Theveli International Conference 2026

17-19 August 2026, The Maldives National University, Male', Maldives

Metabolism of Islands: Advancing an Island Circular Economy for Climate Adaptation in SIDS

Background

Small island territories face some of the most acute intersections of resource insecurity, infrastructure vulnerability, and climate threat. Yet these islands also offer unique opportunities for transformation — for rethinking how they import, use, circulate, discard, and renew the resources they depend on.

This conference theme focusing on **Metabolism of the Islands** is organized as a special session of the forthcoming annual International Conference of the Maldives National University "Theveli International Conference 2026". We invite abstracts from researchers, practitioners, and community leaders to share state-of-the-art approaches for tracking and transforming the material and energy flows of islands — their *metabolism* — to support climate adaptation and strengthen resilience. This theme is at the core of the RECOVER project (Resilience to Climate Vulnerability and Environmental Risk) funded under the CLARE program of IDRC-Canada and FCDO-U.K.

At the heart of this thematic inquiry lies a pressing question: ***How can island economies transition to more sustainable, circular models of resource use — increasing efficiency and security while strengthening their resilience to climate change?***

Why Resource Flows Matter for Climate Adaptation and Resilience?

Tracking how materials and energy move through island economies reveals the hidden dependencies and inefficiencies that shape vulnerability to climate shocks. Understanding these flows helps identify where critical resources come from, how they are used, and where resilience can be built through circularity, diversification, and local innovation. By mapping island metabolisms, we can design adaptation strategies that enhance self-reliance, circular business models, reduce import dependency, and build resource-secure futures.

We welcome contributions that advance a systems-based understanding and innovation in how islands use, manage, and transform their material and energy resources. Submissions may address the measurement, modelling, and governance of island metabolisms; explore circular and nature-

based solutions for reducing vulnerability; or present applied examples that connect resource flow data to adaptation and resilience-building strategies.

- **Quantifying and modelling material and energy flows on islands:** developing data systems, indicators, and models to measure island metabolisms — from material stocks and flows to the services they provide — as a foundation for evidence-based adaptation and planning.
- **Circular economy and infrastructure transitions:** exploring how islands can redesign infrastructure, enhance business models and supply chains, reduce import dependency, close material loops, and improve resource-use efficiency across and within sectors.
- **Transformative adaptation and socio-metabolic risk:** analysing how patterns of resource extraction, trade, and waste generation shape exposure and sensitivity to climate shocks, and how metabolic restructuring can enhance adaptive capacity.
- **Nature-based, socio-technical, and hybrid solutions:** integrating ecosystem restoration, renewable energy systems, and technological innovation to regenerate natural stocks and rebalance material and energy flows.
- **Governance, equity, and knowledge co-production for resource transformation:** examining how institutional frameworks, participation, and data governance influence the tracking, sharing, and transformation of material and energy flows, and how co-created approaches strengthen local control over resource metabolisms.
- **Case studies and local action strategies for metabolic resilience:** presenting empirical evidence of how island communities measure, manage, and redesign their resource use — from closing loops and reducing import dependence to restoring natural stocks and re-engineering local metabolisms for resilience.

Important dates and Information

Abstract Submission Deadline: 20th April 2026 (for this theme only)
Confirmation of acceptance: 1 May 2026 (for this theme only)
Early Bird Registration Deadline: 5th July 2026
Conference Registration Deadline: 5th August 2026
Theveli Conference (Undergraduate Student Symposium): 17th August 2026
Theveli Conference dates: **18-19th August 2026**

Venue: The Maldives National University, Male', Maldives

For submission details & further information, please visit: Theveli-International-Conference-2026

We look forward to receiving your abstracts and welcoming you to the conference.