



FIJI PORTS CORPORATION LIMITED

Sustainability Guidelines for Procurement

| Document: Sustainability Guidelines for Procurement | | | Version: Final | 1 of 23 |
|--|--------------------------------|--------------------|------------------------------|-------------------------|
| 1st Issue Date | Administered by | Approved by | Last Review Date | Next Review Date |
| 6 Dec 2019 | Procurement Coordinator | CEO | | |

Disclaimer: Hardcopies of this document are considered uncontrolled. Please refer to the Fiji Ports Intranet; Corporate Documents; A-Z Policies for the latest version.

Contents

| | |
|--|----|
| Scope..... | 4 |
| Responsible Manager..... | 4 |
| Accompanying Documents | 4 |
| Review..... | 4 |
| Summary of sustainable procurement approach | 4 |
| Obligations on suppliers | 5 |
| Information to be provided by suppliers of services | 5 |
| Information to be provided by suppliers of products, about the products supplied | 5 |
| Information to be provided by suppliers providing routine goods on a regular basis | 6 |
| Sustainability checklist for FPCL staff..... | 6 |
| Phased deployment of this guide | 6 |
| Sustainability Scores | 8 |
| Criteria for Sustainable Product Ranking | 8 |
| Criteria for Sustainable Supplier Ranking | 9 |
| Criteria for Sustainable Local Supplier Ranking | 9 |
| Sustainable Purchasing Guidelines for Specific Products and Services | 10 |
| Civil works | 10 |
| Construction and demolition waste..... | 10 |
| Greenhouse gas emissions..... | 12 |
| Air and water pollution during construction | 14 |
| Stationery and office supplies..... | 14 |
| Vehicles and machinery (including boats) | 15 |
| Office and communications Equipment | 16 |
| Maintenance supplies..... | 16 |
| Discontinued use of single use plastics..... | 17 |
| References | 17 |
| Annexe – Forms and checklists | 19 |
| Sustainability Assessment for Logistics Requisitions | 20 |
| Is this product/service really needed?..... | 20 |
| How does this harm the environment? | 20 |
| Are there better alternatives that provide the same benefit? | 20 |
| What further information should the supplier provide?..... | 20 |

| | | | | |
|--|--------------------------------|--------------------|-------------------------|-------------------------|
| Document: Sustainability Guidelines for Procurement | | | Version: Final | 2 of 23 |
| 1st Issue Date | Administered by | Approved by | Last Review Date | Next Review Date |
| 6 Dec 2019 | Procurement Coordinator | CEO | | |

Disclaimer: Hardcopies of this document are considered uncontrolled. Please refer to the Fiji Ports Intranet; Corporate Documents; A-Z Policies for the latest version.

| | |
|--|----|
| How will we dispose of this product in the most sustainable way at the end of its life?..... | 20 |
| Sustainability Assessment for Logistics Requisitions | 21 |
| Is this product/service really needed?..... | 21 |
| How does this harm the environment? | 21 |
| Are there better alternatives that provide the same benefit? | 21 |
| What further information should the supplier provide?..... | 21 |
| How will we dispose of this product in the most sustainable way at the end of its life?..... | 21 |
| Sustainable Local Supplier Assessment | 22 |
| Environmental certification | 22 |
| Carbon footprint | 22 |
| Waste | 22 |
| Sustainable Product Assessment | 23 |
| Product certification | 23 |
| Manufacturer certification..... | 23 |
| Energy Use | 23 |

| | | | | |
|--|-------------------------|--------------------|-------------------------|-------------------------|
| Document: Sustainability Guidelines for Procurement | | | Version: Final | 3 of 23 |
| 1st Issue Date | Administered by | Approved by | Last Review Date | Next Review Date |
| 6 Dec 2019 | Procurement Coordinator | CEO | | |

Disclaimer: Hardcopies of this document are considered uncontrolled. Please refer to the Fiji Ports Intranet; Corporate Documents; A-Z Policies for the latest version.

Scope

These guidelines cover procurement and civil works undertaken by FPCL, such that they are implemented in a sustainable way, to the greatest extent possible.

“Sustainable procurement looks beyond the up-front cost to make purchasing decisions based on the entire life cycle of the goods and services, taking into account associated costs, environmental and social risks and benefits, and broader social and environmental implications.”¹

Responsible Manager

Procurement Coordinator

Accompanying Documents

- SustainabilityAssessment_LR.dotx
- Sustainable Local Supplier Assessment.dotx
- Sustainable Product Assessment.dotx
- Sustainable Supplier Assessment.dotx

Review

These guidelines shall be reviewed and updated every 5 years, starting 2023.

Summary of sustainable procurement approach

In order to make its supply chain greener, FPCL is adopting these Port Procurement Sustainability Guidelines.

These guidelines require providers of products and services to supply information regarding the sustainability of their products and services. This information will be used as one of the criteria for assessing quotes and suppliers.

FPCL staff placing logistics requisitions (LRs) are also required to complete a sustainability checklist that is included with their requisition.

For goods purchased by tender, tenderers will be required to provide information about the environmental impact of their offer, this will be considered as one of the tender evaluation criteria.

Specific guidance is provided for the procurement of:

- Civil works
- Stationery and office supplies
- IT equipment
- Vehicles
- Maintenance supplies.

¹ 2018 Australian government sustainable procurement guidelines:

<https://www.environment.gov.au/system/files/resources/7b8df2bd-3bb9-49cc-b417-5f2eb6e0ce37/files/sustainable-procurement-guide.pdf>

| Document: Sustainability Guidelines for Procurement | | | Version: Final | 4 of 23 |
|---|-------------------------|-------------|-----------------------|------------------|
| 1 st Issue Date | Administered by | Approved by | Last Review Date | Next Review Date |
| 6 Dec 2019 | Procurement Coordinator | CEO | | |

Disclaimer: Hardcopies of this document are considered uncontrolled. Please refer to the Fiji Ports Intranet; Corporate Documents; A-Z Policies for the latest version.

FPCL will discontinue the use of single use plastics from 2022 on.

Obligations on suppliers

Suppliers shall be required to provide information about the sustainability of the product or service being provided. Suppliers from whom regular, routine purchases are made (eg plumbing supplies, stationary, etc) shall also be required to provide information about the environmental sustainability of their business.

Information to be provided by suppliers of services

Service providers such as auditors, consultants, engineering advisors etc shall be required to provide information about their own environmental sustainability.

This should include the following information:

- Overall: Whether or not they are certified to ISO 15001 (Environmental Management Systems) or ISO 50001 (Energy Management Systems)
- Carbon emissions:
 - o Whether or not they track and report on their carbon footprint
 - o Recent actions they have undertaken to reduce their carbon footprint
- Waste:
 - o Whether or not waste from operations (usually office) is separated for recycling or not.
- Air pollution/carbon emissions:
 - o What proportion of company vehicles are hybrid or electric
 - o The extent to which public transport is used for business purposes
 - o The extent to which video conferencing or similar is used in lieu of air-travel.

All service suppliers shall be required to submit the attached form: Sustainable Supplier Assessment.dotx.

Information to be provided by suppliers of products, about the products supplied

Product suppliers shall supply the following information about products supplied:

- Whether the product has any environmental certification or not, and the name of the certification. Eg. Paper may be certified by the Forestry Stewardship Council (FSC).
- Whether or not the manufacturer has any environmental certification or not. Eg the manufacturer may be ISO 14001 certified.
- If the product is one that uses energy (electricity or fuel), information about its efficiency. Eg for a lighting product, information should provide information on the efficacy of the light, in terms of lumens per watt.

The attached form shall be used by product suppliers: Sustainable Product Assessment.dotx.

| Document: Sustainability Guidelines for Procurement | | | Version: Final | 5 of 23 |
|---|-------------------------|-------------|-----------------------|------------------|
| 1 st Issue Date | Administered by | Approved by | Last Review Date | Next Review Date |
| 6 Dec 2019 | Procurement Coordinator | CEO | | |

Disclaimer: Hardcopies of this document are considered uncontrolled. Please refer to the Fiji Ports Intranet; Corporate Documents; A-Z Policies for the latest version.

Information to be provided by suppliers providing routine goods on a regular basis

These are expected to be local suppliers

- Carbon emissions:
 - o Whether or not they track and report on their energy use and carbon footprint
 - o Recent actions they have undertaken to reduce their energy use/carbon footprint
- Waste:
 - o Whether or not waste from their operations is separated for recycling or not.
- Air pollution/carbon emissions:
 - o What proportion of company vehicles are hybrid or electric
 - o Actions they are taking to minimise fuel use / use of vehicles.

All local suppliers shall be required to submit the attached form: Sustainable Local Supplier Assessment.dotx.

Sustainability checklist for FPCL staff

Staff lodging logistics requisition (LR) shall be required to undertake an assessment, which is to be submitted with the LR.

The assessment is an adaptation of the Australian Government's Sustainable Procurement Guidelines.

The following questions should be addressed:

1. Is there really a need for this good/service? Are alternatives viable, such as reuse, recycling, adaptation of existing, hire?
2. How does this harm the environment? Briefly describe the impact over the product lifecycle
3. Are there better alternatives that provide the same benefit?
4. Do you want the supplier to provide more information? If so, then what (eg data sheets, information on product lifecycle sustainability, etc):
5. How will we dispose of this product in the most sustainable way?

The form that is to be included in the LR is attached: SustainabilityAssessment_LR.dotx

Phased deployment of this guide

This guide shall be deployed using a phased approach.

In 2019 and 2020 these requirements shall apply to a single purchases with a total value worth more than \$15,000.

In 2021 this threshold will be lowered to \$10,000, and in 2022 to \$5,000. In 2023 the threshold will drop to purchases worth \$2,000 or more.

It will be added to FPCLs procurement manual.

| Document: Sustainability Guidelines for Procurement | | | Version: Final | 6 of 23 |
|---|-------------------------|-------------|-----------------------|------------------|
| 1 st Issue Date | Administered by | Approved by | Last Review Date | Next Review Date |
| 6 Dec 2019 | Procurement Coordinator | CEO | | |

Disclaimer: Hardcopies of this document are considered uncontrolled. Please refer to the Fiji Ports Intranet; Corporate Documents; A-Z Policies for the latest version.

The templates that accompany this guide shall be incorporated into existing documentation. Specifically:

- The Sustainability Assessment for Logistics requisition will be incorporated into the Logistics Requisition (LR) form.
- The Sustainable Supplier Assessment and the Sustainable Local Supplier Assessment shall be incorporated into the Supplier Registration Form.
- The Sustainable Product Assessment shall be included as an attachment to suppliers in Requests for Quotes or Invitation to Tenders

| Document: Sustainability Guidelines for Procurement | | | Version: Final | 7 of 23 |
|--|---|---------------------|---------------------------------------|-------------------------|
| 1st Issue Date | Administered by | Approved by | Last Review Date | Next Review Date |
| 6 Dec 2019 | Procurement Coordinator | CEO | | |

Disclaimer: Hardcopies of this document are considered uncontrolled. Please refer to the Fiji Ports Intranet; Corporate Documents; A-Z Policies for the latest version.

Sustainability Scores

To enable a comparison of the sustainability of a supplier or a product, the following scoring tables will be used. The theoretical maximum possible score is 10.

Criteria for Sustainable Product Ranking

Note for a produce that doesn't use energy the maximum number of points is 5

| Criteria | Number of points |
|--|--|
| Product has an environmental certification | <p>1 to 3.</p> <p>If a certification is graded (eg gold, silver, bronze), the highest grade gets 3 points, the second highest 2 points, and the third highest 1 point.</p> <p>If the certification has no grades, then 2 points are allocated</p> |
| Manufacturer has an environmental certification (eg ISO 14001) | 2 points. |
| Energy use (for energy using products only) | <p>1 to 5 points.</p> <p>If the product is one that comes with an energy star rating gets 1 point if the rating is 3 stars, and 1 additional point for each extra star.</p> <p>If the product has a fuel efficiency rating (eg a vehicle), it gets 1 point if its fuel economy is 8 litres/100kms or less, 2 points if fuel economy is better than 6 l/100kms, 3 points if fuel economy better than 4 l/100kms (likely a hybrid vehicle), 4 points if better than 2 l/100kms (this would be a plug in hybrid electric vehicle) and 5 points if less than 1 litre/100 kms (this would be a pure electric car).</p> <p>If the product has no rating system, yet comparative data is available, any product considered to have energy efficiency above average would get 1 point, any product in the top 30% of efficiency 2 points, in the top 20% of efficiency 3 points, in the top 10% of efficiency 4 points, in the top 5% of efficiency 5 points. Average efficiency would be considered the efficiency of a typical product purchased in Suva.</p> <p>Where there is no comparative data available, if the manufacturer can provide a case study showing better efficiency than average then 2 points shall be allocated.</p> |

| | | | | |
|---|--------------------------------|--------------------|-------------------------|-------------------------|
| Document: Sustainability Guidelines for Procurement | | | Version: Final | 8 of 23 |
| 1st Issue Date | Administered by | Approved by | Last Review Date | Next Review Date |
| 6 Dec 2019 | Procurement Coordinator | CEO | | |

Disclaimer: Hardcopies of this document are considered uncontrolled. Please refer to the Fiji Ports Intranet; Corporate Documents; A-Z Policies for the latest version.

Criteria for Sustainable Supplier Ranking

| Criteria | Number of points |
|--|---|
| Supplier has an environmental certification (eg ISO 14001) | 2 points. |
| Supplier tracks its carbon footprint and reports publicly on it | 1 |
| Supplier has taken recent action (in the last 12 months) to reduce its carbon footprint | 1 |
| Supplier can provide reasonable evidence that it is carbon neutral with respect to its operations | 3 |
| Supplier recycles at least 3 of the following: paper, plastic bottles, glass bottles, aluminium, food waste | 1 |
| 30% or more of vehicles are hybrid or electric; Greater than 30% of travel is undertaken by public transport Video conferencing is used instead of air travel. | 1 point for any 1 of these 3; 2 points for 2 or more. |

Criteria for Sustainable Local Supplier Ranking

| Criteria | Number of points |
|--|---|
| Supplier has an environmental certification (eg ISO 14001) | 2 points. |
| Supplier tracks its carbon footprint and reports publicly on it | 1 |
| Supplier has taken recent action (in the last 12 months) to reduce its carbon footprint | 1 |
| Supplier can provide reasonable evidence that it is carbon neutral with respect to its operations | 3 |
| Supplier recycles at least 3 of the following: paper, plastic bottles, glass bottles, aluminium, food waste | 1 |
| 30% or more of vehicles are hybrid or electric; Greater than 30% of travel is undertaken by public transport Video conferencing is used instead of air travel. | 1 point for any 1 of these 3; 2 points for 2 or more. |

| | | | | |
|--|-------------------------|--------------------|-------------------------|-------------------------|
| Document: Sustainability Guidelines for Procurement | | | Version: Final | 9 of 23 |
| 1st Issue Date | Administered by | Approved by | Last Review Date | Next Review Date |
| 6 Dec 2019 | Procurement Coordinator | CEO | | |

Disclaimer: Hardcopies of this document are considered uncontrolled. Please refer to the Fiji Ports Intranet; Corporate Documents; A-Z Policies for the latest version.

Sustainable Purchasing Guidelines for Specific Products and Services

These guidelines are to be provided to the suppliers of these products and services with any tenders, requests for quotes or purchase orders, and suppliers shall be asked to indicate how they will meet the intent of these guidelines.

Civil works

Civil works undertaken include:

- Wharf repairs
- Building construction
- Wharf and dock construction
- Any other civil works involving demolition or construction.

Civil works impact on the environment in the following ways

- Construction and demolition waste: takes up land space and may contain materials harmful to the environment
- Greenhouse gas emissions arise from the embodied emissions in materials, the emissions from building operation and use, and from its eventual demolition and disposal. Concrete has high embodied emissions of around 1 tonne CO₂-e/m³, however operational usage typically accounts for 80% or more of a building's carbon footprint.
- Air pollution during construction.
- Water pollution from any run off for works undertaken close to the sea.

Major port development or redevelopment shall also be undertaken in accordance with the NSW Green Port development guidelines, available here:

<https://www.portauthoritiesnsw.com.au/media/2363/green-port-guidelines.pdf>

These guidelines are focussed on the following ten environmental issues:

1. Materials selection
2. Waste management
3. Water consumption
4. Energy use
5. Transportation
6. Indoor environment
7. Emissions
8. Water quality
9. Land use
10. Environmental management

Construction and demolition waste

Construction and demolition waste takes up land space and may contain toxic materials.

| Document: Sustainability Guidelines for Procurement | | | Version: Final | 10 of 23 |
|---|-------------------------|-------------|-----------------------|------------------|
| 1 st Issue Date | Administered by | Approved by | Last Review Date | Next Review Date |
| 6 Dec 2019 | Procurement Coordinator | CEO | | |

Disclaimer: Hardcopies of this document are considered uncontrolled. Please refer to the Fiji Ports Intranet; Corporate Documents; A-Z Policies for the latest version.

Demolition waste

Any building, wharf, road, or other civil construction that is demolished or removed, or part thereof, shall, to the greatest extent possible, seek to recycle the materials removed and have toxic materials appropriately destroyed.

- Building fixtures shall be recycled to the greatest extent possible. Eg steel from fluorescent light fixtures shall be processed as scrap metal by a recycling company.
- Toxic materials, such as mercury gases in fluorescent tubes, PCBs in old fluorescent light capacitors, asbestos, lead pipe, etc., shall be handled in such a way as to minimise its impact on people and the wider environment. Where such materials can be reclaimed or safely destroyed in Fiji, Australia or New Zealand, this shall be undertaken and with documentation provided to prove proper disposal.
- Concrete removed shall be crushed for reuse. Such uses can include, amongst others²:
 - o As a gravel substitute in drains
 - o As a base for new road paving
 - o As a crushed rock permeable paving.
- Steel removed shall be recycled as scrap.

Construction waste

Construction waste arises for several reasons, including, amongst others:

- Use of non-standard sizes in designs, requiring cutting and trimming of standard sized materials (eg timber materials).
- Rework, as a result of:
 - o Poor design, requiring the design to be changed during the construction phase, which usually means cutting and removal of unwanted materials.
 - o Services (such as electrical and plumbing) that in the design are not sufficiently separated.
 - o Poor coordination of services. Eg. Trenches needing to be cut into fresh concrete for pipes or cabling (why wasn't the trenching and pipework done before the concreting).
- Material quantities not properly calculated, resulting in materials being supplied but unused.
- Damage to materials in storage.
- Excessive product packaging.
- Unexpected site conditions

Several strategies for reducing construction waste are:

- Involving suppliers and trades in the design detail.
- Use of pre-fabrication
- The use of Building Information Modelling (BIM), which can greatly reduce the amount of rework.
- Thorough site surveys etc.

² <https://www.thebalancesmb.com/recycling-concrete-how-and-where-to-reuse-old-concrete-844944>;
<https://www.environment.gov.au/system/files/resources/b0ac5ce4-4253-4d2b-b001-0becf84b52b8/files/case-studies.pdf>

| Document: Sustainability Guidelines for Procurement | | | Version: Final | 11 of 23 |
|---|-------------------------|-------------|-----------------------|------------------|
| 1 st Issue Date | Administered by | Approved by | Last Review Date | Next Review Date |
| 6 Dec 2019 | Procurement Coordinator | CEO | | |

For major projects those tendering should be required to indicate how they intend to minimise construction waste.

Greenhouse gas emissions

With respect to minimising operational greenhouse gas emissions, any new building, no matter what its size - whether a guards shed or a large office - shall be designed with passive design principles, so as to minimize unwanted heat gain whilst maximizing the use of daylight and cooling breezes, and shall be fitted from the start with solar PV panels, such that the building is energy neutral. That is the amount of energy produced by the PV panels over one year is greater or equal to the amount of energy consumed in the building.

Passive design of new buildings

The Sustainable Tropical Building Design: Guidelines for Commercial Buildings:

https://www.cairns.qld.gov.au/data/assets/pdf_file/0003/45642/BuildingDesign.pdf, shall be followed, noting the following (from these guidelines):

- Avoid heat gain
 - Orient the building to reduce exposure to midday sun, particularly summer sun.
 - Use materials with low thermal mass (as a general rule).
 - Shade walls and windows, particularly any walls with high thermal mass.
 - Use glazing on windows that cannot be effectively shaded.
 - Use insulation, light colours and heat reflective surfaces.
- Encourage natural ventilation
 - Orient the building and windows towards prevailing easterly winds.
 - Include operable windows and ceiling vents that enable the building to naturally ventilate.
- Make use of natural light
 - Install shaded windows.
 - Install shaded skylights, light tubes and other natural lighting devices.
- Create cool outdoor areas
 - Use verandahs and deep balconies to shade and cool incoming air.
 - Use landscaping to provide shade without blocking cooling breezes and use planting to reduce ground temperature and minimise reflected heat.

N.B. The advice in this guide with respect to the use of large skylights and atriums is misguided and should NOT be followed, as the use of such features will result in large unwanted heat gains requiring much more air conditioning energy to reduce this heat gain than would otherwise be required to illuminate the space.

For buildings of above 500 m² in area, an experienced thermal modeller in tropical design should be contracted (eg C.K. Tang, <https://ckatwork.com/>), and the BSEEP technical guidelines followed: <https://ckatwork.com/downloads/>

| Document: Sustainability Guidelines for Procurement | | | Version: Final | 12 of 23 |
|---|-------------------------|-------------|-----------------------|------------------|
| 1 st Issue Date | Administered by | Approved by | Last Review Date | Next Review Date |
| 6 Dec 2019 | Procurement Coordinator | CEO | | |

Disclaimer: Hardcopies of this document are considered uncontrolled. Please refer to the Fiji Ports Intranet; Corporate Documents; A-Z Policies for the latest version.

Low embodied carbon

Minimizing the embodied carbon of a new construction is largely a design exercise.

For construction works in excess of FJD \$10,000,000 a consultant should be appointed to advise on embodied carbon, noting however that this should not compromise the life of asset.

Design for long life

Civil works should be undertaken with view to long life, so as to minimize the embodied environmental impacts from the construction of a facility. E.g. a facility built to last 120 years, but with twice the embodied carbon emissions of a facility built to last 40 years, has effective lower embodied carbon due to its longer life.

Key considerations in designing for long life are:

Sea level rise. Predictions of sea level rise vary. The Intergovernmental Panel on Climate Change is generally considered to be the most authoritative source, with the most recent report here: https://www.ipcc.ch/site/assets/uploads/2018/02/WG1AR5_Chapter13_FINAL.pdf, noting that these reports are updated every few years.

Sea level rise will not be uniform, and will vary from location to location. Different climate models predict different levels of sea level rise. The average sea level rise predicted by twenty one different models, for Fiji, is between 0.4 and 0.7m depending on temperature rise, by 2100.

At COP 23 Fiji noted that sea level rise was occurring at 6mm/year, and expected to double by 2100, which would indicate a sea level rise of around 1m by 2100. <https://cop23.com.fj/fiji-and-the-pacific/how-fiji-is-affected-by-climate-change/>

Monitoring of sea level at Lautoka wharf by Geoscience Australia, however, shows effectively a 3.8 mm annual rise from 1993 to 2018. <http://www.bom.gov.au/ntc/IDO70054/IDO70054SLD.shtml>

As Kings wharf has been in use for over 100 years, it would be reasonable to expect that any new wharf built would likely have a similar service life. Accounting for sea level rise, and the ability to raise the wharf level if needed without having to completely rebuild, would be financially and environmentally prudent, noting that the range of sea levels by 2100 could vary widely, and any facility would need to be designed to be used effectively over a range of sea levels.

It would be appropriate to look beyond expected average sea level rises and instead look at the likely distribution of sea level rise and chose an appropriate confidence level. E.g. “the wharf shall be designed to accommodate at a 95% confidence level the expected sea level rise predicted by the IPCC under a high global warming scenario.”

Fiji’s economic growth. Any new wharf development should be undertaken in a way that allows for future economic growth, along with the ability to augment capacity incrementally, over a long period.

| Document: Sustainability Guidelines for Procurement | | | Version: Final | 13 of 23 |
|---|---|-------------|-----------------------|------------------|
| 1 st Issue Date | Administered by | Approved by | Last Review Date | Next Review Date |
| 6 Dec 2019 | Procurement Coordinator | CEO | | |

Disclaimer: Hardcopies of this document are considered uncontrolled. Please refer to the Fiji Ports Intranet; Corporate Documents; A-Z Policies for the latest version.

Storm surges, cyclones and floods. With climate change these are likely to increase in frequency and intensity, and should be accounted for in design. This includes design for strong winds.

Air and water pollution during construction

Air and water pollution shall be minimised during construction as follows:

- Having a site anti-idling policy for vehicles and machinery
- Pre-fabricating as much as possible
- Requiring that vehicles and equipment used on site be less than 10 years old.
- Ensuring that any runoff which may be taking rubbish or other waste into the sea is captured.

Stationery and office supplies

Stationery and office supplies are routinely purchased.

The main environmental impacts of stationery and office supplies are:

- Air pollution and greenhouse gas emissions in their manufacture and transport
- Use of non-renewable resources
- Toxins and waste from their disposal.

Paper based products purchased shall be FSC certified³.

Paper based products which can be recycled shall be preferred over those incorporating plastics. Eg. binders, folders and similar.

Wherever possible paper based products shall be preferred over those which are plastic, noting that paper is bio-degradable, whereas plastics are not.

Plastics degrade when they are recycled, and can only be recycled a limited number of times.

Many plastics have toxins in them which are harmful to human and animal health.

Where the use of plastic products is unavoidable, such plastics shall be ones which can be relatively easily recycled, and include:

- Plastic 1. PET (polyethelyne terephthalate), used in drinks bottles. These can be recycled in Fiji.
- Plastic 2. HDPE (high density poly ethylene), eg as used a packaging for cleaning agents. Recycling shall be undertaken when facilities are available.
- Plastic 7 labelled "PLA" near the recycling symbol. These are made from corn starch and will biodegrade. These should not be recycled, but should instead be processed with compostable waste.

The use of the following plastics shall be avoided:

³ <https://au.fsc.org/en-au>

| Document: Sustainability Guidelines for Procurement | | | Version: Final | 14 of 23 |
|---|-------------------------|-------------|-----------------------|------------------|
| 1 st Issue Date | Administered by | Approved by | Last Review Date | Next Review Date |
| 6 Dec 2019 | Procurement Coordinator | CEO | | |

- Plastic 3. PVC is hard to recycle, and has many toxins in it.
- Plastic 6. Polystyrene. This breaks down easily and is often seen on beaches and in waterways. It is hard to recycle, with toxins in it.
- Plastic 7. (Except those with the “PLA” label.) A variety of other plastic types that may contain toxins.

Further information on plastics and recycling is available here:

<https://learn.eartheasy.com/articles/plastics-by-the-numbers/>

Vehicles and machinery (including boats)

Vehicles and machinery have large environmental impacts due to their size, the large amount of raw materials used in their manufacture, their use of fuels, and the challenges involved in their disposal at end of life.

Some general key principles are:

- Purchase the smallest possible vehicle/machine that can reliably and safely do the job over its intended life. Small vehicles use fewer raw materials and generally get better fuel economy. For example, the Renault City K-ZE could be a suitable all electric vehicle costing no more than a conventional vehicle and with more than enough range for daily activities around Suva: https://www.greencarreports.com/news/1125190_renault-city-k-ze-goes-on-sale-in-china-for-8-700
- The greenhouse gas emissions from fuel use are large, and fuel economy is of high importance.
- Increasingly hybrid and electric vehicles are having lower environmental impacts. In Fiji, with relatively clean grid electricity (mostly produced by hydro-power), electric vehicles have much lower emissions than those that use fossil fuels.
- Plug in hybrid vehicles, such as the plug in Mitsubishi Outlander, can have very low emissions if plugged in every night and typically only used to travel 40 to 50kms per day.
- Small efficient vehicles and machines cost less to own and operate.

FPCL shall ensure that each vehicle it purchases uses at least 10% less fuel to do the same job as the vehicle it replaces, and shall aim to eventually have an all-electric fleet (e.g. by 2035) subject to existence of national infrastructure to support this decision.

Machinery purchased should be able to do the same job as the previous one, but also, based on manufacturer representations, using 10% less fuel to do the same job than the machine it is replacing.

Boats or vessels that are purchased should similarly, based on manufacturer representations, have high fuel efficiency, without compromising on safety.

Preference shall always be given to vehicles that provide instantaneous information to the driver about fuel economy and provide feedback about how efficiently the car is being driven.

| | | | | |
|--|--------------------------------|--------------------|------------------------------|-------------------------|
| Document: Sustainability Guidelines for Procurement | | | Version: Final | 15 of 23 |
| 1st Issue Date | Administered by | Approved by | Last Review Date | Next Review Date |
| 6 Dec 2019 | Procurement Coordinator | CEO | | |

Disclaimer: Hardcopies of this document are considered uncontrolled. Please refer to the Fiji Ports Intranet; Corporate Documents; A-Z Policies for the latest version.

Office and communications Equipment

Office and communications equipment including computers, printers, monitors, mobile phones, network equipment and servers can account for up to 30% of office energy use and has environmental impacts associated with its manufacture, energy use, and disposal.

As FPCL seeks to become paperless in its operation, the environmental impact of office and communications equipment could be expected to increase.

The Electronic Product Environmental Assessment Tool <https://www.epeat.net/> evaluates the sustainability of office and communications equipment based on a range of criteria including:

- Product criteria:
 - Substance management
 - Preferable material use
 - Energy efficiency
 - Indoor air quality and consumables
 - Product packaging
 - Product longevity
 - Design for repair, reuse and recycling
- Corporate criteria (of the manufacturer)
 - Responsible end of life management
 - LCA and carbon footprint
 - Corporate Social Responsibility
 - Corporate Environmental Performance
 - Manufacturing Chemicals

Servers, computers and displays, and imaging equipment shall only be purchased if it is registered on the Electronic Product Environmental Assessment Tool (EPEAT, <https://www.epeat.net/>), and preference will be given towards products which achieve a silver or gold rating.

Maintenance supplies

FPCL regularly purchases materials for maintenance of its assets, such as plumbing supplies, electrical supplies, paint, oils, etc.

The environmental impact of these supplies mostly comes from the materials used, the energy used in their manufacturer and transport, and how toxic they are to the environment.

The following principles should be applied in the purchase of these products.

- Longevity. Materials shall be purchased that can reliably perform for a long time.
- Toxicity. Preference shall be for materials with low toxicity.
- Easy of recycling. Preference shall be for materials that can be recycled.

| | | | | |
|--|--------------------------------|--------------------|------------------------------|-------------------------|
| Document: Sustainability Guidelines for Procurement | | | Version: Final | 16 of 23 |
| 1st Issue Date | Administered by | Approved by | Last Review Date | Next Review Date |
| 6 Dec 2019 | Procurement Coordinator | CEO | | |

Disclaimer: Hardcopies of this document are considered uncontrolled. Please refer to the Fiji Ports Intranet; Corporate Documents; A-Z Policies for the latest version.

Metals that are not complex alloys can generally be easily recycled and if not prone to corrosion can have very long service lives and may only have low toxicity.

There are various environmental labelling schemes for paints. One that applies to paints and other construction materials in the Good Environmental Choice Australia (GECA) label www.geca.eco

Discontinued use of single use plastics

Single use plastics are a leading cause of plastics in the ocean. They include items such as coffee cups, take away food containers, plastic shopping bags, straws, water bottles, plastic packaging, plastic cutlery, etc.

As a port authority, FPCL is committed to having a clean port. This includes oceans free of plastic.

By the end of 2022 FPCL will phase out the use of single use plastics:

- It will use large, reusable water bottles with dispensers, or water filters, for the provision of drinking water.
- It will prohibit staff from disposing of take-away plastic food container, such as the polystyrene containers common in Fiji, in its premises
- It will engage with staff to inform them and educate them about the ban on single use plastics and suitable alternatives.
- It will require suppliers to minimize their use of plastic packaging.

Exception shall be the use of stretch films to protect and wrap goods.

References

2018 Australian government sustainable procurement guidelines:

<https://www.environment.gov.au/system/files/resources/7b8df2bd-3bb9-49cc-b417-5f2eb6e0ce37/files/sustainable-procurement-guide.pdf>

2013 Australian government sustainable services procurement guidelines:

<https://www.environment.gov.au/system/files/resources/cbe8a470-2e37-40d7-9715-57a25a6eba30/files/sustainable-procurement-services.pdf>

Sustainability Guidelines for Capital Works, Department of Justice and Regulation, Victoria State Government. http://www.biosis.com.au/wp-content/uploads/2018/08/2017-8049_Appendix-6.pdf

<https://www.wbdg.org/design-objectives/sustainable>, a good general overview of the elements involved in sustainable construction and how they can be addressed (as do the sustainability guidelines)

https://www.designingbuildings.co.uk/wiki/Sustainability_in_building_design_and_construction

| | | | | |
|--|--------------------------------|--------------------|------------------------------|-------------------------|
| Document: Sustainability Guidelines for Procurement | | | Version: Final | 17 of 23 |
| 1st Issue Date | Administered by | Approved by | Last Review Date | Next Review Date |
| 6 Dec 2019 | Procurement Coordinator | CEO | | |

Disclaimer: Hardcopies of this document are considered uncontrolled. Please refer to the Fiji Ports Intranet; Corporate Documents; A-Z Policies for the latest version.

| | | | | |
|--|---|---------------------|---------------------------------------|-------------------------|
| Document: Sustainability Guidelines for Procurement | | | Version: Final | 18 of 23 |
| 1st Issue Date | Administered by | Approved by | Last Review Date | Next Review Date |
| 6 Dec 2019 | Procurement Coordinator | CEO | | |

Disclaimer: Hardcopies of this document are considered uncontrolled. Please refer to the Fiji Ports Intranet; Corporate Documents; A-Z Policies for the latest version.

Annexe – Forms and checklists

These are also attached as individual documents

| Document: Sustainability Guidelines for Procurement | | | Version: Final | 19 of 23 |
|--|---|---------------------|---------------------------------------|-------------------------|
| 1st Issue Date | Administered by | Approved by | Last Review Date | Next Review Date |
| 6 Dec 2019 | Procurement Coordinator | CEO | | |

Disclaimer: Hardcopies of this document are considered uncontrolled. Please refer to the Fiji Ports Intranet; Corporate Documents; A-Z Policies for the latest version.

Sustainability Assessment for Logistics Requisitions

Product or service being requisitioned: [Click or tap here to enter text.](#)

Is this product/service really needed?

| | Yes | No | Comment |
|---|--------------------------|--------------------------|--|
| Do we have an existing product that can be reused? | <input type="checkbox"/> | <input type="checkbox"/> | Click or tap here to enter text. |
| Can we purchase a recycled product instead? | <input type="checkbox"/> | <input type="checkbox"/> | Click or tap here to enter text. |
| Can we adapt an existing product? | <input type="checkbox"/> | <input type="checkbox"/> | Click or tap here to enter text. |
| Will it only be used infrequently, and can we hire instead? | <input type="checkbox"/> | <input type="checkbox"/> | Click or tap here to enter text. |

Conclusion:

Yes, this product needs to be purchased.

No, it doesn't need to be purchased. Instead the following will be done:

[Click or tap here to enter text.](#)

How does this harm the environment?

| | | |
|---|---|--|
| <input type="checkbox"/> Use of non-biodegradable materials <input type="checkbox"/> Use of toxic materials in its manufacture | <input type="checkbox"/> Use of materials that can't be easily recycled | <input type="checkbox"/> Produces emissions or pollution when used |
|---|---|--|

Are there better alternatives that provide the same benefit?

Such as products/services with environmental certification, products that use energy more efficiently, etc.

Yes No Comment: [Click or tap here to enter text.](#)

What further information should the supplier provide?

Do you want the supplier to provide more information. If so, then what (eg data sheets, information on product lifecycle sustainability, etc): [Click or tap here to enter text.](#)

How will we dispose of this product in the most sustainable way at the end of its life?

Please describe: [Click or tap here to enter text.](#)

| | | | | |
|---|--------------------------------|--------------------|-------------------------|-------------------------|
| Document: Sustainability Guidelines for Procurement | | | Version: Final | 20 of 23 |
| 1st Issue Date | Administered by | Approved by | Last Review Date | Next Review Date |
| 6 Dec 2019 | Procurement Coordinator | CEO | | |

Disclaimer: Hardcopies of this document are considered uncontrolled. Please refer to the Fiji Ports Intranet; Corporate Documents; A-Z Policies for the latest version.

Sustainability Assessment for Logistics Requisitions

Product or service being requisitioned: [Click or tap here to enter text.](#)

Is this product/service really needed?

| | Yes | No | Comment |
|---|--------------------------|--------------------------|--|
| Do we have an existing product that can be reused? | <input type="checkbox"/> | <input type="checkbox"/> | Click or tap here to enter text. |
| Can we purchase a recycled product instead? | <input type="checkbox"/> | <input type="checkbox"/> | Click or tap here to enter text. |
| Can we adapt an existing product? | <input type="checkbox"/> | <input type="checkbox"/> | Click or tap here to enter text. |
| Will it only be used infrequently, and can we hire instead? | <input type="checkbox"/> | <input type="checkbox"/> | Click or tap here to enter text. |

Conclusion:

Yes, this product needs to be purchased.

No, it doesn't need to be purchased. Instead the following will be done:

[Click or tap here to enter text.](#)

How does this harm the environment?

| | | |
|---|---|--|
| <input type="checkbox"/> Use of non-biodegradable materials <input type="checkbox"/> Use of toxic materials in its manufacture | <input type="checkbox"/> Use of materials that can't be easily recycled | <input type="checkbox"/> Produces emissions or pollution when used |
|---|---|--|

Are there better alternatives that provide the same benefit?

Such as products/services with environmental certification, products that use energy more efficiently, etc.

Yes No Comment: [Click or tap here to enter text.](#)

What further information should the supplier provide?

Do you want the supplier to provide more information. If so, then what (eg data sheets, information on product lifecycle sustainability, etc): [Click or tap here to enter text.](#)

How will we dispose of this product in the most sustainable way at the end of its life?

Please describe: [Click or tap here to enter text.](#)

| | | | | |
|---|--------------------------------|--------------------|-------------------------|-------------------------|
| Document: Sustainability Guidelines for Procurement | | | Version: Final | 21 of 23 |
| 1st Issue Date | Administered by | Approved by | Last Review Date | Next Review Date |
| 6 Dec 2019 | Procurement Coordinator | CEO | | |

Disclaimer: Hardcopies of this document are considered uncontrolled. Please refer to the Fiji Ports Intranet; Corporate Documents; A-Z Policies for the latest version.

Sustainable Local Supplier Assessment

Please answer the following questions. Note that you may be required to provide evidence to support your response.

Environmental certification

Does your organisation have ISO 14001 (Environmental Management Systems), or ISO 50001 (Energy Management Systems), or any other internationally recognized environmental certification? [Choose an item.](#)

If other, please list: [Click or tap here to enter text.](#)

Evidence you may need to provide: Copy of the certification showing its validity.

Carbon footprint

Does your organisation track and report publicly on its carbon footprint? Check if yes.

Have you undertaken any recent action to reduce your carbon footprint? Check if yes, and please briefly describe what you did and the month/year in which this was undertaken.

Actions taken to reduce carbon footprint: [Click or tap here to enter text.](#)

Evidence you may need to provide: The latest report on your carbon footprint, a brief report on actions to reduce your carbon footprint.

Waste

Which of the following waste from your office/operations is recycled and or composted:

- Paper
- Plastic bottles
- Glass bottles
- Aluminium
- Food waste/other compostables

Evidence you may need to provide: invoice/payment receipt to provider of recycling services

Air pollution/carbon emissions

What percentage of your company vehicles are hybrid or electric? [Choose an item.](#)

What percentage of travel by staff is undertaken using public transport? [Choose an item.](#)

Evidence you may need to provide: public transport expense claims, vehicle details.

| Document: Sustainability Guidelines for Procurement | | | Version: Final | 22 of 23 |
|---|-------------------------|-------------|-----------------------|------------------|
| 1 st Issue Date | Administered by | Approved by | Last Review Date | Next Review Date |
| 6 Dec 2019 | Procurement Coordinator | CEO | | |

Disclaimer: Hardcopies of this document are considered uncontrolled. Please refer to the Fiji Ports Intranet; Corporate Documents; A-Z Policies for the latest version.

Sustainable Product Assessment

Product certification

Does this product have any environmental certification? Check if yes.

If yes, please list the name of the certification: [Click or tap here to enter text.](#)

Manufacturer certification

Does the manufacturer of the product have any environmental certification? If yes, select the certification that applies. [Choose an item.](#)

If other, please list: [Click or tap here to enter text.](#)

Energy Use

If the product is one that uses energy (electricity or fuel), please provide information about its efficiency. Eg for a lighting product, information should provide information on the efficacy of the light, in terms of lumens per watt.

Information about its efficiency: [Click or tap here to enter text.](#)

Yes, a product data sheet providing information on its energy usage is attached.

| Document: Sustainability Guidelines for Procurement | | | Version: Final | 23 of 23 |
|---|-------------------------|-------------|-----------------------|------------------|
| 1 st Issue Date | Administered by | Approved by | Last Review Date | Next Review Date |
| 6 Dec 2019 | Procurement Coordinator | CEO | | |

Disclaimer: Hardcopies of this document are considered uncontrolled. Please refer to the Fiji Ports Intranet; Corporate Documents; A-Z Policies for the latest version.