KEY FOCUS AREAS

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

VALUE CREATION
- Infrastructure & People
- Improvement of Facilities

SUSTAINABILITY
- Green Port Master Plan
- Initiatives and Achievements

DIGITAL TRANSFORMATION
- Information Sys. Strat Plan
- Smart Port Initiatives

WORK-LIFE BALANCE
- Learning Management
- Wellbeing and Mental Health

A. Resilient
B. Clean
C. Green
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).

<table>
<thead>
<tr>
<th>Identification</th>
<th>Action Items</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 cost saving projects was identified and quantified:</td>
<td>1. Upgrade internal lighting to LED.</td>
<td>1. In 2017 electricity consumption dropped at Muaiwalu House by 21% compared with 2016.</td>
</tr>
<tr>
<td>1. Directly power tenants from main source and not sub-metering.</td>
<td>2. Meet with EFL to discuss possibility of installing solar PV systems.</td>
<td>2. Lighting was upgraded to LED over the period December 2016 – March 2017.</td>
</tr>
<tr>
<td>2. Install power factor correction to the reefer energy supply.</td>
<td>3. Power factor correction is being discussed with EFL to have it rectified.</td>
<td>3. Forecast of savings: $31k &amp; 32 tons of GHG emissions.</td>
</tr>
<tr>
<td>3. Upgrade internal lighting to LED.</td>
<td>4. Upgrade of Yard lighting is in design process, with trial to begin in December 2017.</td>
<td>4. Actual cost of Light Upgrades: under $23k</td>
</tr>
<tr>
<td>4. Upgrade Port Yard/Security lighting with LED (follow a lighting design).</td>
<td></td>
<td>5. LED lights have already paid for themselves.</td>
</tr>
<tr>
<td>5. Install solar system on roofs with minimum shading.</td>
<td></td>
<td>6. Lights have a 3-year warranty.</td>
</tr>
<tr>
<td>6. Replace office air conditioning system.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
POSITIVE OUTCOME

Monthly Electricity Consumption, kWh, Muaiwalu House, 2016 & 2017 (year to August)
**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.
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 were implemented to operate more **Efficiently** and with greater **Sustainability** in line with global trends to **Optimise** business outcomes.

<table>
<thead>
<tr>
<th>INITIATIVES</th>
<th>ACHIEVEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Pacific Port to conduct Energy Audit &amp; Tracker (2016)</td>
<td>Achievement of ISO Certifications</td>
</tr>
<tr>
<td>Installation of an Electric Incinerator to meet international requirements</td>
<td>ISO 9001: 2015 QMS</td>
</tr>
<tr>
<td>Upgrading of facilities with energy-efficient LED lighting</td>
<td>ISO 45001: 2018 OHS</td>
</tr>
<tr>
<td></td>
<td>ISO 14001: 2015 EMS</td>
</tr>
<tr>
<td></td>
<td>Establishment Carbon Neutral Facility (2021)</td>
</tr>
</tbody>
</table>
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)

FPCL - “To be the Smart, Green Gateway for Trade in the Pacific region.”
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

<table>
<thead>
<tr>
<th>3,440 Mwh</th>
<th>&quot;An aspiring Smart-Green Gateway in the Pacific&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPCL's Average Energy Consumption per Annum</td>
<td>FPCL's Carbon Footprint per Annum</td>
</tr>
<tr>
<td><strong>11%</strong></td>
<td><strong>11%</strong></td>
</tr>
<tr>
<td>Average Reduction of Energy Consumption over the last 5 years</td>
<td>Average Carbon Footprint Reduction over the last 5 years</td>
</tr>
<tr>
<td>$1.1M</td>
<td>$1.1M</td>
</tr>
<tr>
<td>Total Invested</td>
<td>Total Invested</td>
</tr>
<tr>
<td>25 Projects In-Progress</td>
<td>40 Key Projects Implemented</td>
</tr>
<tr>
<td>15 Projects Completed</td>
<td>15 Projects Completed</td>
</tr>
</tbody>
</table>

FPCL - “To be the Smart, Green Gateway for Trade in the Pacific region.”
FPCL has seen an **11% average reduction in Energy Consumption** and an **11% average Carbon Footprint reduction** over the last five years.
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
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

INFORMATION SYSTEMS STRATEGIC PLAN (ISSP) DASHBOARD

NO. OF DELIVERABLES DISTRIBUTED OVER THE YEAR

<table>
<thead>
<tr>
<th>Year</th>
<th>COMPLETED</th>
<th>IN PROGRESS</th>
<th>NOT YET STARTED</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>2021</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>2022</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>2023</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

% OF DELIVERABLES PER ISSP PILLAR SPREAD OVER THE YEARS

1. Enhance IT Disaster Recovery Infratructure, Monitoring and Response
2. Implement International Best Practices leading to Certification
3. Incorporate Business Continuity of Information System with Organisational Continuity Plan
4. Implement and enforce Organizational wide IT Policies and Procedures
5. Introduce automation of systems and processes
6. Improve Quality, Integrity, and meaningful representation of data
7. Unification of Systems
8. Learning/ Knowledge Management System

ISSP PROGRESS

- COMPLETED: 14, 41%
- STARTED & CONTINUING: 6, 18%
- NOT YET STARTED: 7, 21%
- IN PROGRESS: 7, 20%
DIGITAL TRANSFORMATION

- CCTV Surveillance System Upgrade
- Portfolio Project Management
- Vessel Traffic Management System
- Revenue Automation
- In-House Apps
- Knowledge Management System
- Back up Power System
- Learning Management System
- Portable Pilot Units

FPCL - “To be the Smart, Green Gateway for Trade in the Pacific region.”