

# Pacific Biomedical Network Meeting

## FIJI OXYGEN PROJECT

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Biomedical Engineer  
Fiji Oxygen Project  
Cure Kids



# Background – Fiji Oxygen Project



**2014**

**CK Innovation Seed Fund –  
Stephen Howie**

**Preventing pneumonia deaths in Pacific  
children – an innovative oxygen  
solutions pilot project**



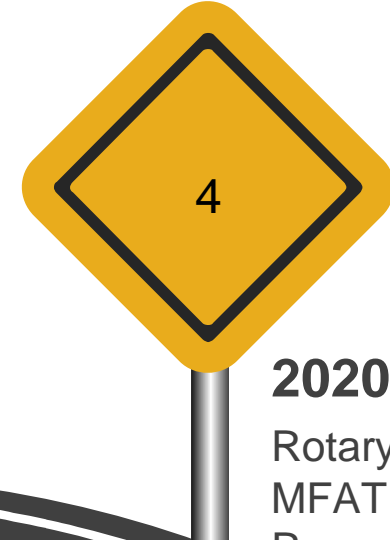
**2015-2016**

**Armacup, Rotary, Fiji Water,  
ACCOR, CK**  
**Pilot project site – Nausori  
Health Centre**



**2017-2019**

**CK Fund – CBA Concentrators vs  
Cylinders.**  
**DFAT Funding**  
**Formation of Steering Committee**



**2020 -2023**

**Rotary Global Grant**  
**MFAT Grant – COVID  
Response**

## FiO2 project Achievements

OXYGEN EQUIPMENT AND SOLAR SYSTEMS



# Oxygen Concentrators Achievements

- Distributed and installed over 250 oxygen concentrators (OCs), over 100 pulse oximeters, and other oxygen-related equipment,
- 44% of health facilities across Fiji are equipped with functional Oxygen Concentrators
- Additional 50 oxygen concentrators in stock awaiting distribution to increase our coverage of facilities with full oxygen availability.





# Oxygen concentrator Achievements

Development of a pathway and support for domiciliary oxygen therapy.





# Solar Energy Achievements

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12 solar systems in health facilities to ensure 24/24h stable, good quality power supply to utilize oxygen concentrators and other essential medical equipment.





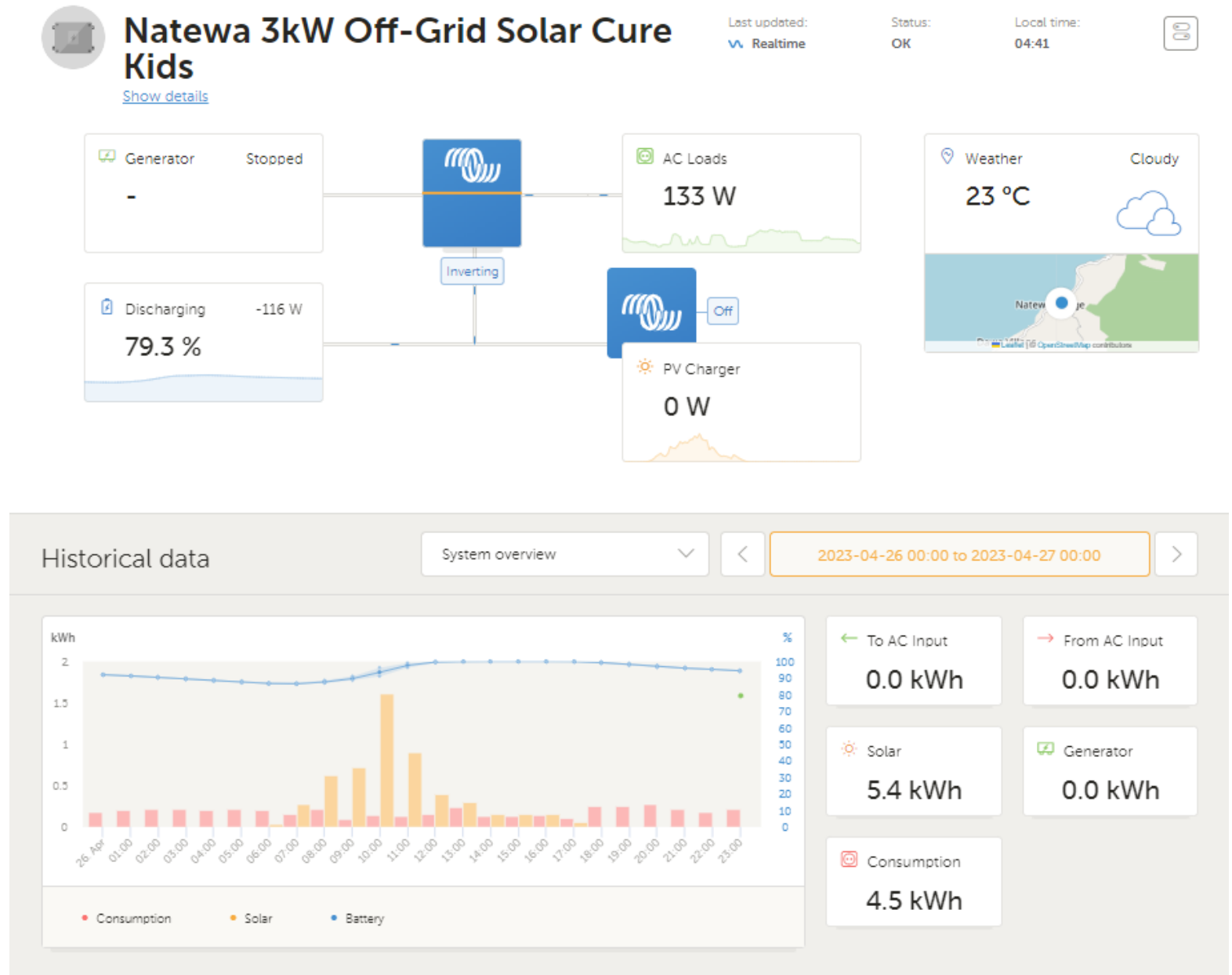
# Solar Energy Achievements

Scope of work include the electrification and or repair of solar systems of some staff quarters to guarantee minimum power supply (may contribute in the reduction staff turnover and so improve health care).



# Solar Energy Achievements

Realtime online monitoring of the solar systems to ease the Operation and Maintenance Tasks.





# Solar Energy Achievements

Continual technical assessment of health facilities to identify those that need immediate assistance with the provision of solar power.



## FiO2 project Achievements

TRAININGS/CAPACITY BUILDING AND OXYGEN BIOMEDICAL TEAM  
SETTING



# Training Achievements

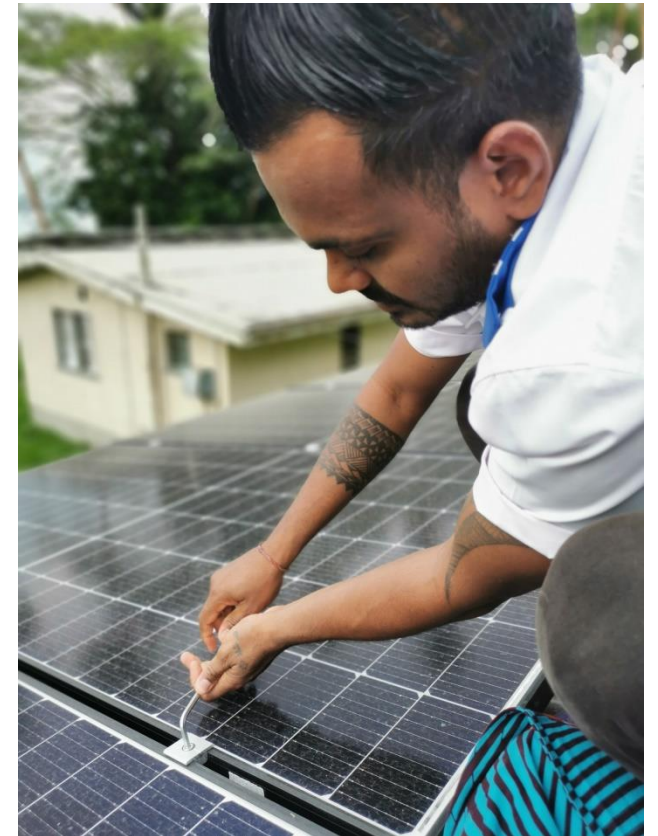
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Training to over 1500 clinical staff members, enabling them to utilize and maintain oxygen concentrators to treat a total of over 50,000 patients.



# Training Achievements

Cyclone Readiness Standard Operation Protocols created and taught for the Health Facilities relying on Solar Energy.





# Training Achievements

Online and in-house service training for over 20 biomedical technicians, equipping them with the skills and knowledge necessary for proper servicing and maintenance of oxygen concentrators.





# Training Achievements

Theoretical/hands-on training for biomedical engineers, biomedical technicians and electricians on detailed technical health facility assessments and solar system sizing, installation, verification, operation and maintenance.





# Challenges

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1. Accessibility and Logistics
2. Workshop Space & Storage
3. Biomedical Capacity Building
4. Equipment Management and Tracking



# Future Directions

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- Integration of Project Personnel into MHMS
- Adoption and implementation of the National Oxygen Policy
- FiO<sub>2</sub> Steering Committee oversight
- Research Outputs and Dissemination
- Biomedical Capacity Building





VINAKA 😊