

FIJI PORTS CORPORATION PTE LTD

The Smart, Green Gateway for Trade in the Pacific region



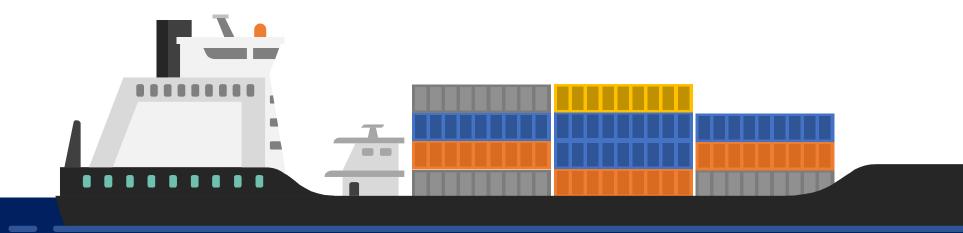
GREEN & SMART PORT INITIATIVES

CONTENTS





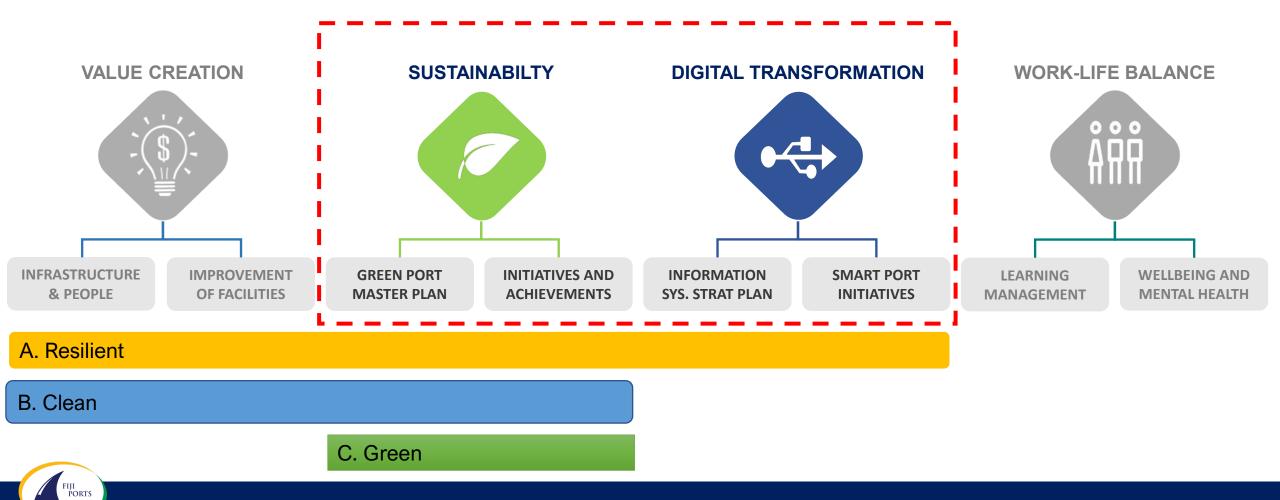
KEY FOCUS AREAS



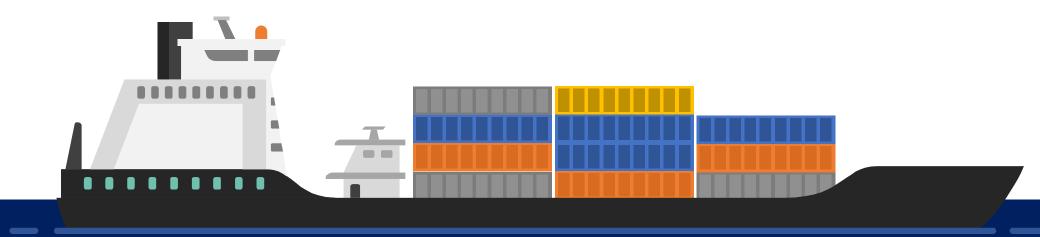


KEY FOCUS AREAS

FPCL'S focus on 4 Key Areas for Charting a Smart, Green Pathway – introduced in 2022 and continuing in 2023



GREEN PORT INITIATIVES





ENERGY AUDIT 2016







Fiji Ports is first Pacific Port to conduct Level 1 Energy Audit in 2016, carried out by 8020 Green Consultant, and commissioned by the Secretariat of the Pacific Community (SPC).

Identification

6 cost saving projects was identified and quantified:

- 1. Directly power tenants from main source and not sub-metering.
- 2. Install power factor correction to the reefer energy supply.
- 3. Upgrade internal lighting to LED.
- 4. Upgrade Port Yard/Security lighting with LED (follow a lighting design).
- 5. Install solar system on roofs with minimum shading.
- 6. Replace office air conditioning system.

Action Items

- 1. Upgrade internal lighting to LED.
- 2. Meet with EFL to discuss possibility of installing solar PV systems.
- 3. Power factor correction is being discussed with EFL to have it rectified.
- 4. Upgrade of Yard lighting is in design process, with trial to begin in December 2017.

Implementation

- 1. In 2017 electricity consumption dropped at Muaiwalu House by 21% compared with 2016.
- 2. Lighting was upgraded to LED over the period December 2016 – March 2017.
- 3. Forecast of savings: \$31k & 32 tons of GHG emissions.
- 4. Actual cost of Light Upgrades: under \$23k
- 5. LED lights have already paid for themselves.
- 6. Lights have a 3-year warranty.



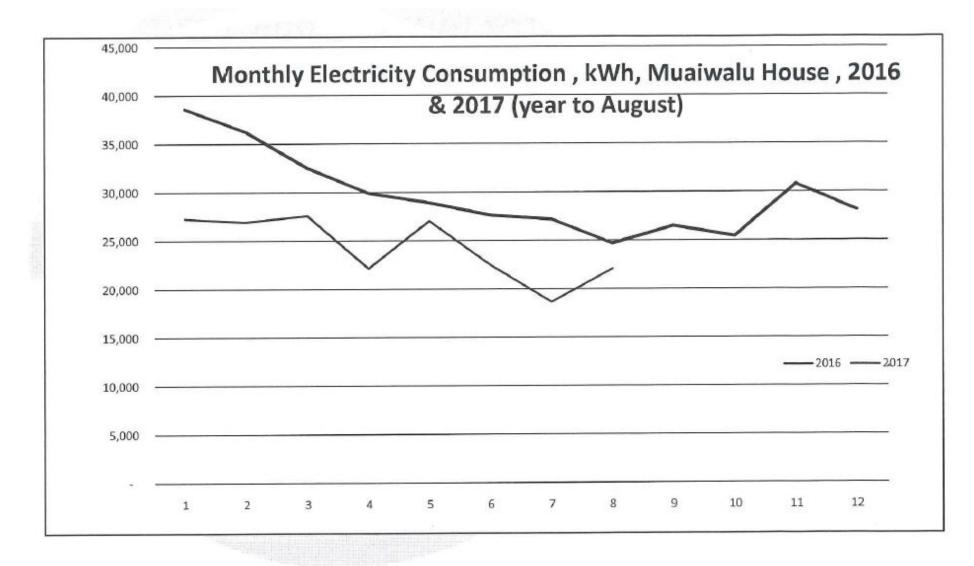
POSITIVE OUTCOME













QUICK WINS & LONG-TERM STRATEGIES









To *reduce* energy consumption, along with any associated greenhouse gas emission reductions.

Energy Policy

- To realize economic and environment benefits by optimising and continually improving the performance over which FPCL has direct control and that of the Terminal Operator(s) and other working on behalf of FPCL.
- Improvement Target: reduce energy usage by 30% by 2022 compared with 2016.

Energy Management Plan

- FPCL uses energy in the form of electricity, diesel and petrol energy plays an important role in powering and enabling our operations.
- Enhance organisational performance through improved energy management, leading to business improvement:
 - Profitable operations
 - Care for local environment
 - Greenhouse gas abatement
- Target for 2018: reduce overall energy usage by at least 5%.
- FPTL to achieve a savings of at least 5%.

Data Management

- Monthly Report showing consumption, cost, GHG.
- A customized spreadsheet to be used.
- Include fuel usage for pilot boat, incinerator, generator and office vehicle fuel cards.



DEVELOPMENT OF GREEN PORT MASTER PLAN 2019









- This plan has been prepared to describe the approach FPCL will implement from 2019 to 2023 to reduce its environmental impact.
- This masterplan is independent of but aligns with FPCL's Strategic Plan 2019 to 2023 and will assist FPCL in contributing to achieving several Sustainable Development Goals (SDGs).



































Development of the Green Port Master Plan (2019-2023) & Procurement Sustainability Guidelines

















GREEN PORT – INITIATIVES & ACHIEVEMENTS









Green Port initiatives were implemented to operate more **Efficiently** and with greater **Sustainability** in line with global trends to **Optimise** business outcomes.

INITIATIVES



First Pacific Port to conduct Energy Audit & Tracker (2016)



Installation of an Electric Incinerator to meet international requirements



Upgrading of facilities with energy-efficient LED lighting

ACHIEVEMENTS



Achievement of ISO Certifications

ISO 9001: 2015 QMS

ISO 45001: 2018 OHS

ISO 14001: 2015 EMS



Establishment Carbon Neutral Facility (2021)



GREEN PORT – INITIATIVES & ACHIEVEMENTS









INITIATIVES



Establishment of Green & Recreational Space Endeavors





Addition of a new modern & environment-friendly Pilot Boat

Aligning to the Pacific Ports Recognition Framework & Indicators (2030 – 2050)

ACHIEVEMENTS



Recipient of Akiyama Award for Climate & Energy under Green Port Initiatives (2022)



Recipient of Green Award for Protection of the Environment presented by Green Scouts Movement Fiji Islands (2016)









DATA CAPTURING, MONITORING & REPORTING









FPCL has seen an 11% average reduction in Energy Consumption and an 11% average Carbon Footprint reduction over the last five years

GREEN PORT DASHBOARD

3,440 Mwh

FPCL's Average Energy Consumption per Annum

11%

Average Reduction of Energy Consumption over the last 5 years

25
Projects In-Progress



"An aspiring Smart-Green Gateway in the Pacific"

\$1.1M Total Invested

40Key Projects
Implemented

2023: QTR 1

1,238 t CO₂-e

FPCL's Carbon Footprint per Annum

11%

Average Carbon Footprint Reduction over the last 5 years

15
Projects Completed



DATA CAPTURING, MONITORING & REPORTING

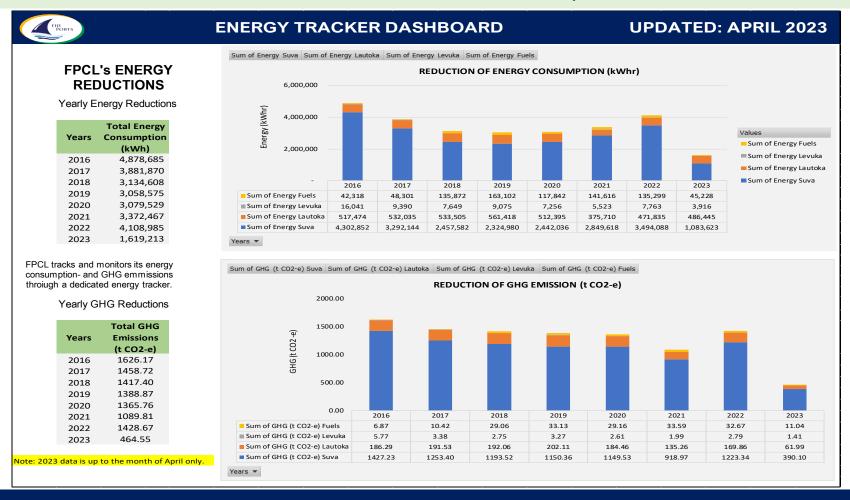






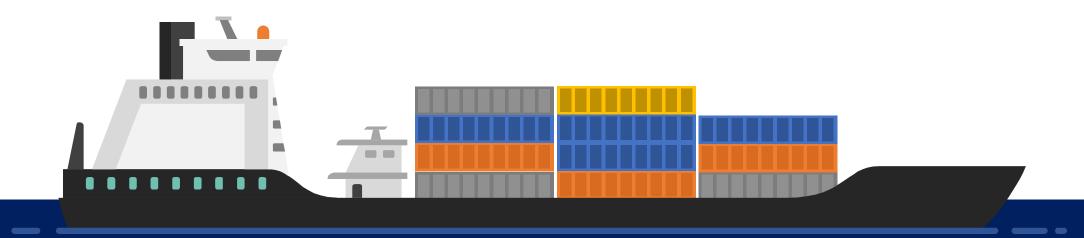


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SMART PORT INITIATIVES





SMART PORT STUDY IN THE PACIFIC





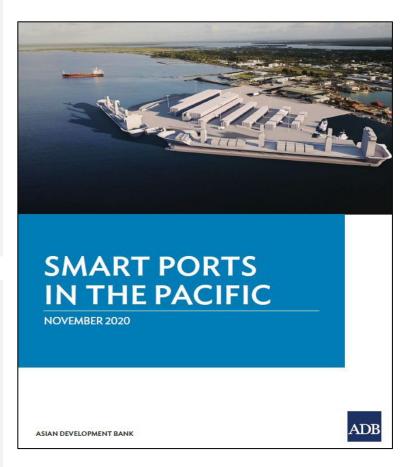




- The Study was commissioned in 2020, as a part of ADB's regional technical assistance, *Trade and Transport Facilitation in the Pacific*.
- Ports assessed were:
 - 1) Queen Salote International Wharf, Tonga
 - 2) Honiara Port, Solomon Islands.
 - 3) Suva Port, Fiji

Summary of **Key Challenges** from the Study:

- Low level of digital maturity
- Lack of written standard operating procedures
- Reactive vessel planning
- Customs and quarantine operations exacerbating the bottleneck
- Limited planned maintenance
- Occupational safety hazards





DIGITAL TRANSFORMATION









Development of Information System Strategic Plan

- As part of Fiji Ports' 5-Year Strategic Plan, technology
 has been identified as one of the key strategic goals to
 "Adopt Smart Port initiatives to achieve best practice in
 International Port Security and safe working
 environment".
- The objectives are embedded in Fiji Ports' Information Systems Strategic Plan with the vision of being the business enabler on the digital frontier, aiding Fiji Ports to implement Smart Port Initiatives.





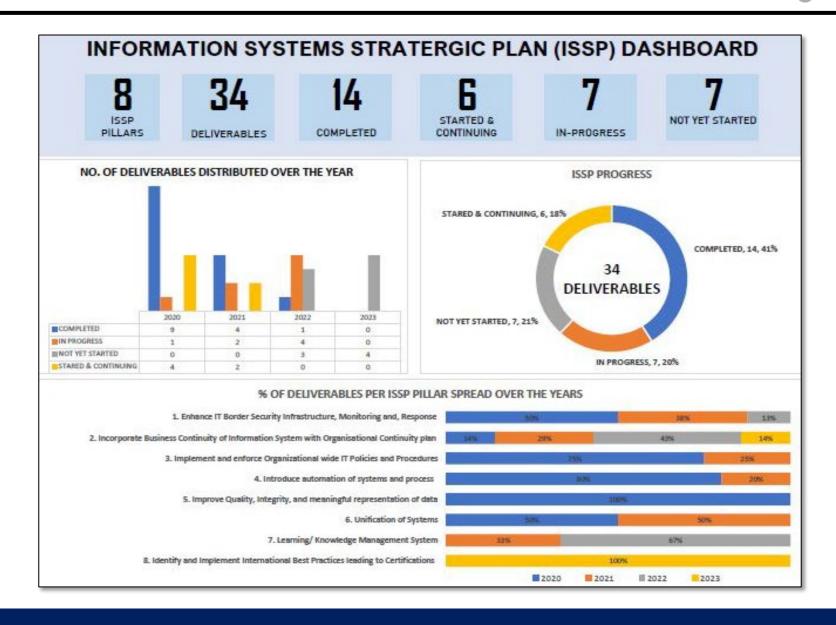
ISSP IMPLEMENTATION PROGRESS













SMART PORT – INITIATIVES











