



**Nauru Utilities Corporation (NUC) provides services to the community of Nauru across the entire water and electricity supply chains, in addition to our legislative obligations as the power system controller and water operator.**

**OUR BUSINESS**



**Water Production**

**163,786,400 litres produced**



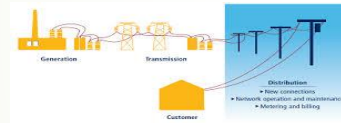
**Water Storage**

**4,349,256 litres in storage**



**Water Despatch and Delivery**

**133,444,500 litres delivered**



**Electricity Generation**

**Diesel Generation: 19,304,798kWh**

**Renewable Energy Generation: 2,132,693kWh**



**Electricity Customers**

**3566 Customers comprising:**  
**3066 Domestic Customers**  
**413 Commercial Customers**  
**30 Industrial Customers**  
**57 Government Customers**




**Water Customers**

**1594 Customers comprising:**  
**1569 Domestic Customers**  
**25 Commercial Customers**  
**30 Industrial Customers**  
**57 Government Customers**

# Current Projects 2020-2021

- ▶ Power Generation
  - ▶ Major overhauls of Generators at Aiwo Power Station site
- ▶ Power Distribution Network
  - ▶ HV/LV Feeder Refurbishment and Augmentation
  - ▶ Ports Project Development (New supply/Cabling/ Transformer)
  - ▶ Distribution transformer Upgrades
  - ▶ HV Grid Extensions and New Connections (Regional Processing Centres)
- ▶ Renewable Energy/Power Generation
  - ▶ 6 MW (2.5MW/5.0MW BESS) Solar Development Project
- ▶ Water Operations
  - ▶ Storage Tank relining and refurbishment
  - ▶ Customer Billing System (Tank ID)
- ▶ New 2 x 900kL Reverse Osmosis Production Plant



**Nauru 6 MW Solar Development Project**  
**With**  
**2.5MW / 5.0 MW Battery Energy Storage**  
**System**

# 6 MW Solar Development Project



- Target 50% renewable by 2022
- Feasibility Study and Network Assessment completed in 2018 to assess options, sizing of BESS, Current Generation Capacity and potential Fuel Offset including Demand forecasts.
- New 6 MW Solar Development Project including 2.5MW/5.0MW Battery Energy Storage System Proposed for development
- GoN and ADB funded project \$22M Grant Funding available.
- Local Civil Contractor engaged to prepare the site clearing and leveling.
- China Harbour (CHEC/RISEN/HNAC) consortium engaged to design, construct and commission solar plant
- Project Implementation Consultant engaged to assist NUC as implementing agency to deliver the project by 2022.
- Project includes grid connection, SCADA and Energy Management System (EMS), control, communication and protection system integration with existing generators and solar plant.
- Fully automated system with NUC operator capability.
- Project outcome will achieve approx. 47% renewable energy generation (MWh) by end of 2022

# Land Area Preparation



# Land Area Preparation



# 6 MW Solar Development Project Status

- Land preparation being finalised with defects to be addressed
- Project Management Plans submitted for approval and finalisation (EMP, CMP, PMP, QMP, etc)
- 15% Design submitted for approval
- 50% Design submitted for clarification and approval
- Resource Mobilisation Considerations currently under negotiations
- COVID-19 Restrictions and resourcing mobilisation is major current risk – Options being considered to maintain timeline and agreed schedule
- Plant and Equipment Procurement

# Project Considerations

- Relocation of NUC High Speed Generators to solar site – voltage stability
- Water catchment and storage facilities
- Future additional storage capacity – (BESS, Pumped Hydro etc.)
- Excess solar energy under-utilised (current Peak Demand 5.7MW)
- Solar generation and demand profile not matched
- Capacity building for NUC staff
- Gender and social inclusion project opportunities





**Tubwa Kor!**  
**Thank you**