RTRC on Coastal Contaminant Monitoring & Marine Innovative Technologies (RTRC-Coastal COMMIT)

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Presentation Outline

01 | Introduction

02 | Time course of development

03 | Activities and impacts

04 | Recommendation on the way forwards

Introduction of RTRC-Coastal COMMIT

Aims: to safeguard key marine habitats, conserve biodiversity and protect natural resources in countries across the Western Pacific region through the provision of relevant scientific training and the establishment of collaborative platforms.







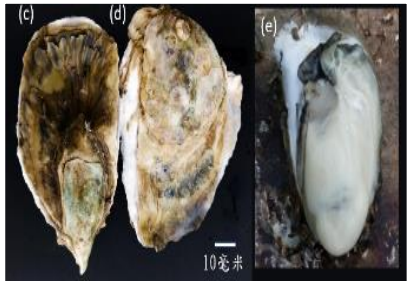


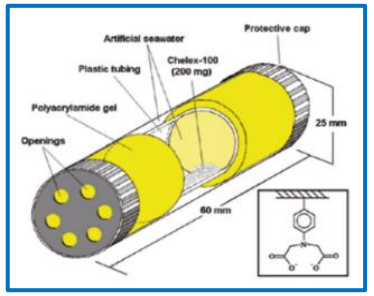


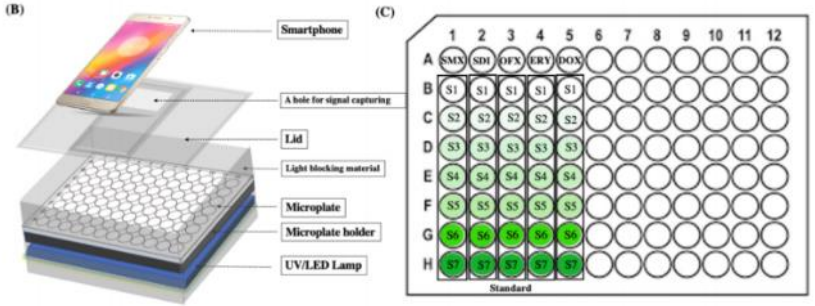
Introduction of RTRC-Coastal COMMIT

Objectives:

1) To enhance the capacity building for monitoring and risk assessment of chemical contaminants as well as marine innovative technologies via **training and technology transfer**;
2) To catalyze and co-design **regional research collaborative projects (e.g. GEM)**;
3) To understand the current situation of chemical contaminants and marine ecosystem health;
4) To promote marine environment protection and facilitate sustainable development, and
5) To recommend regulatory measures to protect marine environments of the WESTPAC region.







Cost-effective & easy-to-use technologies



Time course of development

2022.4 — Application Submission

2023.4 — Application Approved by UN



2023.5 — Scientific Diving Training Course in Indonesia

2024.1 — Plaque Unveiling Ceremony

The 10th International Conference on Marine Pollution and Ecotoxicology



2024.4

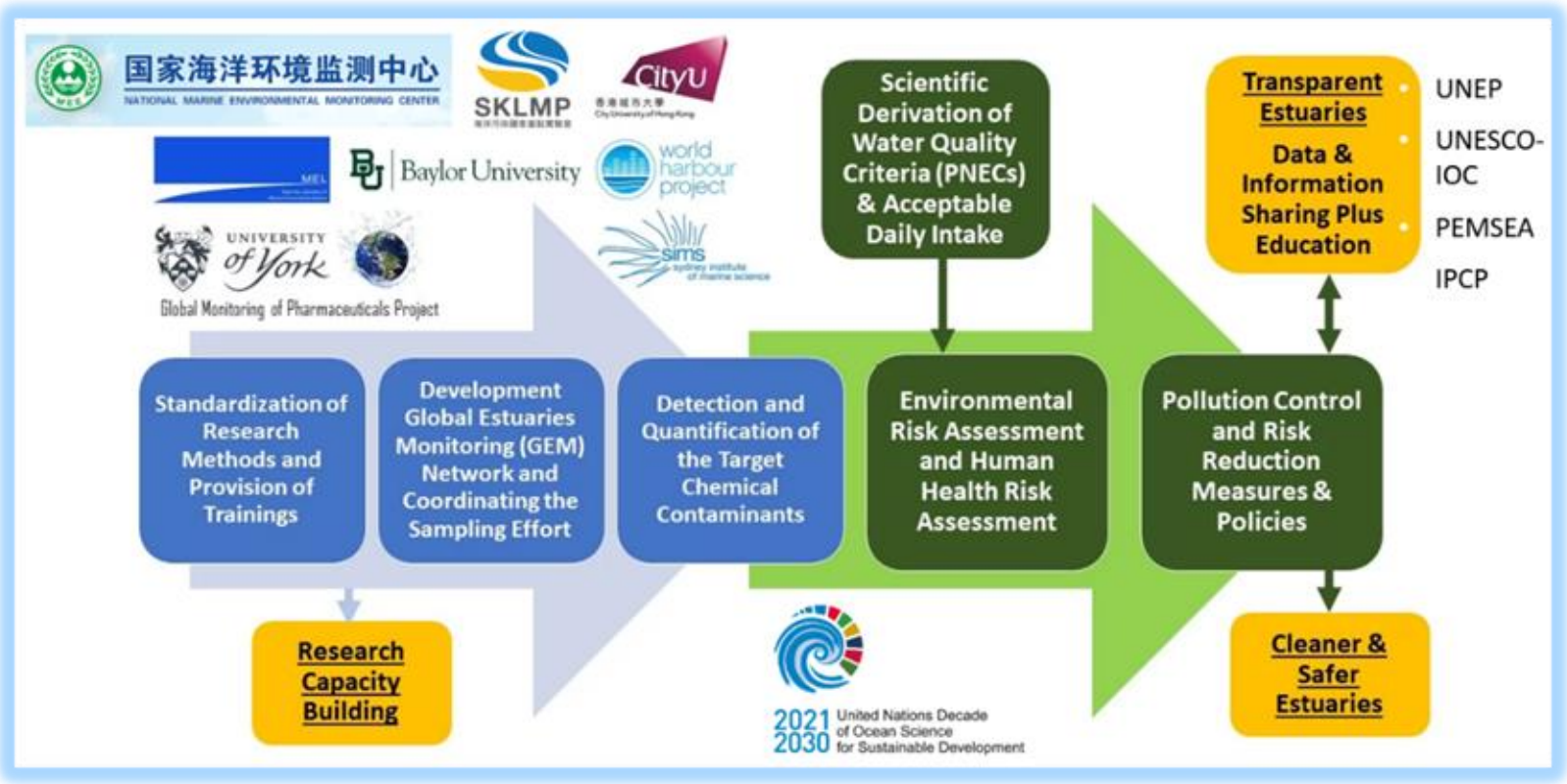
In this 11th WESTPAC Conference:

- **Co-chair Session C1:** Marine chemical Contaminants of Emerging Concern (yesterday)
- **Organize Decade Action Workshop 1:** GEM: Global Estuaries Monitoring Programme (this PM)

Activities and impacts:

1. Global Estuaries Monitoring (GEM) Programme

Action Programme under the United Nations Decade of Ocean Science for Sustainable Development (2021-2030)



Aims to establish a global network for monitoring priority pollutants (e.g., pharmaceuticals and other new pollutants) in estuaries using standard methods, develop simple and feasible sampling equipment, and enhance global monitoring capability

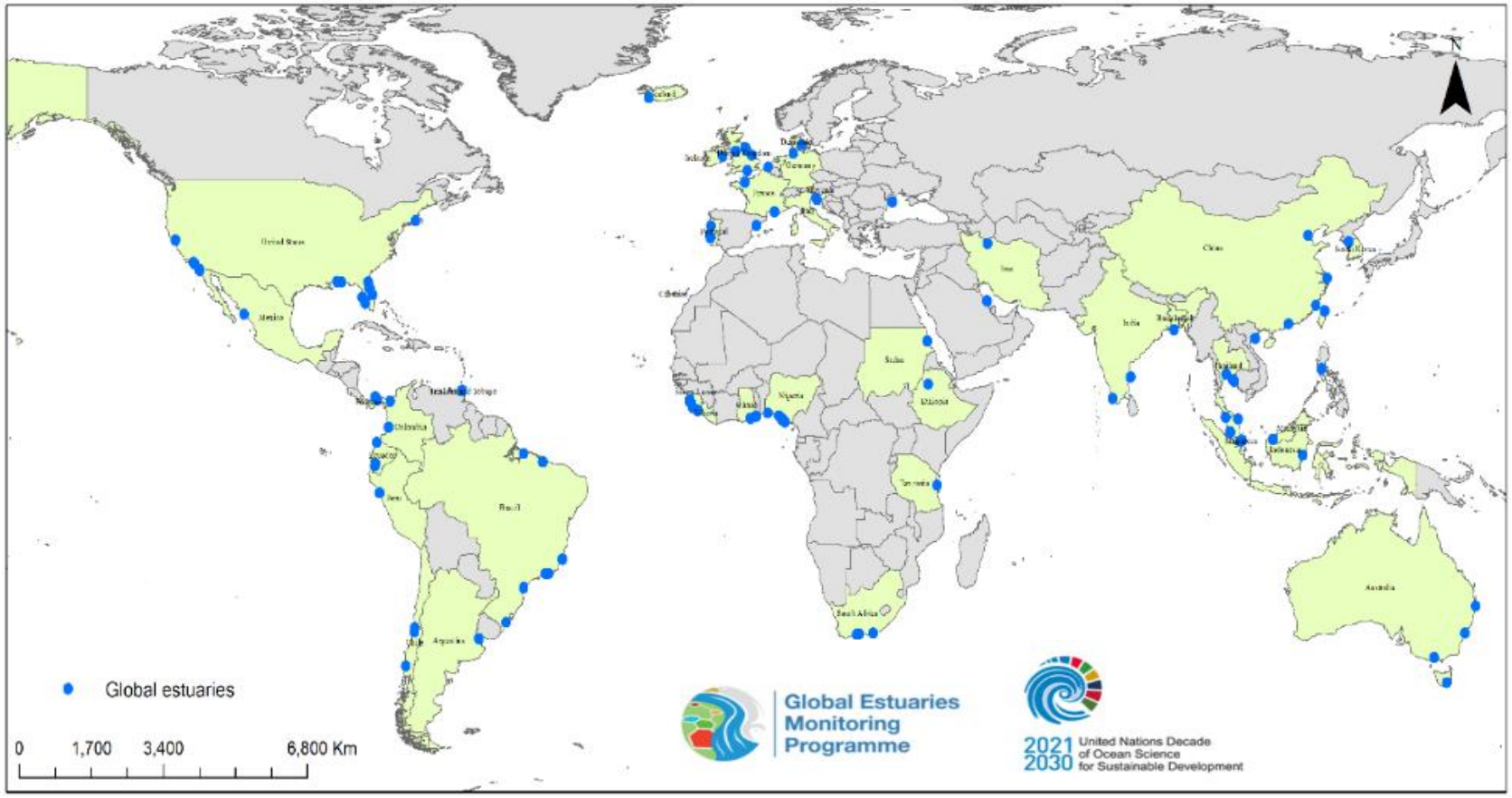
GEM Website:
https://www.globalestuaries.org/

GEM Video: https://youtu.be/iSoTgz6roKA

Key Partners: SKLMP (City University of Hong Kong), York University, Sydney Institute of Marine Science, Baylor University, MEL (Xiamen University), National Marine Environmental Monitoring Centre (China)

Activities and impacts:

1. Global Estuaries Monitoring (GEM) Programme



So far, we have established a global monitoring network

54+ countries

120+ collaborators

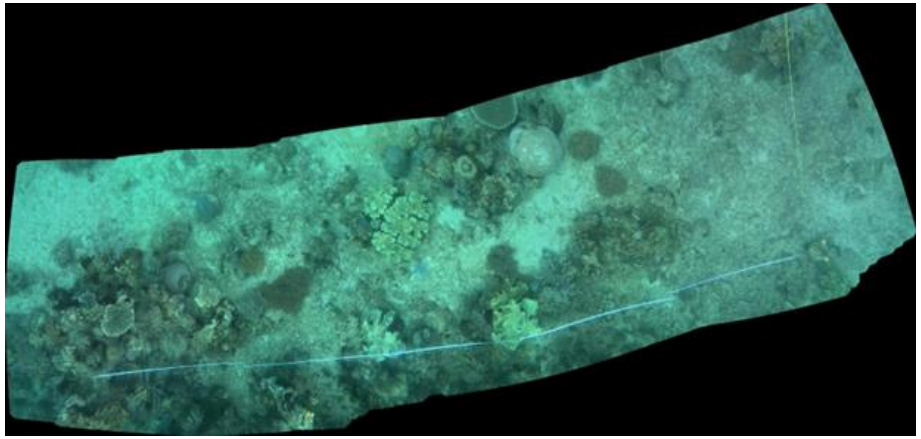
163+ estuaries

The implementation of GEM will contribute to the reduction of global marine pollution via developing cleaner and safer global estuary solutions, aligning with the UN Sustainable Development Goal 14.1.

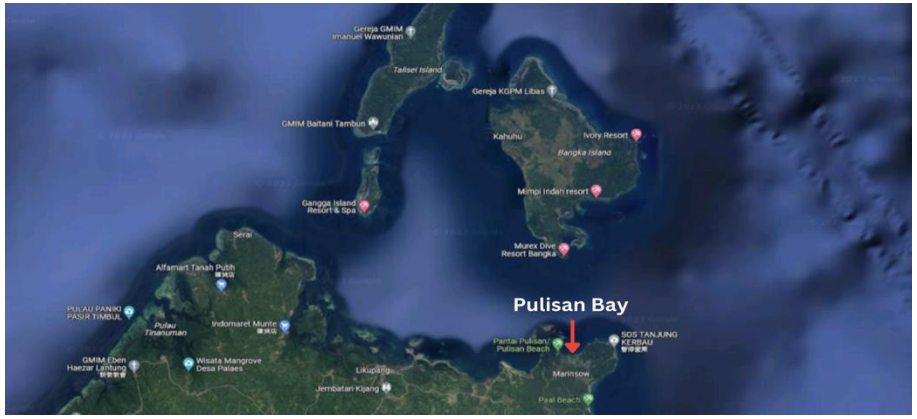
Activities and impacts:

2. Scientific Diving Training Programme at the Pulisan Bay (North Sulawesi, Indonesia)

- To practise the use of Underwater Information Systems (UWIS) and Ocean Plan system
- To develop integrated scientific diving training program and Standard Operating Procedures (SOP) for **underwater habitat mapping** and coral reef health monitoring



10m x 3m trial mapping result from Pulisan I dive site











Activities and impacts:

Award- Winning at 49th International Exhibition of Inventions Geneva 2024

Gold Medal

"Nearshore Benthic Habitat Mapping and Assessment Technique"







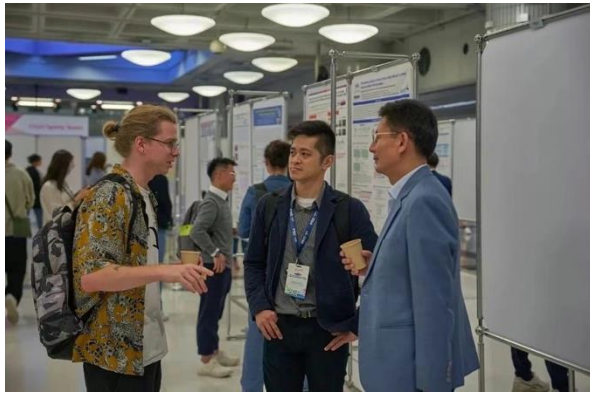
Activities and impacts:

3. 10th International Conference on Marine Pollution and Ecotoxicology (3-6 Jan 2024)

The event witnessed a remarkable turnout, with about 300 participants from 20 different countries and received a total of 270 abstracts. In addition to poster presentations, there were 80 regular oral presentations plus 3 plenary and 22 keynote lectures.







Activities and impacts:

Upcoming activities

- Training workshop on "**underwater survey technology for coral ecosystem**"
- Training workshop on "analytical method for per- and poly-fluoroalkyl substances (**PFAS**) characterization and quantification"







Recommendation on the way forwards

(with consideration on RTRCs' role in achieving UN Ocean Decade targets)



Core Business

- Transfer knowledge and cost-effective, novel technologies to address the needs of the WESTPAC region
- Coordinate and co-design regional research collaboration

Partnership

- Co-develop research collaboration and training workshops with other RTRCs in cross linked areas

Recommendation on the way forwards

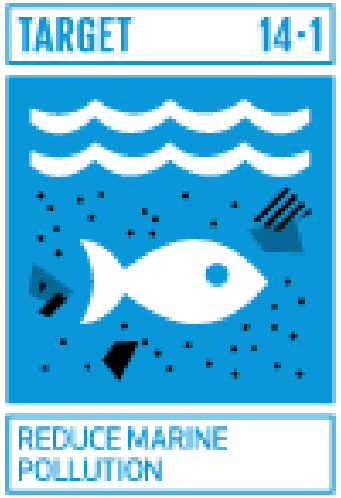
We will be keen to support IOC-WESTPAC to achieve UN Ocean Decade targets

United Nations Decade of Ocean Science 2021-2030

Clean Ocean

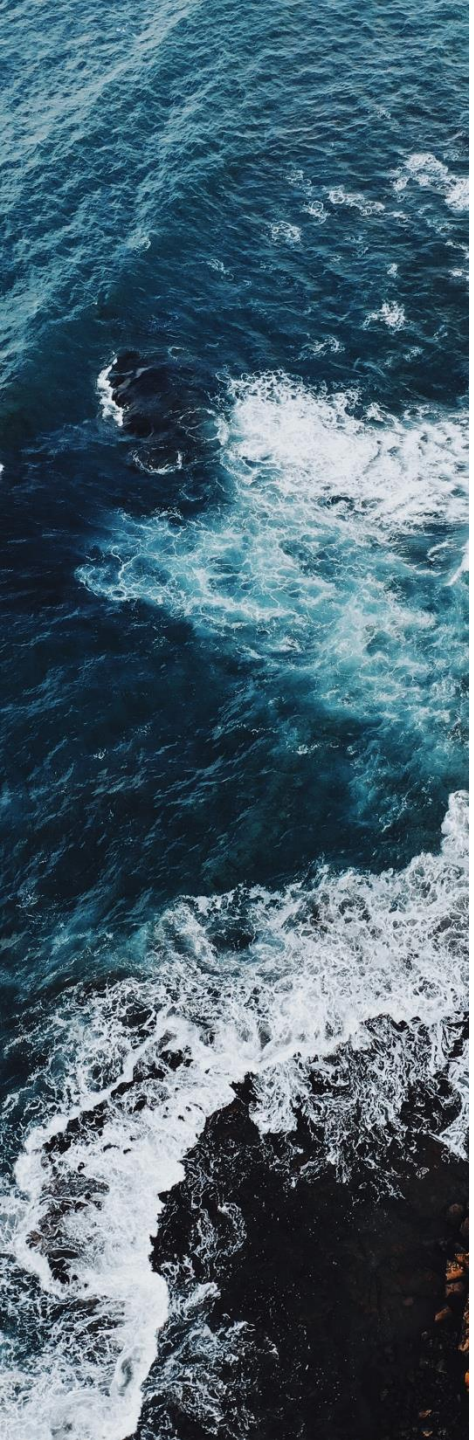
Safe Ocean

Transparent Ocean



Through

1. Our **GEM Programme** (54+ countries), **Coastal COMMIT Regional Training and Research Centre** (22 countries), and the PEMSEA endorsed **Regional Centre of Excellence in Marine Pollution Research** for East Asia region (14 countries);
2. Regularly hosting international academic conferences, scientific research workshops, and training activities;
3. Establishing cooperative partnerships with leading marine research institutions overseas; and
4. Our "**Visiting Scholars Program**", to strengthen talent exchange and in-depth research collaboration, and deepening international exchanges and cooperation. **[Deadline for Application: 20 May 2024]**



Thank You !

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