

TERMS OF REFERENCE (TOR)

Finalise the Draft e-Waste Framework

GENERAL INFORMATION

Services/Work Description: National Consultant

Project Title: Finalise the draft e-waste framework.

Type of Contract: Individual Contract

Scope of Advertisement: National

Duration: Four Months

I. BACKGROUND

Bhutan's draft E-Waste Management Framework is being developed to guide the country's transition toward sustainable, climate-resilient, and resource-efficient e-waste management. Building on the national vision of "Zero Waste Bhutan by 2030," the framework responds to emerging challenges associated with rapid urbanization, changing consumption patterns, technological advancement, and the growing generation of electronic and hazardous waste. The framework seeks to strengthen institutional capacity, promote sustainable financing and technology adoption, enhance public awareness, and support the transition toward a circular economy through environmentally sound e-waste prevention, collection, recycling, and disposal systems.

The need to update and strengthen the framework has become increasingly critical amid evolving environmental, social, and economic conditions. Population growth, urban expansion, increased use of electrical and electronic equipment, and the impacts of climate change have significantly altered the scale and composition of e-waste generated in Bhutan.

In this context, the updated E-Waste Management Framework will contribute to national climate goals by promoting resource efficiency, reducing environmental pollution and greenhouse gas emissions, facilitating the transfer of climate technologies, and encouraging investment from both the public and private sectors. To ensure lasting and inclusive impact, the

framework embeds key priorities—including gender equity, climate resilience, and active community and stakeholder participation—directly into its implementation strategy.

II. OBJECTIVE AND SCOPE OF THE ASSIGNMENT

This consultancy aims to finalize Bhutan’s draft E-Waste Management Framework into a climate-resilient, circular-economy roadmap aligned with the nation's Zero Waste vision. The consultant shall assess current draft strategies, awareness goals, and collection mechanisms while designing practical measures to tackle emerging e-waste and hazardous waste issues in compliance with national and international standards.

The consultant shall align the framework with relevant national policies and international commitments while embedding core provisions for governance, financing, tech adoption, climate resilience, gender, and social inclusion. Through comprehensive consultations with government, private sector, civil society, and local government stakeholders, the consultant will capture technical inputs and community feedback. Ultimately, the work will deliver clear institutional roles, monitoring systems, and practical implementation strategies to finalize Bhutan’s e-waste framework.

III. KEY TASKS

The key tasks under this assignment include, but are not limited to, the following:

1. Conduct a comprehensive review of the Draft e-waste framework, including assessment of contents, gaps, challenges, implementation, and creation of an e-waste eco-system.
2. Undertake a comprehensive assessment of the current and emerging e-waste landscape to establish the country’s first national e-waste baseline, including an analysis of e-waste generation patterns, emerging trends, existing management practices, and the current and projected generation and management of photovoltaic (PV) waste, including end-of-life solar panels.
3. Evaluate the institutional and regulatory framework for e-waste management, including roles, coordination mechanisms, enforcement of the Waste Prevention and Management Act and Regulations, waste management strategy 2025, and alignment with other relevant policies.
4. Carry out comprehensive audits to identify and assess the types, quantities, and movement of e-waste generated by organizations and private households. This includes identifying equipment lifecycles, disposal practices, storage conditions, and leakage risks (e.g., informal dumping or unsafe dismantling).
5. Assess current collection, storage, treatment, reuse, refurbishment, and recycling practices undertaken by public entities and waste collectors.
6. Conduct consultations with key stakeholders such as the Department of Environment and Climate Change (DECC), Ministry of Health (MoH), Thromdes, relevant government

agencies, Local Governments (LGs), private waste operators, CSOs, electronic enterprises, repair shops, communities, and development partners to capture perspectives, priorities, and recommendations, validate the updated framework and roadmap, and incorporate feedback to finalise the documents.

7. Review and propose strategic partnerships with national and international institutions for capacity building, technology transfer, knowledge exchange, and support for e- waste infrastructure and services, including possible collaboration for research and development with relevant institutions such as the College of Natural Resources under the Royal University of Bhutan.
8. Assess the existing institutional arrangements for e-waste management by examining the roles and responsibilities of key stakeholders, including government ministries and agencies, local governments, producers and importers, recyclers and waste-management companies, informal-sector workers, consumers, and businesses.
9. Recommend the establishment of an e-waste management entity and define governance arrangements and review the draft Request for Proposal (RFP).
10. Develop recommendations for Extended Producer Responsibility (EPR), including responsibilities of producers, importers, distributors, retailers, and regulators.
11. Formulate an updated E-Waste Management Framework
12. Develop an implementation roadmap with national goals, targets, institutional responsibilities, financing, monitoring, and performance indicators.
13. Develop strategies for reuse, refurbishment, recycling, circular economy, education, awareness, and behavior change.
14. Recommend documentation, reporting systems, collection targets, and compliance mechanisms for EPR.
15. Design and recommend an integrated national e-waste data and digital monitoring system to support the effective implementation, tracking, reporting, and monitoring of e-waste management and Extended Producer Responsibility (EPR) obligations.
16. Develop pilot collection and source-segregation models for selected institutions or local governments, including the development of standardized operational procedures for e-waste collection, segregation, handling, labeling, transportation, and temporary storage.

IV. PAYMENT SCHEDULE

The Consultant shall receive his/her lump sum service fees upon certification of the completed activities/deliverables satisfactorily, as per the following payment schedule:

Activities/Deliverables	Target Due Dates	Schedule of Payments
Submission and approval of the inception report with work plan and methodologies for the key tasks and risk mitigation strategy.	15 days	10% of the contract amount
National E-Waste Situation Analysis, Institutional and Organisational Assessment, and Stakeholder Consultation Report	45 days	25% of the contract amount
Revised National Framework for E-Waste Management with a Draft Implementation Roadmap	60 days	25% of the contract amount
Submission of final reports on stakeholder consultations and the validation workshop. Finalization and formal approval of the updated e-waste framework, including an accompanying executive policy brief.	End of Contract Period	40 % of the contract amount

V. APPROACH OF THE WORK

The Consultant shall strictly adhere to the work plan and timeline agreed upon with the Department of Digital Infrastructure (DDI), GovTech Agency, throughout the execution of the assignment and shall:

- Undertake the collection and analysis of all relevant data and information necessary for the framework update from various sources, including government agencies, local governments, electrical and electronic dealers, waste handlers, and academic institutions. DDI, GovTech will facilitate access to data/information through necessary official letters and coordination with the focal person wherever required.
- Prepare and facilitate presentations, stakeholder interviews, bilateral meetings, and national consultation workshops as per the agreed work schedule to ensure broad-based participation and validation of key findings and recommendations.
- Maintain and submit detailed minutes of meetings, workshops, and discussions held during the assignment period.

The methodology of the assignment shall be clearly documented in the final report and must include comprehensive details of the following, not limited to:

- i. Documents reviewed (including existing national waste-related policies, strategies, laws, and relevant international frameworks).
- ii. Interviews, meetings, and bilateral discussions were conducted with key stakeholders.
- iii. Consultations with stakeholders at national and sub-national levels, including the private sector and waste handlers.
- iv. Techniques and approaches used for data collection, validation, gap analysis, and strategic planning; and
- v. Any training, capacity-building, or awareness sessions conducted or supported as part of the assignment.

VI. DURATION AND TIMEFRAME OF THE WORK

The duration of the contract shall be for 120 days, starting from the signing of the contract.

VII. INSTITUTIONAL ARRANGEMENT / REPORTING RELATIONSHIPS

The consultant shall work under the direct supervision of the e-waste focal person at GovTech and shall carry out day-to-day activities in accordance with the agreed work plan/schedule. The consultant shall submit reports as required under the work plan. All project deliverables shall be reviewed and verified by the e-waste focal person in close consultation with DDI management. Fortnightly/Weekly progress review meetings will be held to monitor implementation progress. Payments shall be certified by GovTech upon submission and acceptance of each deliverable as specified in the Terms of Reference (ToR).

VIII. DUTY STATION

The assignment will entail frequent consultations with institutions and staff based in Thimphu. All other tasks will be carried out remotely from the consultant's home, as DDI, GovTech will not provide office space for this assignment.

IX. QUALIFICATION

The Consultant will execute the assignment in accordance with the key tasks set out in Section III of this ToR and must possess the following qualifications:

- Minimum Bachelor's degree in environmental management, waste management, electronics, urban planning, environmental engineering, sustainable development, or

other relevant fields, and a Master's degree may be preferred.

- Minimum of four years of relevant professional experience in developing national strategies, policies, roadmaps, or plans in the waste management or environmental sector.
- Knowledge in Life Cycle Assessment (LCA) of electronics and experience in waste management, recycling plants, or environmental consultancy will be preferred.
- Proven track record of organising and facilitating multi-stakeholder workshops and high-level government consultations.
- Certified Environmental Professional is preferred, and
- Good analytical and report writing skills.

X. RECOMMENDED PRESENTATION OF PROPOSAL

Applicants must submit a financial proposal in Bhutanese Ngultrum (Nu.) detailing the cost of services per deliverable. In accordance with procurement regulations, the proposal must provide an all-inclusive fixed total contract price—comprising professional fees, transportation, communication, and all travel-related expenses—supported by a comprehensive itemized cost breakdown.

The Technical Proposal document must be submitted along with the following documents:

- A brief background of the applicant and a letter of intent.
- Evidence of experience in undertaking similar works (provide examples and referees).
- Technical proposal: Consultant's objective and scope of work. A summary of the methodology and project timelines & milestones for ensuring completion of work by the required time.
- The deliverables as per ToR
- CV of the consultant; and
- Financial proposal (all-inclusive fixed total contract with cost breakdown)