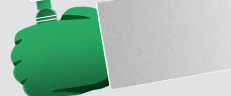


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Waste in humanitarian Operations:
Reduction and Minimisation

**Tackling
the medical
waste
management
challenges**
in the
humanitarian
sector



Funded by
the European Union

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WORM KEY FIGURES



16 PARTNERS
from **11 COUNTRIES**

2

YEARS

2 SETTINGS



→ **Field hospital** and
→ **Livelihood programmes**
with a waste picking
component



FOCUS ON

5
PRIORITY
PRODUCTS

Personal
protective
equipment



Syringes
and
needles



Body bags



Temporary
water/sludge
bladders



Sharps
containers



17 standard operational
procedures collected from
24 EMERGENCY MEDICAL
TEAMS in field hospitals

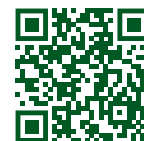
5 
POLICY
BRIEFS



13 WORKSHOPS
and **WEBINARS**
gathering more than
300 PARTICIPANTS



41 products presented
in our **WORM**
Humanitarian
Bio-Based
Catalogue



4 local awareness
campaigns and **4200**
PEOPLE reached

1
video on the
WORM
PROJECT



WORM POLICY BRIEFS

Read the full policy briefs of the WORM project!



1. Sustainability criteria for the evaluation of product groups: introducing a sustainable procurement framework for the humanitarian sector

Three components have been identified comprising several criteria, such as:

1. **The procurement policy:** e.g., operational localisation, whole life cycle cost, transitional localisation
2. **The supplier evaluation:** social (e.g., human rights compliance), environmental (e.g., climate change mitigation) and economic/legal dimensions (e.g., anti-corruption)
3. **The product evaluation:** material composition (e.g., recycled material); product design (e.g., reusability); product processes (e.g., lifecycle environmental footprints)

3. Scaling-up: developing innovative waste management business models

WORM draw a set of recommendations for **humanitarian practitioners** when aiming to introduce and scale **circular economy waste management business models**, as well as **policy advice**, such as:

- Humanitarian actors should map costs and benefits related to transitioning to circular economy waste management;
- Donors should consider financing the up-front costs associated with the transition to circular economy business models to achieve higher cost-efficiency and increase long-term impact;
- Humanitarian actors should think outside the box and draw from multiple financial tools to unlock the potential of circular economy in humanitarian contexts.

2. Procurement guidelines: adopting bio-based solutions

This policy brief explores how **bio-based solutions and products can reduce environmental impacts of humanitarian operations**, and to encourage humanitarian organisations to shift from fuel-based solutions to **bio-based solutions**. Sustainability criteria are expected to shape the sustainable procurement policy and strategy of humanitarian organisations and facilitate the introduction of bio-based solutions in humanitarian procurement.



4. Plug and play framework for the application at the field hospital for waste management

WORM analysed the current availability of **medical waste treatment technologies** and introduces a framework to support the integration of **local waste management services** with Humanitarian Organisations (HOs) operations deploying field hospitals while ensuring **sustainability, environmental protection and residents wellbeing**.

A set of recommendations are provided:

- Use of Multi Criteria Decision Analysis (MCDA) to align HOs and waste management providers, considering cost, environmental impact, reliability, and humanitarian operability;
- Adapt to context, with the inclusion of sub-criterion for specific waste treatment options (e.g., autoclaving + landfill);
- Continually update databases on regulation, certification, and service providers for field deployment;
- Apply MCDA as a learning tool to understand local conditions and strengthen partnerships;
- Factor in bio-based materials, adjusting implantation by local regulation and market readiness.



5. Medical waste management guidelines: supporting humanitarian teams manage waste better in field hospitals

Humanitarian field hospitals often operate in disaster or conflict zones with little waste treatment infrastructure, which can lead to **environmental damage and health risks**. The guidelines propose concrete recommendations to **improve waste management** in these contexts:

- Make waste management one of the core responsibilities of all staff;
- Include waste training in staff induction and daily routines;
- Avoid harmful plastics such as PVC and teflon;
- Build waste-friendly procurement into supply chains;
- Fund and pre-position waste kits for quick setup;
- Track basic waste indicators to improve accountability;
- Coordinate across agencies to avoid duplication and improve system design;
- Support local contractors and value chains when it is safe and legal to do so;
- Create a shared pool of technical experts for waste management in emergency deployments.

OUR LOCAL AWARENESS CAMPAIGNS

WORM aims to enhance local awareness in order to improve waste management through targeted and community-based campaigns.

KISUMU COUNTY, KENYA

Promoting safe waste management in Kisumu's healthcare facilities, June 2025

WORM partner Pamela Steele Associates conducted a **campaign within Kisumu County, aiming at educating local communities on the hazards of incineration and promoting sustainable waste management practices.**

As part of these awareness efforts, artistic murals were created in various hospitals to engage local communities. Specifically targeting healthcare workers, the murals illustrate how to segregate waste at its source and provide guidance on the best practices for handling medical waste. This visual artwork now serves as a daily reminder of responsible waste management practices within the hospital and the surrounding community.



DISCOVER
THE CAMPAIGNS!



Creative expression during the World Environment Day, June 2025

The event provided a platform for local youth artists to engage communities through creative expression. During the celebration in Kisumu, young people used drama, poetry, and visual art to spread powerful messages about healthcare waste and its environmental and health consequences.

These young artists actively contributed to raising awareness about safer, more responsible waste management practices, using their talents to support the goals of the WORM project. It was the opportunity to distribute educational materials highlighting the dangers of incineration and introduce safer, alternative methods for waste disposal.



VIETNAM



Waste management campaign in Thai Nguyen province schools, March 2025

Throughout the "Raising Community Awareness on Waste Management" campaign in **two schools**, the Vietnam Red Cross Society engaged **over 900 participants**, including teachers and students, in promoting **community action for sustainable waste management.**

A variety of activities were organised to raise awareness in a **fun and engaging way**, including creative competitions and interactive sessions. Students also took part in hands-on initiatives such as tree planting, clean-ups, and waste exchange programs, reinforcing their **commitment to environmental protection.**

This campaign's success showcases that collective action and **community engagement** are key to fostering sustainable waste management practices.



"Together with Waste Collectors - Connecting Communities, Protecting the Environment" event, July 2025

The Vietnam Red Cross Society, in collaboration with the Khanh Hoa Provincial Red Cross and the People's Committee of Nam Ninh Hoa commune, organized the event "Together with Waste Collectors", combined with the activities of **collecting ocean waste and planting one hectare of coastal mangrove forest.**



THIS EVENT AIMED TO

1. Raise community awareness about the **role of informal waste collectors** in environmental protection and waste reduction
2. Strengthen the connection between communities and waste collectors, promoting the spirit of "Live Green - Live Clean"
3. Contribute to **protecting coastal ecosystems**, adapting to climate change, and promoting sustainable livelihoods

It gathered **300 participants**, including Red Cross volunteers, informal waste collectors and local media agencies.

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