energy commitments set out in the Renewable Energy Policy and National Energy Policy.
- Contribute to achieving the 80% self-sufficiency target outlined in the NIRP 2022; and
- Support local participation in renewable-energy development and generation.

Current Project Status (September 2026)

The 80 MW Omburu Solar PV II Project has fulfilled all essential Project Development Framework criteria, encompassing the Concept Note, Implementation Plan, Financial Model, Energy Yield Assessment, and Project Business Case, all of which have obtained requisite internal approvals.

The Project is currently in the establishment phase, with several critical activities under way. The procurement processes for both the Engineering Consultant and the Environmental Practitioner have commenced, and the respective RFPs have closed. The evaluation processes are currently being finalised.

The Transmission Connection Offer has been accepted. The remaining critical path dependent activities include completion of the ESIA and amended ECC, appointment of the Engineering Consultant, detailed engineering design, compilation of key-equipment procurement packages, and submission of the generation licence application.

Timely completion of environmental reports, engineering design and procurement activities are essential for progression into execution phase.

SWOT Analysis

The Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis for the Project is summarised in *Figure 1*.

Strengths ▪ Increase generation capacity by 80 MW ▪ Supports key national goals (NIRP, NDP6, Vision 2030 and COP21 Agreement). ▪ Solar irradiation as a no-cost fuel ▪ Mature technology ▪ Connection at a strong grid node	Weaknesses ▪ Contributes to the issue of intermittency. ▪ Potential complex contractual arrangements (i.e. Front-End Engineering Design method)
Opportunities ▪ Land availability (secured) ▪ Access to competitive funding ▪ Lower blended NamPower tariff ▪ Local socio-economic impact ▪ Future BESS integration	Threats ▪ Contributes to the “duck-curve” phenomenon ▪ Market competition ▪ Environmental impacts and approval delays

Figure 1: Project SWOT Analysis

Current Key Risks and Challenges

The Project is currently exposed to several key risks and challenges that may impact schedule and execution:

- Environmental Approval Delay: Completion of the full ESIA and issuance of the amended ECC may delay submission of the generation licence application and downstream activities.
- Engineering Consultant Procurement: A delay in appointing the Engineering Consultant may affect detailed engineering design and reviews, bidding documents, procurement and construction readiness.
- Engineering Design and Procurement Interfaces: The multi-package procurement strategy requires close coordination of PV-field detailed engineering design, transmission

integration, free-issued equipment and construction contracts.

- Resource Constraints: Limited internal project-team capacity across concurrent projects may affect timely reviews, approvals and procurement activities.

Technical Description and Site Details

The Project site is shown in *Figure 2*. The 80 MW Omburu Solar PV II Power Plant will be developed on a NamPower-owned 300-hectare property located approximately 10 km south-east of Omaruru, near the NamPower Omburu Substation. The site is partly developed: approximately 42 hectares are occupied by the existing Omburu 20 MW Solar PV Power Station, leaving about 258 hectares available for the proposed development.



Figure 2: 80 MW Omburu PV II Project site location

Although the highest Global Horizontal Irradiance (GHI) occurs in western Namibia, most of the country has a strong solar resource, as shown in *Figure 3*.

Over the past three years, the Project site recorded an annual average of approximately 26 rainy days and a further 40 days with partial cloud cover.

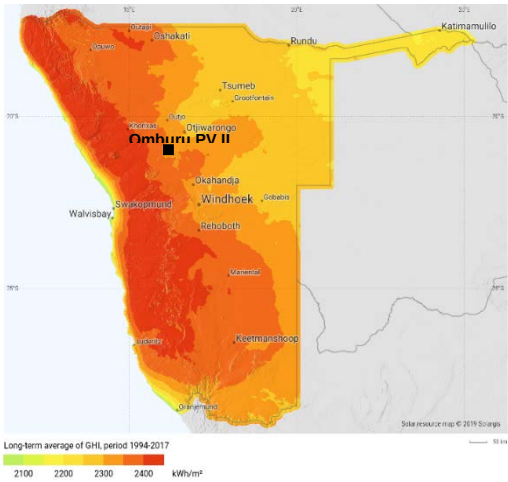


Figure 3: GHI Solar Resource Map of Namibia

The Plant will be designed to allow future modular integration of a Battery Energy Storage System (BESS), subject to technical and economic viability. The preliminary technical description and site details are provided in *Table 1*.

Table 1: Location and Description

Location and Description	
Site Area	258 hectares
Coordinates	21°29'10.28"S, 16°1'19.99"E
Plant Footprint	±200 hectares
Plant Capacity	80 MW net export; with a power-factor of ±0.9
Annual Production	Energy 240 GWh (P50)
Planned Commissioning	Q2 2029
Plant Design Lifetime	30 years (minimum)
Performance Ratio	80% (minimum)
Capacity Factor	≈34.3% (P50)
DC/AC ratio	1.27 (minimum)
Availability	≥99%
PV Module Technology	Bifacial PERC/TOPCon crystalline-silicon technology (n-type/p-type)
PV Mounting Structure	1-axis tracking with back-tracking
Cleaning Method	Wet cleaning
BESS Ready	Yes
BESS Capacity	± 64MW/128MWh

Plant Yield Estimate

The energy-yield assessment is based on the preliminary technical design and was prepared by NamPower's Project team. *Figure 4* provides the indicative monthly generation profile. Estimated average annual net energy exported to the grid is 240.1 GWh at P50 and 230.6 GWh at P90.

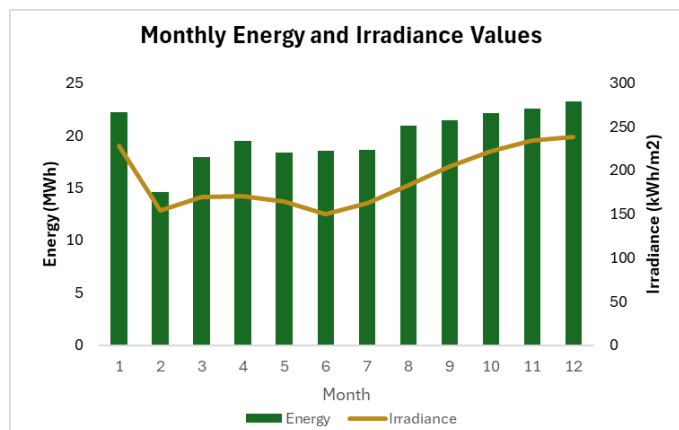


Figure 4: Monthly yield estimates for the Project

Grid Integration and Technical Risk

From a grid-integration perspective, the Project will be connected to the existing Omburu Substation through the planned 220 kV integration works. The Transmission Connection Offer has been accepted.

Integration of variable renewable energy at this scale introduces operational considerations, including potential voltage fluctuations, reduced system inertia, and the “duck-curve” effect during periods of high solar generation and low demand.

Provision for future BESS integration will support dispatchability, ramp-rate control, and frequency and voltage regulation. Compliance with NamPower's grid-code requirements and applicable international standards will be verified during detailed engineering design and commissioning.

Project Structure

The intended Project structure and key stakeholders are shown in *Figure 5*.

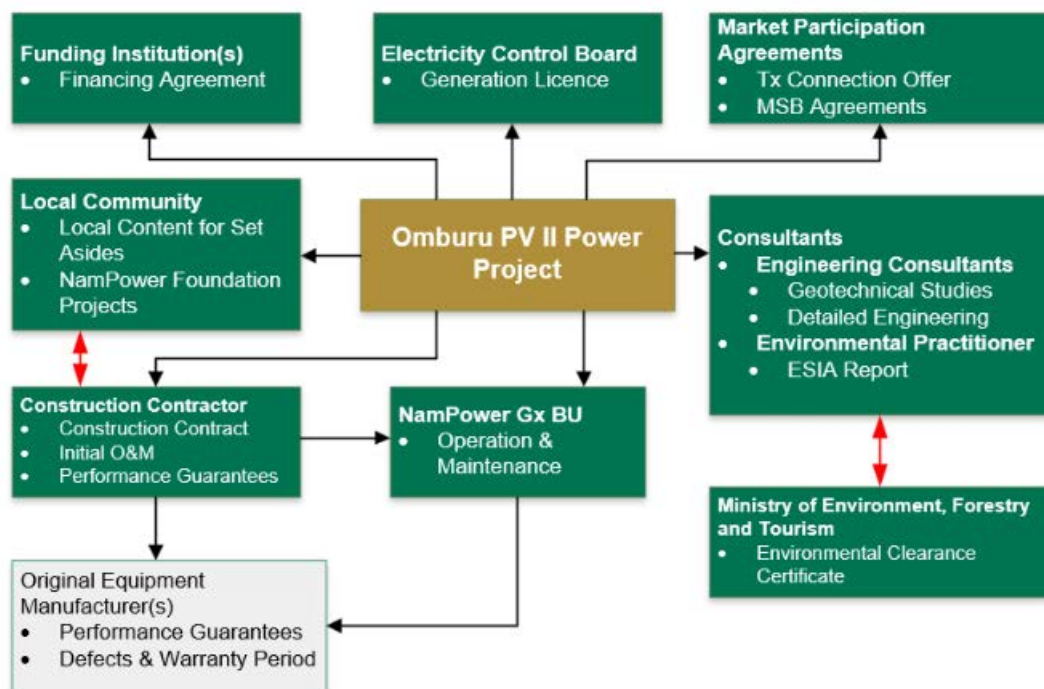


Figure 5: Project Structure

The 80 MW Omburu Solar PV II Power Plant will be developed, owned and operated by NamPower. NamPower has opted for a construction-contract strategy under which it will prepare the detailed PV-field designs and free-issue key equipment, including PV modules, inverters, trackers and MV power stations. This approach may support local contractors by reducing the works contract value.

Figure 5 illustrates the key stakeholders and principal agreements in the Project structure:

- Financing Agreement – The Project is planned to be financed through NamPower’s balance sheet. NamPower may also obtain corporate borrowing, in which case a financing agreement will be concluded with the relevant funding institution.
- Generation Licence – NamPower will submit a generation licence application to the Electricity Control Board (ECB) for approval to generate electricity and operate the Plant.
- Intra-BU Market Participation Agreements – The Generation Business Unit will enter into the applicable connection, market-participation and operating agreements with the Modified Single Buyer Market Operator.
- Engineering Consultant – NamPower will appoint an engineering consultant and specialist technical advisers to support engineering design and implementation of the Omburu PV II Project, including:
 - o Technical support for detailed-design and review, preparation of bidding documents, construction supervision, and contract administration and management.
 - o Geotechnical investigations and pull-out testing to support tracker design and, where required, supplementary geotechnical, hydrological and topographical studies to mitigate ground and civil-works risks.
- The Environmental Practitioner will undertake the full ESIA process, compile a full Environmental and Social Management Plan and support the application for an amended ECC covering both the existing Omburu 20 MW PV Plant and the new 80 MW Omburu PV II Plant at the site.
- Construction Contractor – NamPower will procure a contractor to complete the remaining engineering, procurement and construction of the PV-field and transmission-integration works through the applicable competitive procurement process, in compliance with the Public Procurement Act.

Plant Operation and Maintenance

The Plant will enter a two-year Defects Notification Period (DNP) following Taking-Over. During the DNP, NamPower will undertake operation and maintenance (O&M) of the 80 MW Omburu Solar PV II Power Plant. NamPower personnel will be trained by the original equipment manufacturers (OEMs) and the appointed Contractor to ensure effective transfer of the knowledge required to operate and maintain the Plant.

Environmental Considerations

An Environmental Impact Assessment (EIA) was completed for the Project site in 2014 as part of the former 3 × 10 MW Solar PV Project.

The site’s Environmental Clearance Certificate (ECC) was first issued in June 2016 and subsequently updated for the existing Omburu 20 MW PV Power Plant. The current ECC covers operation of a 55 MW photovoltaic plant and associated infrastructure in Omaruru, Erongo Region, and was renewed in July 2025.

Because the additional 80 MW is not fully covered by the existing studies and ECC, the Environmental Practitioner will undertake a full ESIA, update the Environmental and Social Management Plan, and support issuance of an amended ECC covering both the existing Omburu 20 MW PV Plant and the new 80 MW Omburu PV II Plant .

Capital Budget

The Project is planned to be financed through NamPower's balance sheet. NamPower's financial statements are published in its [Annual Reports](#). Corporate financing from institutional lenders may be considered to support Project implementation.

The Project cost estimate is N\$1.3 billion and is classified as a Class D estimate with an accuracy range of -20% to +30%. Exchange rates of NAD/USD 18 and NAD/EUR 20 were assumed.

In addition to the base cost estimate of N\$1.3 billion, further financial evaluation indicates that the Project is expected to deliver competitively priced energy relative to Namibia's current generation and import mix. The levelized cost of energy (LCOE) is anticipated to be favourable due to high solar resource availability, optimised plant design, and low operating costs associated with photovoltaic technology.

Value Proposition

The Project offers both economic and strategic value by reducing Namibia's reliance on imported electricity and stabilising long-term tariffs through cost-competitive renewable energy. The integration of 80 MW of solar PV will diversify the energy mix, reduce exposure to regional price volatility, and support carbon reduction targets. Its value proposition is further demonstrated by the favourable cost of generated energy relative to the existing energy mix, underpinned by NamPower's regulated depreciated asset return model, which enables tariffs to decline over time. Additionally, the Project is expected to stimulate local economic development in Omaruru through job creation and skills transfer, while future integration of BESS will enhance grid reliability, peak demand support, and overall system flexibility.

Project Schedule and Progress

The following activities have been completed in line with NamPower's Internal Project Framework and Investment Framework requirements for progression toward the execution phase:

- o Obtain approval of the Project Concept Note
- o Compile the Implementation Plan
- o Prepare the baseline Project development schedule
- o Complete the Project energy-yield assessment
- o Develop the financial model and Project Business Case
- o Obtain the investment decision in line with the Project Governance Framework
- o Receive and accept the Transmission Connection Offer

The NamPower Project team will continue the establishment phase activities, including detailed engineering design and procurement activities. Key milestones during this period are shown in Table 2.

Table 2: Key Next Steps for the Project and Status

Key Next Steps	Completion Date	Status	Critical Path	Impact on COD	Comment
Receive and accept the Transmission Connection Offer	May 2026	Completed	● Yes	High	Offer accepted
Appoint the Environmental Practitioner	October 2026	In Progress	● Yes	High	RFP Closed; evaluation and award pending
Appoint the Engineering Consultant	November 2026	In Progress	● Yes	High	RFP issued; evaluation and award pending
Complete the preliminary PV-field detailed design	Q4 2026	In Progress	● Yes	High	Internal design activities under way
Complete the preliminary transmission-integration design	Q4 2026	In Progress	● Yes	High	Final SLD approval scheduled
Complete the Project Feasibility Report	Q4 2026	In Progress	● Medium	Medium	ESIA and financial updates required
Complete technical specifications and bidding documents	Q1 2027	In Progress	● Medium	Medium	Engineering Consultant input required
Complete the ESIA and obtain the amended ECC	Q2 2027	Not Started	● Yes	High	Full ESIA required
Submit the generation licence application to the Electricity Control Board	Q3 2027	Not Started	● Yes	High	Dependent on amended ECC
Complete procurement of major PV equipment	Q4 2027	Not Started	● Medium	Medium	Early Market Engagement
Appoint the Construction Contractor	Q4 2027	Not Started	● Yes	High	Dependent on design and bidding document
Confirm financing arrangements for Project execution	TBC	In Progress	● Medium	Medium	Financing options under evaluation
Commence construction of the 80 MW Omburu PV II Project	Q1 2028	Not Started	● Yes	High	Dependent on mobilisation
Commercial Operation Date (COD)	Q2 2029	Planned	● Yes	Final milestone	Baseline Programme date



Project Key Milestones

To support decision-making and stakeholder communication, the Project timeline in *Figure 6* highlights key schedule milestones and dependencies. Emphasis is placed on environmental approvals, consultant and contractor appointments, construction commencement, and achievement of commercial operation.

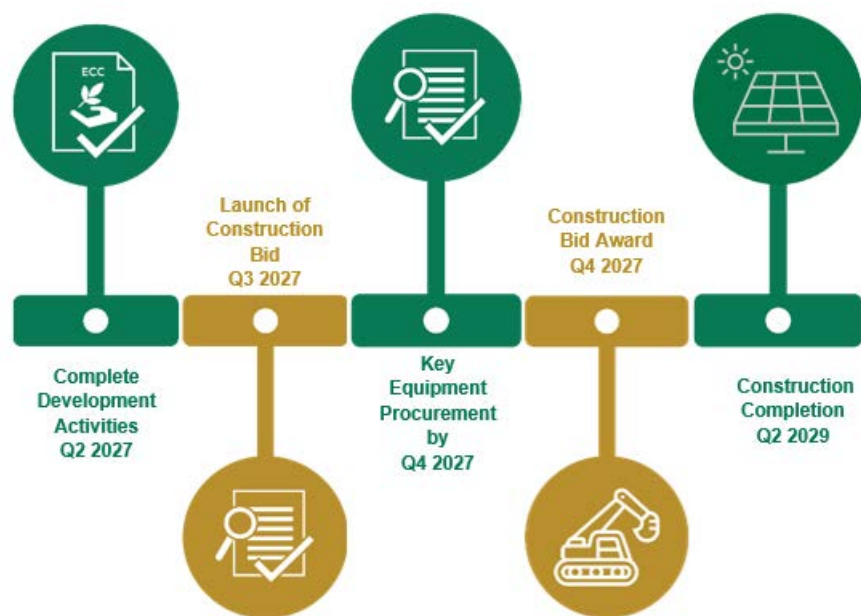


Figure 6: Project Development Timeline

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