





# Hazardous waste in the Pacific

Poor waste management is a major threat to sustainable development in Pacific Island countries and territories as it has negative impacts on the region's environment, as well as on human health, water quality, fisheries, agriculture, tourism and quality of life in general. Significant progress is underway, but there is opportunity for improvement in the management of hazardous waste such as asbestos, healthcare



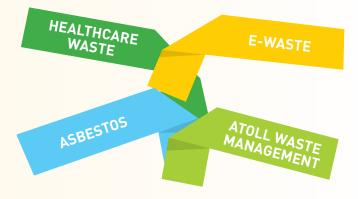
## What is PacWaste?

waste and F-waste across the Pacific.

PacWaste (Pacific Hazardous Waste) is a four year project funded by the European Union and implemented by Secretariat of the Pacific Regional Environment Programme (SPREP) to improve regional hazardous waste management across the Pacific in the priority areas of healthcare waste, E-waste, asbestos, and integrated atoll solid waste management.

PacWaste has commenced with a series of baseline surveys that will collect and collate information about the current status of hazardous waste and its management in the region and will identify best practice options for interventions that are cost-effective, sustainable and appropriate for Pacific island communities. These interventions will be implemented in priority countries identified through the baseline survey. The Majuro Atoll (Republic of Marshall Islands), has been selected to demonstrate best practice integrated solid waste management. PacWaste further aims to strengthen regional

collaboration and information sharing by establishing a recycler's network as well as national coordination committees for each waste type. PacWaste will also facilitate a regional workshop to showcase the interventions introduced in priority countries and facilitate the sharing of experiences and lessons learnt between countries.



### What will PacWaste do?

Over the next four years, PacWaste will contribute to building a healthy, economically and environmentally sustainable Pacific for future generations. The project will also support the efforts of Pacific island countries and territories to adopt cost-effective and self-sustaining priority waste management systems under the four result areas.

These result areas reflect the objectives of SPREP'S Pacific Regional Solid Waste Management Strategy 2010–2015 and the following regional hazardous waste strategies:

- An Asbestos Free Pacific: A Regional Strategy and Action Plan 2011
- Pacific E-waste: A Regional Strategy and Action Plan 2012
- Pacific Healthcare Waste: A Regional Strategy and Action Plan 2013–2015 (draft).

#### Result Area 1

Assessment and prioritisation of Pacific hazardous waste status and management options.

#### Result Area 2

Implementation of best available practices in priority hazardous waste management in demonstration countries.

#### Result Area 3

Enhanced capacity and appropriate policies and regulatory frameworks in place to mitigate and better manage hazardous waste streams achieved in Pacific island countries.

#### Result Area 4

Improved regional collaboration and information exchange on hazardous waste management practices.

## PacWaste project timeline

Year 1 Year 2

Year 3

Year 4

- PacWaste Project Team formed
- Project oversight established
  - PacWaste Steering Committee formed
  - PacWaste Technical Advisory Panel formed
- Regional E-waste baseline survey
- Regional healthcare waste baseline survey
- Regional asbestos baseline survey
- PacWaste web page launched.

- Priority countries identified
- Best practice waste management solutions implemented in selected countries
- National coordination committee established
- Recycler's networks established (E-waste)
- Hazardous waste stockpile removal/ stabilisation
- Regional training (healthcare waste, asbestos and E-waste).

- Hazardous waste management policies and frameworks strengthened (healthcare waste, E-waste, asbestos)
- Port infrastructure upgrades
- Auditing/monitoring of best practice waste management solutions
- Ongoing training in hazardous waste management.
- Regional workshop showcasing best practice waste and pilot interventions management
- Twinning between and within Pacific island nations
- Ongoing training in hazardous waste management.



Healthcare waste (also called hospital, clinical or medical waste) is the range of waste generated by hospitals and health clinics.

Healthcare waste is hazardous because it has the potential to be infectious or harmful to humans and the environment and therefore requires proper management, treatment and disposal. Healthcare waste includes infectious waste such as biological and pathological waste, chemical waste, sharps (including syringes and needles) and expired or unused pharmaceutical products.

The quantity of healthcare waste in the Pacific region is increasing as population grows and medical services expand. In order to protect Pacific communities from exposure to healthcare wastes we need to protect all individuals who could be exposed to the risks of improperly managed healthcare waste. This includes healthcare workers at hospitals and health clinics, hospital workers responsible for the handling, transport and disposal of healthcare waste, and members of the community living near hospitals and health clinics.

PacWaste will implement storage, treatment and disposal solutions along with training and personal protective equipment for hospitals in priority countries across the Pacific. E-WASTE



E-waste is end of life electrical and electronic equipment such as televisions, computers and mobile phones.

E-waste is a growing problem in the Pacific due to increasing consumption and frequent replacement of technology. Electrical and end of life electronic items contain many recoverable and valuable components such as copper, steel and gold that can be re-used. If left to accumulate in landfills, E-waste will in time leak toxic substances and contaminate the environment. Effective management involves the collection, storage and recycling of E-waste as well as exporting the waste for final disposal.

The impacts of E-waste on the environment can often be underestimated by Pacific island communities, so to increase awareness and encourage good practices, a public media campaign will be launched under the PacWaste programme.

PacWaste will assist with collection, dismantling, storage and disposal solutions for E-waste in priority countries across the Pacific.

ASBESTOS

Asbestos is naturally occurring material that was widely used in the past in the building and manufacturing industries due to its affordability and resistance to fire, heat, electrical and chemical damage.

Damage to material containing asbestos can result in the release of small asbestos fibres that become airborne and are readily inhaled. These fibres are not immediately toxic but can remain in the lungs for long periods and cause serious lung disease including asbestosis, lung and other cancers. The disease may not appear until 10 to 50 years after the exposure to asbestos fibres

Asbestos in the Pacific becomes a concern when natural events such as cyclones, tsunamis and earthquakes destroy or damage buildings with asbestos containing materials. Emergency personnel and members of the community may be at risk of exposure when cleaning up after a disaster.

It is important that everyone understands more about asbestos therefore an awareness raising campaign will be developed as part of the PacWaste programme.

PacWaste will implement stabilisation, removal and disposal solutions along with training and personal protective equipment for asbestos waste in priority countries across the Pacific.





Waste management on atoll countries poses unique challenges due to their isolation, small land area and low lying positions.

The atoll waste management 'pilot' will focus on an integrated, whole of waste system approach which targets priority infrastructure works, worker training, waste collection systems, recycling programme improvements, public awareness and participation and the implementation of container deposit-type systems to ensure the sustainability of recycling programmes.

# **Participating countries**

|                                | HEALTHCARE<br>WASTE | E-WASTE  | ASBESTOS | ATOLL WASTE<br>MANAGEMENT |
|--------------------------------|---------------------|----------|----------|---------------------------|
| Cook Islands                   | ✓                   | ✓        | 1        |                           |
| Federated States of Micronesia | ✓                   |          | 1        |                           |
| Fiji                           | ✓                   | 1        | 1        |                           |
| Kiribati                       | ✓                   | ✓        | ✓        |                           |
| Marshall Islands               | ✓                   | ✓        | ✓        | ✓ Majuro                  |
| Nauru                          | ✓                   |          | ✓        |                           |
| Niue                           | ✓                   |          | ✓        |                           |
| Palau                          | ✓                   | ✓        | ✓        |                           |
| Papua New Guinea               | ✓                   |          |          |                           |
| Samoa                          | ✓                   | ✓        | 1        |                           |
| Solomon Islands                | ✓                   | 1        | 1        |                           |
| Timor-Leste                    | ✓                   |          |          |                           |
| Tonga                          | ✓                   | <b>✓</b> | 1        |                           |
| Tuvalu                         | ✓                   |          | ✓        |                           |
| Vanuatu                        | 1                   | ✓        | 1        |                           |



To find out more about 1 deviate, visit www.sprep.org, paewaste

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