

WASTE OIL COLLECTION SYSTEM AND TREATMENT PLANT



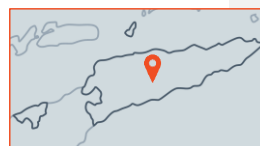
LOCATION SNAPSHOT

Location & description

Project location is Timor-Leste, Dili and a location outside Dili (tbd)

Project to be implemented in Dili and one other municipality for hosting waste oil treatment and recycling plant.

Target population is the entire population (1.3 million)



1. PROJECT CONTEXT AND RATIONALE

1.1. Sector & Sub-sector(s)

Sector: **Solid waste management**

The activity is classified under the following NACE codes:

- E) Water supply; sewerage, waste management and remediation activities
- 38 - Waste collection, treatment and disposal activities; materials recovery
 - 38.12 - Collection of hazardous waste
 - 38.22 - Treatment and disposal of hazardous waste
- 39 - Remediation activities and other waste management services
 - 39.00 - Remediation activities and other waste management services

1.2. Rationale for PPIP intervention and IFI loan

The largest portion of the country's waste oil is generated by the three main Power Stations established in Hera (Dili Municipality), Betano (Same Municipality) and Sacato (RAEOA – ZEESM) which are operating on diesel. However, waste oil also appears from many smaller producers throughout the country, e.g. lubricant oil from motor vehicles, and individual generators. It is reported that the Dili Port also produces waste oil, and it has been exported to Surabaya for incineration as no suitable bilge or sump oil incinerator is available at the port¹.

Inadequate management of waste oil (see Figure 6) has been reported to constitute serious environmental problems such as soil and groundwater contamination and ecosystem damages (GoRDTL, 2012). In response to this, the Government of Timor-Leste, through the Secretariat of State for Environment (SEA), has established a recycling plant in Tibar, on the western edge of the existing landfill site (see Figure 2 below), to receive, store and transform waste oil into diesel to be used as fuel in the power plants. Supplemented with collection trucks, the facility consisted of five storage tanks of 120,000 litres each and a range of operational units.

The National Directorate for Pollution Control (NDPC) has not provided accurate production capacity data for the plant. However, it is indicated that the Hera Power Station has its own storage tank of about 25,000 to 30,000 litres, while Betano has a 100,000 litres of storage capacity for waste oil. When these tanks are full, the NDPC is contacted to carry out the collection with normally two collection trucks. The collection was before entrusted to local companies but due to some irregularities, as well as because of the collection vehicles were not technically appropriate, the collection responsibility has now been taken over by the NDPC.

The plant started operating from 2010 but it is currently (2021) not operating due to technical malfunctions and on February 22, 2021, SEA has signed a new memorandum of understanding with IOC Waste Oil Refinery to restart but only after an Environmental Impact Assessment (EIA) is

¹ This information is from 2015. Is has not been verified or updated in 2021

carried out with a subsequent grant of environmental licensing certificate. This has not been achieved yet.

During the operational period of the recycling plant, waste oil was being collected only from the Hera Power Station (Dili Municipality), Betano Power Station (Same Municipality) in addition to workshops around Dili. Other municipalities still remain unserved until now. The collection frequency has been on average 2-3 times per month. Collection services cost \$200/trip and \$500/trip from Hera and Betano to Tibar respectively.



Figure 1 Open waste oil storage and spillage at small producers of waste oil (garages). © COWI/2021

The amount of waste oil produced in the country is not recorded in detail. Waste oil produced from the two power plants is estimated at around 600 litres per day (~220 tons/year). In addition, used motor oil is generated from motor vehicles (e.g. motorcycles, cars, busses, and trucks), small generators, and other small scale generators. According to WHO², the total number of officially registered vehicles in Timor-Leste in 2016 amounted to 146 596 vehicles. Assuming the following distribution of vehicles and their oil replacement, a rough estimate of waste oil from small producers indicates a production of around 160 tons annually.

Table 1 Estimate (rough) of waste oil production from vehicles in Timor-Leste

Type of Motor Vehicle	Estimated number Timor-Leste (2016)	Motor oil capacity (l)	Change frequency per year	Waste oil generation
Passenger car	16,000	4.5	0.5	36,000
Bus Car	3,000	7	1	21,000
Freight cars	8,000	7	1	56,000
Motorcycle	119,000	0.75	0.5	44,625
Total	146,000			157,625

Significant volumes of waste oil from vehicles and other small producers are assumed to be disposed of directly into the environment, from garages, fuel stations and individuals that lack proper storage and collection of the waste oil. It may also be assumed that a considerable amount of waste oil is utilized in ways that are environmentally not sustainable, including treatment of timber, poles and roofing timber, as coolant for chain saws, pest control, and as a source of fuel in simple furnaces.

Besides from being out of order, the existing waste oil recycling plant appears to be too small to accommodate and process the total amount of waste oil produced across the country, which is why SEA has secured a three hectares land in the municipality of Same and planned to install a similar but nation-wide and eco-friendly facility. According to SEA, these plans have not materialised as of October 2021.

² <https://www.who.int/data/gho/data/indicators/indicator-details/GHO/number-of-registered-vehicles>



Figure 2 The current waste oil plant at Tibar, Timor-Leste. Pictures taken May 2021. ©COWI

1.3. Relevance to Strategic Development Plan & overall planning framework

The Government of Timor-Leste, in its Strategic Development Plan (SDP covering the years 2011-2030), has demonstrated its commitment to bring improvement on the sector of urban solid waste management by introducing guidelines based on environmental laws and regulations to set standards for waste treatment in Dili and other main Cities, encouraging activities on waste recovery and better management of waste. The SDP called for the better waste treatment in Dili and other main cities and the encouragement of composting, plastic recycling, paper recycling and glass recycling plants. The SDP promised the provision for household rubbish bins, **collection of waste oils**, and reduction of the use of plastic bags by encouraging the use of paper bags as an alternative and hereby reducing the spread of communicable diseases transferred in waste, reduced clogging of drains and canals by solid waste causing malfunctions, and reduced outflux of waste to the sea for improvements of the marine life.

Accordingly, waste oils should be treated in accordance with the waste hierarchy to protect human health and the environment, waste oils should be collected separately from other wastes, and waste oils with different characteristics should not be mixed and not mixed with other kinds of waste or substances that would impede their treatment and/or recycling.

Commented [WU1]: Please consider the decree law no. 2/2017 of Urban solid waste management system in chapter II article 6 paragraph b) and referring to the decree law no. 38/2020 the creation of national Water and sanitation in article 4 paragraph 1) and 2),

1.4. Relevance to Sustainable Development Goals

The project contributes to the following Sustainable Development Goal(s):

- > Goal 6: Ensure availability and sustainable management of water and sanitation for all
- > Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable
- > Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

(See attached table for a more detailed description of contributions to achievement of SDGs)

1.5. Project promoter(s)

The project promoter is/are:

Ministry of State Administration, through the National Directorate of Local Administration.
National Directorate for Pollution Control (NDPC), Secretariat of State for Environment (SEA), through its General Directorate for Environment (DGA)

1.6. General institutional set-up

It is understood that the Secretary of State for Environment (SEA) will be the regulatory authority for the licensing process for the installation of any waste oil recycling plant, as well as to act as the implementing Government Department for investments related to this particular sector.

According to the Decree-Law 2/2017 "Urban Solid Waste Management System", collection and treatment of the MSW is responsibility of the municipalities, but this decree does not mention responsibility to collect and treat/dispose of hazardous waste. Therefore, with regards to legal frameworks, no any specific laws or guidelines have been produced to regulate upon this specific

waste. The only law that generally does address the issue is the Decree-Law no. 26/2012 – Base Law for Environment.



2. INVESTMENT PROJECT INFORMATION

2.1. Scope of proposed project and type of investment measures to be implemented

The general idea of the project is to provide adequate collection, transport/transfer equipment and services, supporting structures for segregated collection and recycling/reuse activities of waste oil, and to provide environmentally safe treatment/disposal facilities for this waste to the Timor-Leste population, in alignment to the extent possible with relevant development plans, and SDGs.

This project will benefit residents and businesses in the entire country through improved solid waste management delivering improved public health and economic opportunities. Residents and businesses will have access to new employment opportunities and the ability to deliver new services (additional economic activity).

The project can generate potential employment in collection and processing, both for construction of the required sorting and re-processing infrastructure, as well as for their operation & maintenance as part of existing or new businesses.

Specific objectives are:

- > Provision of collection services and facilities for intermediate waste storage and collection of waste oil from small as well as larger producers of waste oil, meeting adequate environmental and health standards
- > Reduce significantly haphazard dumping and other illegal depositing of waste oil
- > Reduce significantly GHG emissions from illegal burning of waste oil
- > Increased levels of recycling of waste oil
- > Improved public awareness and acceptance of a system for management of waste oil
- > Improvement of stakeholder knowledge and capacity in waste management planning and implementation, especially regards waste oil

These objectives will be achieved by investments in new and adequate waste management equipment, structures, and plants, supplemented by investments in institutional development, capacity building, and public awareness/education.

The anticipated investment measures include:

- > Support the SEA in establishment of a processing plant for waste oil in Same and at the same time supporting the refurbishment of the plant at Tibar (if needed for re-starting the operation).
- > A nation-wide collection system for collection of waste oil from small as well as large producers is also supported.
- > Strategic plan for management of waste oils from Timor-Leste
- > Collection equipment for separate collection of waste oils from all producers
- > Establishment of processing plant in Same

2.2. Level of maturity

Project idea based on stakeholder dialogue and waste management goals of the Strategic Development Plan (SDP 2011-2030).

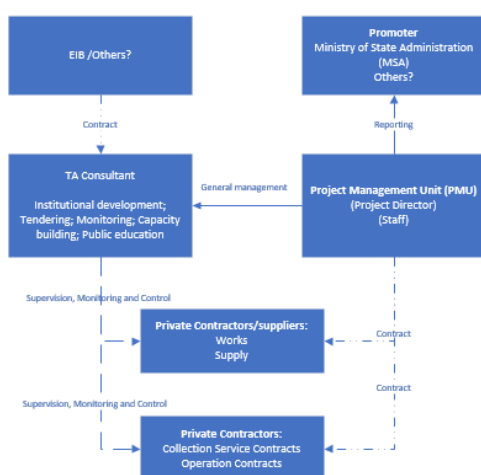
2.3. Approach chosen for project implementation

The proposed Institutional set-up for project implementation is as follows:

PMU
(Project Management Unit)

Implementing Agency: Established by the Promotor, comprising representatives from a (possible future) Regional Waste Management Entity and Municipalities, and supported by a Technical Assistance (TA) Consultant to oversee, monitor, and overall management of all components of the project in all phases

TA Consultant:	Institutional development; Tendering; Design review, Monitoring; Capacity building; Public education
Private Contractors (Implementation phase):	Supply contracts: Contracts with PMU Works contracts: Contracts with PMU
Private Contractors (Operation phase):	Transfer stations, Landfills and other plants: Service contracts with Regional Entity Waste collection and transport: Service contracts with municipalities



2.4. Identification of preliminary alternatives for the works

Consideration about the strategies in waste management in general and for final disposal of waste oil in particular will be provided in the pre-feasibility study. Several alternatives exist for final disposal of waste oil, including recycling/reuse (e.g. upgrading to lubricant oil quality or producing fuel for power plant). The options analysis may comprise elements such as:

- > Number and location of recycling/processing plants (one or two)
- > Structure of collection system
- > Option analysis regarding private sector participation

2.5. Total estimated project investment costs

A **first order** indication of the investment costs is shown below:

Output	Approx. cost (MEUR)
Waste oil storage equipment for small producers (garages, workshops, etc.)	tbd
Collection vehicles for collection of waste oil from large and small producers	tbd
Facilities for processing/upgrading waste oil	tbd
TA project: Institutional developments, including capacity building and public education/information	tbd
Total	tbd

2.6. Approach to finance the project	<p>Considering that the EIB's contribution to a project's cost is limited to 50% of the overall investment, the following financing sources have been identified:</p> <ul style="list-style-type: none"> > To be determined during Feasibility Study (PPIP). > During operations phase, user payment under affordability constraints is anticipated, however, probably not full-cost coverage.
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3. IMPLEMENTATION ARRANGEMENTS

3.1. Provisional schedule for project implementation	<p>The provisional schedule for project implementation is about 36 months, including 6-8 months for specifications/design and tender dossier, 6-8 months for procurement and contracting, and 18 months for works execution, supply and installation of equipment, and 4 months for training, with overlapping time for institutional build-up.</p>																
3.2. Estimated time and resources for PFS and FS	<p>The estimated time and resources required are as follows:</p> <table border="1" data-bbox="320 864 1070 1043"> <thead> <tr> <th>Phase</th> <th>Time (months)</th> <th>Level of Effort (person days – KE and Backstopping)</th> <th>Level of Effort (person days – NKEs)</th> </tr> </thead> <tbody> <tr> <td>Pre-Feasibility study</td> <td>4</td> <td>25</td> <td>75</td> </tr> <tr> <td>Feasibility study</td> <td>6</td> <td>60</td> <td>150</td> </tr> <tr> <td>Total</td> <td>10</td> <td>85</td> <td>225</td> </tr> </tbody> </table>	Phase	Time (months)	Level of Effort (person days – KE and Backstopping)	Level of Effort (person days – NKEs)	Pre-Feasibility study	4	25	75	Feasibility study	6	60	150	Total	10	85	225
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Pre-Feasibility study	4	25	75														
Feasibility study	6	60	150														
Total	10	85	225														
3.3. Main barriers to develop the project	<p>The main barriers to develop and implement the project identified at this stage are:</p> <ul style="list-style-type: none"> > Policies, plans, guidance documents and SWM strategies at the municipal or national level do not yet exist, including strategic plan for management of hazardous waste. > Financing sources, including tariff setting, fee collection, billing practices, (to be identified during pre-feasibility and Feasibility studies) > Institutional set-up, i.e. setting up structures and establish responsibility for operating the proposed regional structure. To be outlined in PFS study and executed during Project implementation. 																
3.4. Estimation of required TA activities to implement the planned investment	<p>The TA activities required to implement the investment include: Institutional development (establishment of relevant entities for ownership and operation of plants/facilities/structures; division of responsibilities between National, regional, and municipal entities); tender procedure, tendering of supply and works contracts, contracting supply and works, review of detailed design, monitoring deliveries of supply contracts, monitoring works contract; preparation of tender dossier for operation contracts/service, tendering and contracting; capacity building, public education.</p>																



4. SAFEGUARDS AND ELIGIBILITY

4.1. Environmental and Social issues, recommended ESIA needs	<p>A screening of environmental and social aspects will be performed at the pre-feasibility stage; the environmental and social safeguards that may become relevant are listed below:</p>		
	Y	Involuntary resettlement	N
	Y	Pollution prevention and abatement	N
	-	Rights and interests of vulnerable groups	N
	Y	Biodiversity and ecosystems	N
	Y	Climate-related standards	Y
	?	Occupational and public health, safety and security	Y
	?	Cultural heritage	Y
	?	Labour standards	N
	Y	Stakeholder engagement	Y

<p>4.2. Eligibility: Alignment with Paris Agreement</p>	<p>The proposed investment falls within the following sector(s) supported by the EIB Group under the Paris alignment framework (low carbon):</p> <ul style="list-style-type: none"> > Infrastructure and equipment for collection and transport of waste, including vehicles with priority given to low and zero-carbon technology (where both technically feasible and economically viable). Vehicles with fossil-fuel technology shall meet EU Taxonomy criteria for DNSH. 														
<p>4.3. Eligibility: Alignment with EU Taxonomy</p>	<p>A summary of the technical screening criteria for “substantial contribution” and “do-no-significant-harm” (DNSH) in relation to the six environmental objectives of the EU Taxonomy is shown below.</p> <p>The following project activities are/will be aligned with the EU Taxonomy, as shown below:</p> <table border="1" data-bbox="320 723 1082 1597"> <thead> <tr> <th data-bbox="320 723 488 779">Environmental objective</th> <th data-bbox="488 723 1082 779">Activity: Separate collection and transport of hazardous waste, NACE code E38.12</th> </tr> </thead> <tbody> <tr> <td data-bbox="320 779 488 835">Climate change mitigation</td> <td data-bbox="488 779 1082 835">DNSH: N/A</td> </tr> <tr> <td data-bbox="320 835 488 891">Climate change adaptation</td> <td data-bbox="488 835 1082 891">DNSH: Climate risk and vulnerability assessment performed</td> </tr> <tr> <td data-bbox="320 891 488 947">Water and marine resources</td> <td data-bbox="488 891 1082 947">DNSH: N/A</td> </tr> <tr> <td data-bbox="320 947 488 1037">Circular economy</td> <td data-bbox="488 947 1082 1037">DNSH: Separately collected waste is not mixed in waste storage and transfer facilities with other waste or materials with different properties.</td> </tr> <tr> <td data-bbox="320 1037 488 1541">Pollution prevention & control</td> <td data-bbox="488 1037 1082 1541"> <p>Substantial contribution:</p> <ol style="list-style-type: none"> 1. Hazardous waste is source segregated from non-hazardous waste to be separately collected and transported. Separate collection and transport of hazardous waste include (but is not limited to) Waste oils Batteries 2. Proper collection and handling to prevent leakage of hazardous waste during collection, transport and delivery to the treatment facility which is permitted to treat hazardous waste. 3. In the course of collection and transport, hazardous waste is packaged and labelled in accordance with the international and Community standards in force. 4. The operator collecting hazardous waste complies with record-keeping obligations including the quantity, nature, origin, destination, frequency of collection, mode of transport and treatment method foreseen set by applicable legislation. 6. The activity delivers the waste to economic activities which are substantially contributing to either the transition to a circular economy or pollution and prevention control objectives. </td> </tr> <tr> <td data-bbox="320 1541 488 1597">Biodiversity and ecosystems</td> <td data-bbox="488 1541 1082 1597">DNSH: N/A</td> </tr> </tbody> </table> <p>Hazardous waste collection is considered a complex task that requires significant investments in terms of infrastructure and maintenance/improvement of hazardous waste collection schemes and requires numerous participants in the private and public sector. Hazardous waste can take the form of solids, liquids, sludges, or contained gases and are classified on the basis of their properties (biological, chemical and physical).</p> <p>The very first step of proper hazardous waste management is the collection of waste classified as hazardous (also referred to as hazardous and special waste by the industry). Separate collection plays an essential role in preserving the physical integrity of hazardous waste in various forms and preventing the leakage of hazardous substances. Besides substantially contributing to pollution and</p>	Environmental objective	Activity: Separate collection and transport of hazardous waste, NACE code E38.12	Climate change mitigation	DNSH: N/A	Climate change adaptation	DNSH: Climate risk and vulnerability assessment performed	Water and marine resources	DNSH: N/A	Circular economy	DNSH: Separately collected waste is not mixed in waste storage and transfer facilities with other waste or materials with different properties.	Pollution prevention & control	<p>Substantial contribution:</p> <ol style="list-style-type: none"> 1. Hazardous waste is source segregated from non-hazardous waste to be separately collected and transported. Separate collection and transport of hazardous waste include (but is not limited to) Waste oils Batteries 2. Proper collection and handling to prevent leakage of hazardous waste during collection, transport and delivery to the treatment facility which is permitted to treat hazardous waste. 3. In the course of collection and transport, hazardous waste is packaged and labelled in accordance with the international and Community standards in force. 4. The operator collecting hazardous waste complies with record-keeping obligations including the quantity, nature, origin, destination, frequency of collection, mode of transport and treatment method foreseen set by applicable legislation. 6. The activity delivers the waste to economic activities which are substantially contributing to either the transition to a circular economy or pollution and prevention control objectives. 	Biodiversity and ecosystems	DNSH: N/A
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Biodiversity and ecosystems	DNSH: N/A														

prevention control, proper collection of hazardous waste can help to close the loop of materials and hence contribute to circular economy.

To allow successful hazardous waste collection, some crucial activities have to take place before. These include:

- proper storage
- labelling of the hazardous waste
- hazardous waste should not be mixed

The substantial contribution of separate collection of hazardous waste is to:

- ensure that hazardous waste is collected separately from non-hazardous waste;
- proper collection and handling prevent leakage of hazardous waste during collection, transport and delivery to the treatment facility permitted to treat hazardous waste, including through the implementation of standardised organisational measures for specific streams such as e-waste;

so as to reduce the pressures on the environment by preventing or reducing direct emissions of pollutants.

Environmental objective	<p>Activity: Treatment of hazardous waste as a means for pollution prevention and control, NACE code E38.22</p> <p>Sub-activities: construction, revamping, upgrade, and operation of dedicated facilities for the treatment of hazardous waste, including the incineration of hazardous waste.</p> <p>The following sub-activities are excluded from the scope:</p> <ol style="list-style-type: none"> 1) Disposal operations of hazardous waste e.g., landfilling or permanent storage. 2) The construction, revamping, upgrade and operation of non-dedicated facilities incinerating hazardous waste i.e., non-dedicated hazardous waste incinerators that may still be permitted to accept and treat hazardous waste.
Climate change mitigation	DNSH: N/A
Climate change adaptation	DNSH: Climate risk and vulnerability assessment performed
Water and marine resources	Relevant techniques for the activity concerned are deployed as described for the protection of water and marine resources, as set out in the Best Available Techniques Reference Document (BREF) for Waste Treatment.
Circular economy	DNSH: N/A
Pollution prevention & control	<p>Substantial contribution:</p> <p>Compliance (as a minimum) with the requirements defined in the BAT conclusions of the WT and WI BREFs, aiming to optimise the effectiveness and environmental performance of treatment processes for the safe destruction of the hazardous substances present in the waste (as per the implementation of BAT 8 of WI BREF, in case of thermal treatment). Facilities that have been granted a derogation as per the procedure outlined in IED article 15(4) are not considered as fulfilling the Technical Screening Criteria.</p> <p>Additional criteria for types of treatment or treatment steps that may have a higher environmental impact are outlined below:</p>

	<p>1) Concerning all waste treatment processes (Technical Screening Criteria complementary to BAT 2 of WT BREF):</p> <p>Pre-acceptance procedures:</p> <p>In the case of hazardous waste, at least the following information must be gathered:</p> <p>(Expected) date of arrival at the waste treatment plant.</p> <p>The contact details of the waste producer and the sector which the waste originates from. The nature of process producing the waste, incl. the variability of the process.</p> <p>The estimated quantity expected to be delivered to the operator per delivery and per year.</p> <p>Description of the waste, incl.: composition, hazardous properties of the waste, waste code, the appropriate / suitable treatment route</p> <p>Acceptance procedures:</p> <p>In the case of hazardous waste, the following elements are in place:</p> <p>A reception facility equipped with a laboratory to analyse samples on site and documented analytical standard operating procedures, Documented sampling procedure consistent with relevant standards (e.g., EN 14899)</p> <p>Documented analysis of the relevant physico-chemical parameters for the treatment</p> <p>A dedicated quarantine waste storage area, as well as written procedures to manage non-accepted waste.</p> <p>Furthermore, the personnel having to deal with the (pre-) acceptance procedures need to be able due to his profession and/or experience to deal with all necessary questions relevant for the treatment of the wastes in the waste treatment facility. The procedures are intended to (pre-) accepting wastes at the waste treatment plant only if an appropriate / suitable treatment (route) is available and the disposal/recovery route for the output of the treatment is determined.</p> <p>8) Applicable to the (non-combustion) treatment of healthcare waste:</p> <p>The installation shall implement the best practices defined in the safe management of health care waste from WHO: https://www.euro.who.int/__data/assets/pdf_file/0012/268779/Safe-management-of-wastes-from-health-care-activities-Eng.pdf</p> <p>In addition, and in order to ensure that there is no risk of pollution of the environment and no risk for health, the following best practices can be taken into consideration. A non-combustion healthcare waste installation has specific acceptance procedure, monitors and can prove that the following types of healthcare waste are not accepted for treatment: Cytotoxic waste; Pharmaceutical waste; Chemical waste; Radioactive waste.</p> <p>Finally, the technologies used have to be certified by an acknowledged body.</p>
Biodiversity and ecosystems	An Environmental Impact Assessment (EIA) or screening has been completed in accordance with Directive 2011/92/EU

4.4. Eligibility: Clean Oceans Initiative	The proposed investment is not eligible for the Clean Oceans Initiative.
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Relevant Sustainable Development Goals (SDGs) and indicators

Goals and targets	Indicators
Goal 6. Ensure availability and sustainable management of water and sanitation for all	
6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally	6.3.2 Proportion of bodies of water with good ambient water quality
6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	6.6.1 Change in the extent of water-related ecosystems over time
By reducing illegal dumping, use of environmental unsustainable disposal practices, and improved collection coverage of waste oil, significantly less quantities of hazardous waste will be disposed of in or close to fresh water sources, lakes, wells and other places where water can be contaminated, thus contributing to the targets and the general goal.	
Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable	
11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	11.6.1 Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities
The project plans from the outset proper collection, transport and disposal/recycling of waste oils to be provided for the entire population. Separately collected waste oil will significantly enhance the possibilities for achieving recycling goals as well as the general waste management goals. Also, prevention of illegal burning of waste oil in small furnaces will be prohibited/prevented, thus contributing to improved air quality. Finally, waste collection vehicles will meet EU Taxonomy criteria for DNSH thus minimizing the impact on air quality.	
Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development	
14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution	14.1.1 Index of coastal eutrophication and floating plastic debris density
By providing adequate collection, transport, and disposal/recycling of waste oil, the amount of waste oil being disposed of illegally and not acceptable will dramatically decrease throughout Timor-Leste. The country is surrounded by the sea and no distances to the shoreline are more than 40 km. Since many current dumpsites are prone to flooding and flash-floods, the future risk of waste oil entering the sea will be dramatically diminished when waste is no longer disposed of in these unsafe places, and these are closed/remediated.	