

FIJI COVID-19 SOCIAL PROTECTION PROJECT

E-Waste Management Plan

February 2022

1. Introduction

The Fiji Social Protection COVID-19 Response and System Development Project (the parent Project) became effective in 2021. The Project is being implemented by Ministry of Economy (MOE), in collaboration with other implementation partners, including Fiji National Provident Fund (FNPF), Ministry of Women, Children and Poverty Alleviation (MWCPA), and the Ministry of Employment, Productivity and Industrial Relations (MEPIR), and the Ministry of Commerce, Trade, Tourism and Transport (MCTTT). A Project Management Unit (PMU) has been established under MOE, responsible for daily management of the Project implementation.

The objective of the parent Project is to support cash transfers to the unemployed and underemployed affected by COVID-19 and strengthen the social protection system and the relevant policy setting in Fiji. The parent Project consists of two components:

- **Component 1 – Cash transfer to the unemployed and underemployed affected by the COVID-19.** This component will support cash transfer in the form of government top-ups to the Fiji National Provident Fund (FNPF) members who have lost their jobs or face reduced hours or reduced wages as a result of the COVID-19 crisis and who have insufficient balance in their FNPF General Account.
- **Component 2 – Institutional strengthening** will focus on strengthening the Fijian social protection delivery system and the relevant policy setting. Activities under this component will enable efficient and timely targeting of existing groups supported by social assistance benefits, as well as the inclusion of other groups of people heavily hit by COVID-19, focusing on workers in the informal economy as well as near-poor groups more broadly. The component will finance TA activities, study tours, workshop and consultative activities, the procurement of office equipment, hardware and software, as well as project management and monitoring and evaluation activities of the project.

As the Component 2 – Institutional Strengthening will support the procurement of office equipment, i.e. electronic hardware such as computers, printers, internet equipment etc. which will ultimately result in the generation of electronic waste. In order to address the potential environmental risks of such e-waste, this E-waste Management Plan (EWMP) is developed according to the World Bank Environmental and Social Framework (ESF) requirements and the PMU's commitment in the Environmental and Social Commitment Plan (ESCP).

During the implementation, an additional financing (AF project) of USD 50 million is provided by the Bank to support: Component 3 Unemployment Assistance, which will support conditional cash transfers to individuals who lost their jobs or livelihoods in formal and informal sectors because of the COVID-19 pandemic, and Component 4 Job for Nature 2.0, which will finance the implementation of a community-driven green and inclusive public works. It will also support additional TA activities under the Component 2. The AF project will also include procurement of office equipment, which have the same potential concern of e-waste management.

This EWMP sets out the institutional arrangement for tracking the use of electronic hardware procured under the project (both the parent project and AF project), till the final disposal throughout the whole life of these office equipment.

2. Legal Framework

2.1 Legal Framework in Fiji

The main national laws and regulations in Fiji related to waste management include:

- **Environment Management Act 2005.** The Act provides an integrated system for the protection of natural resources, and for the control and management of developments, waste management and pollution control, and for the establishment of a national environmental council and for related matters.
- **Environment Management (Waste Disposal and Recycling) Regulations 2007.** This Regulation provides a framework for the administration of waste disposal and recycling, with institutional arrangement for permit system and compliance enforcement mechanisms. It specifies requirements for waste recycling in terms of lead acid batteries, plastic bottles, landfills and recycling and waste collection.
- **Health and Safety at Work Act 1996.** The Act is the key legal instrument for safety and health at work. It is comprehensive, covering a wide range of key aspects of safe and healthy environment at work. The Act is supplemented by associated regulations on OHS administration, training, representatives and committees, general workplace conditions, several specific substantive provisions, and a Code of Practice on noise. All activities will be undertaken in compliance with this Act.
- **National Solid Waste Management Strategy (2011-2014).** Fiji recognizes waste management as a pressing issue that needs immediate action. It is recognized as a major concern with the potential to cause negative impacts on the national development activities including public health, the environment, food security, tourism and trade. To address the impacts, the National Solid Waste Management Strategy and Action Plan 2008 -2010 was formulated and in the years since the launching of the strategy, there has been some progress on improving solid waste. This revised Strategy, developed in consultation with stakeholders and approved by cabinet decision on 15th August 2011 strives to address the environmental, health, and economic impacts of wastes over the period 2011- 2014 by building on the progress and successes achieved under the 2008 – 2010 strategy. It is supported by an implementation plan which sets out the key actions that will be taken to deliver the vision of the strategy.

In general, e-waste is not yet separately recognized and addressed under the existing environmental laws and regulations in Fiji.

2.2 The World Bank ESF

The World Bank's ESF applies to the Project. It requires the borrower to identify, evaluate and manage the environmental and social risks and impacts of the Project in a manner consistent with the Environmental and Social Standards (ESSs) of the ESF.

Based on environmental and social screening, seven ESSs are applicable to the Project¹, specifically among which:

- *ESS 1 Assessment and Management of Environmental and Social Risks and Impacts* requires the borrower to carry out environmental and social risks and impacts assessment, and develop mitigation measures to avoid, minimize, mitigate or otherwise compensate the anticipated impacts. Following the ESS1 requirement, the potential environmental risks of e-waste generation from office equipment procurement is identified, and the development of an e-waste management plan is committed by PMU in the ESCP;
- *ESS3 Resource Efficiency and Pollution Prevention and Management* requires the borrower to apply technically and financially feasible pollution prevention measures proportionate to the risks and impacts levels associated with Project and consistent with World Bank Group Environment, Health and Safety Guidelines (EHSGs) and Good International Industrial Practice (GIIP).

The World Bank Group EHSGs provides guidelines on general solid waste and hazardous waste management measures, as well as health and safety measures related to the waste management.

3. Environmental Impacts of Office Equipment

Based on the Project design, the following office equipment (electronic hardware) will be procured during the implementation:

Type	Quantity	Estimated Life Span
Office equipment to be procured under the parent Project		
Laptop	5	2-5 years
Portable Wi-Fi	2	N/A
Projector *	1	Up to 10 years
Mouse*	5	Up to 3 years
Hard Drive*	1	3-5 years
USB*	10	N/A
Recorder*	1	N/A
Office equipment to be procured under the AF Project		
Laptop	5	2-5 years
Hard Drive	3	Up to 10 years
Portable Wifi	2	N/A
Mouse*	5	Up to 3 years
Recorder	1	N/A
Projector	1	Up to 10 years
Cables (Extension Cord)	5	N/A
Power boards	5	N/A
Color Printer & Scanner	1	N/A

¹ ESS5 Land acquisition, ESS 7 Indigenous People and ESS9 Financial Intermediaries are not applicable to the Project.

Note: Items with the * are proposed to be purchased. Should there be any further procurement during this project's life cycle, the inventory table of the e- waste management plan shall be updated.

Technically, this office equipment procured by the project are not classified as hazardous waste. While these products may contain potentially hazardous substances like lead, cadmium, and mercury etc. During normal daily use, there is little or no adverse environmental or health risks in the office environment. However, when this office equipment retires at the end of their life span, and if wrongly handled (e.g. using burning method or other chemical methods to recycle metals), they may generate pollution of heavy metals and/or other organic pollutants that are harmful to human health and natural environment.

Given these potential risks and impacts, this e-waste management plan is developed for the Project, with management procedures, and monitoring and reporting protocol established in the following sections.

4. Current E-waste Management in Fiji

Though there a number of environmental protections, waste management, health and safety related laws and regulations in place in Fiji, there are no specific policies and guidelines for collection, treatment, and disposal of waste from electrical and electronic equipment in Fiji, and there is no established e-waste recycling industry or enterprises. Currently, most e-waste in Fiji is landfilled together with other solid waste or burned.

In Fiji, most solid waste is still currently being thrown in open dumpsites, illegally disposed of in the sea, on unused land. However, despite such challenges, Fiji, Suva City in particular, has achieved important improvements in solid waste management in recent years. Suva City Council conducts a special collection drive for e-waste twice a year under its "Keep Suva Clean Campaign", and the collected e-waste is sent to Naboro Sanitary Landfill in Suva for safe disposal.

Naboro Landfill is an anaerobic sanitary landfill located on the Queens Road approximately 24 km south from central Suva. Naboro Landfill caters for solid waste collected in Fiji's central division. The Naboro Landfill is Fiji's only sanitary landfill, it is designed to capture all leachate that would result from decomposition of waste on site through geomembrane, polyethylene, and clay liners. This is ensuring the protection of groundwater as well as surface near the site. Moreover, it also has onsite leachate treatment system including aeration and wetland treatment system. The landfill also operates under strict supervision of the Ministry of Environment ensuring that all users as well as contractors adhere to the legal framework in Fiji.

The Naboro Landfill is owned by the Fiji government and is managed by the Ministry of Environment through a private company. The landfill began operations in 2005 and is designed to have a lifespan of 70 years. Due to the special design of the landfill, it is ideal for final disposal of the e-waste should there not be any e-waste collection or recyclers in Fiji by end-of-products life cycle.

5. E-Waste Management Procedures

The following procedures will be implemented for the e-waste management related to the office equipment procured under the Project.

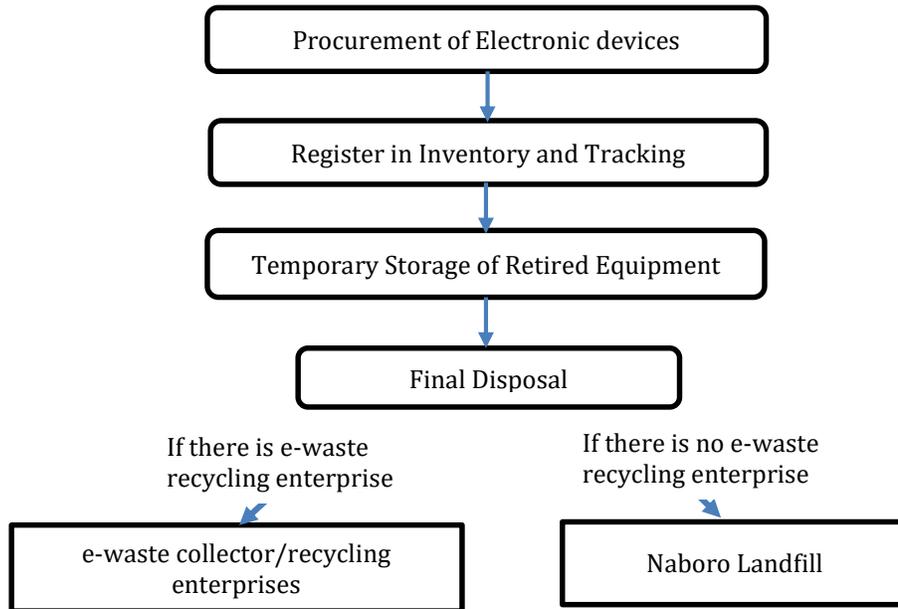


Figure 1: Flowchart of E-waste Management by PMU

5.1 Inventory Register

Once the electric office equipment is procured, PMU shall establish an electronic equipment inventory, with detailed information of equipment name, model, serial number, assigned user, location of use.

This registration shall be co-signed by the PMU inventory staff and the user and be kept as part of the PMU archive.

5.2 Use tracking

During the implementation of the project, PMU shall keep tracking the use of these equipment on an annually basis to update the current users and locations.

5.3 Temporary Storage of Retired Equipment

Once the equipment cannot be further used and are to be replaced or decommissioned, PMU shall store the equipment in a safe room before sending out for final disposal. The temporary storage room shall only be accessed by authorized staff. The equipment shall not be dismantled or taken away by unauthorized technical person for necessary repair.

5.4 Final Disposal

When appropriate, PMU shall arrange the final disposal as follows:

- First, PMU shall explore whether there are established e-waste recycling industries in Fiji market. The PMU should contact and enquire with the Ministry of Environment to obtain the list of recycling companies. Given country's effort on waste management and technical evolution in the coming year, there is a possibility that formal e-waste recycling industry is available by the time when the Project's electronic equipment reaches its end life. If yes, then PMU shall contact the licensed e-waste collector/recycler for the final disposal.
- In the case there is no e-waste collection or recycling company, PMU shall send the retired electronic equipment to the Naboro Sanitary Landfill in Suva for safe landfill disposal.

Upon completion of disposal, PMU shall update the equipment inventory accordingly to record the date and destination of the final disposal.

6. Institutional Arrangement and Reporting

PMU shall assign a staff who is responsible for creation and management of the equipment inventory throughout the project implementation. This designated staff will be monitoring and updating the inventory according to the above procedures and prepare relevant reporting for PMU.

PMU shall provide the update on the e-waste management situation in the project progress report to the Bank on a semi-annual basis, throughout the project implementation period.