SUSTAINABLE PROCUREMENT FACTSHEET – PLASTIC BUCKET



This factsheet provides practical guidance for humanitarian procurement and programme teams to source plastic buckets more sustainably and from local production. It highlights key considerations throughout the product lifecycle:



Before buying | Choosing the right plastic bucket | During use | End of life | Alternatives

1. Before buying

Sustainable procurement starts with a clear assessment of needs. The following questions can guide procurement policies and decisions.

Do we need to buy new buckets?	Does it need to be plastic?	Can we choose a local and sustainable option?
• Can existing stocks be reused or redistributed? • What is the expected quantity and intended use? • Are the specifications aligned with the actual needs of affected populations? • Can the procurement volume be optimized to avoid over-supply and waste?	Could another material be suitable instead of plastic?	• Is there a local supplier able to produce or supply the bucket sustainably (e.g. recycled plastic, or alternative material)? • Does the supplier reduce environmental impact through recycled content, energy efficiency, or reduced packaging? • Can we prioritize durable, repairable, and reusable designs? *If no local supplier meets these criteria, consider regional suppliers for alternative sourcing options.*

2. Choosing the right plastic bucket

These tables help integrate sustainability into your plastic bucket procurement. **Table 1** includes ready-to-use technical specifications for BOQs, and **Table 2** provides supplier evaluation criteria for procurement assessment. The "Impact" column reflects each criterion's importance to the environmental footprint (climate, water, waste).

Table 1. Criteria for sustainable plastic bucket procurement

Criteria	Impact	Sustainability guidance
Durability & lifetime	High	**Robust buckets designed for repeated use** in field conditions. Prioritize mechanical strength, impact resistance and long service life to reduce replacement needs.
Material efficiency	High	Optimize weight and material use while maintaining required strength, watertightness and expected lifetime to reduce resource use and transport emissions.
Material selection	High	**Mono-material buckets** (e.g. PP) with clearly identified polymer type, minimal additives, and simple, single-material design to facilitate local reuse, repair, and recycling.
Recycled content	Medium	PCR content where technically and legally appropriate. **Do not prioritize recycled content alone: safety, traceability, durability and environmental benefit must be demonstrated.** *Note: No certified recycled food-grade plastics suitable for potable-water buckets were identified in the assessed Middle East market.*
UV resistance	Medium	UV-stabilized materials when buckets are expected to be used or stored outdoors or exposed to high solar radiation.
Packaging	Low	Minimise secondary and tertiary packaging. Avoid individual plastic wrapping where it is not necessary for product protection.

Table 2. Supplier criteria

Criteria	Impact	Sustainability guidance
Take-back	High	The supplier shall take back damaged or end-of-life buckets for recycling where feasible.
Information and traceability	Medium	The supplier shall provide documented information on polymer composition, recycled content (where applicable), material origin, manufacturing process, and relevant environmental data.

Responsible manufacturing	Medium	The supplier shall demonstrate environmental management practices, responsible resource use, and compliance with applicable labour and social standards across its operations and supply chain.
Quality and compliance documentation		The supplier shall provide valid certificates, test reports, and regulatory references demonstrating compliance with potable water/food-contact requirements and product performance specifications.

3. During use

- **Clean and store properly** to maintain hygiene and prevent damage.
- **Protect from unnecessary sun exposure** and extreme conditions to reduce material degradation.
- Use appropriately: **avoid overloading** or applications beyond the bucket's intended purpose.
- **Keep all components together** (e.g. lids, handles) to maximise usability.
- Inspect regularly for cracks, leaks, deformation or damaged handles.
- Repair or repurpose buckets when safe and technically feasible.
- Track losses and damage to improve future specifications and reduce unnecessary replacement.

4. End of life

- Promote **local recycling** by working with verified recyclers able to process the relevant plastic type (contact the **WREC** or **hulo** in the country).
- **Set up plastics collection points** at warehouses, distribution sites or operational facilities to facilitate recovery.
- Document end-of-life pathways to understand recovery rates and improve future procurement decisions.

5. Alternatives: cost and environmental analysis

Table 3. All contexts: environmental benefits of recommended alternatives

Availability of these alternatives must be verified with local suppliers. The reductions in climate change impact were calculated by comparing buckets made from virgin plastic with two alternatives: longer-lasting metal buckets and buckets made partly from recycled plastic.

Alternatives	Reduction in climate impact	Key benefits
Metal buckets (e.g. galvanized steel or stainless steel)	-67%	Offer high durability (assumed lifespan is three times longer than for other buckets), long service life and good repair potential. However, they are heavier, more expensive, prone to corrosion if not properly protected, and may have higher transport impacts.

Lower recycled plastic-content solution	-23%	**Recycled content is not automatically the best option**: Certified recycled plastic buckets suitable for potable-water applications are currently difficult to source in some context. For this reason, procurement should not set a mandatory high recycled-content threshold (i.e. 100%) without first validating: potable-water/food-contact compliance; material traceability; mechanical performance; UV resistance; watertightness; expected lifetime; availability of the recycled material; and the overall environmental benefit. **A lower recycled-content solution with verified safety and long lifetime may be preferable to a higher recycled-content solution that cannot demonstrate these requirements.**

Table 4. Lebanon: cost and environmental analysis of available alternatives

Locally manufactured, food-grade virgin plastic buckets with lids are **34% more expensive** than standard imported ones. Prices would drop with larger order volumes. This alternative also reduces the bucket's climate change impact by 2%.

Conventional technical specification	Sustainable technical specification
100% virgin HDPE/PP, imported. Expected lifespan of more than 3 years, fully recyclable at end of life, but reliant on virgin plastic production with a higher environmental footprint. Lower and more stable cost due to established international supply chains.	100% virgin, food-grade HDPE/PP, locally produced. Same expected lifespan and recyclability as the conventional option, with reduced transport-related emissions due to local sourcing.

6. References and resources

This factsheet is based on a project's market assessment in Lebanon, drawing on supplier questionnaire responses, technical observations from site visits, and available guidance on sustainable products and services relevant to the Lebanese context in 2026. For more information, as well as the methodology used for price comparison, total cost of ownership, and the simplified LCA, please refer to the following document: *Appendix 1 - Price comparison & environmental analysis methodologies.*