



53 presentations relating to coastal urban policy at 4 Caribbean Urban Forums



US\$ 1.5 million raised for resilience action plans in communities



600+ community members trained in Disaster Risk Reduction, Vulnerability and Capacity Assessment of communities, and Coastline Monitoring

The OACPS Research and Innovation Programme: Advancing the R&I landscape in the Caribbean, Indian Ocean and Pacific regions

The **OACPS R&I Programme** works in African, Caribbean and Pacific (ACP) countries through the **ACP Innovation Fund (IF)** - for R&I capacity building, research uptake and policy advocacy, and the **Policy Support Facility (PSF)** - to enhance R&I policies and ecosystems

CARIBBEAN



2 digital tools to support planning and management of coastal communities



4 Living Labs established addressing climate change challenges



1 comprehensive database of waste management and renewable energy technologies for the Indian Ocean Commission



180 government officials from Energy and Waste departments trained in Waste-to-Energy policy making



2 Renewable Energy Technologies teaching qualifications for Tertiary Education providers adapted with Waste-to-Energy component

INDIAN OCEAN



80 individuals from **30 institutions** engaged in developing a digital repository and STI programme



2 Living Labs established focusing on Waste-to-Energy technologies

PACIFIC



5 National Waste-to-Energy Forums engaging **780 participants** from the public and private sector



Achievements – November 2024

In the **Caribbean region**, **IF** finances one project:

Harnessing innovative technologies to support resilient settlements on the coastal zones (**HIT RESET**)



HIT RESET
2021 – 2025

- ▶ **Implemented by:** The University of the West Indies (**UWI**), Caribbean Disaster Emergency Management Agency (**CDEMA**), Anton de Kom University (**AdeKUS**).
- ▶ **Objective: Climate-smart and resilient coastal settlements in the Caribbean region.** The project stimulates the use of **digital and modelling technologies** by coastal development agencies, disaster management agencies, local government and government ministries for: the **prediction** of the impacts of climate change and natural disasters the **planning and management** of coastal communities, and the development of urban planning **policies / plans** promoting digital and modelling innovations for sustainable coastal development.
- ▶ **Selection of Products:** 4 annual **Caribbean Urban Forum** (CUF) meetings with 53 presentations on coastal urban planning policies

▶ **HIT RESET-financed projects**

Country	Projects	Achievements
Barbados	SarGASsum	1 mobile Sargassum biomass prediction app created, 1 financial model for biogas production from Sargassum drafted with interest from potential investors
Dominica	CHVP-Dominica	1 report on coastal hazards in Dominica, 10 young coastal community residents trained in coastline monitoring
Dominican Republic	AdaptCCDR	Expected: 3D digital twin model for urban coastal area management
Jamaica	BCSRS	Expected: 3D digital twin model for integrated coastal zone management
	MINDSET	Expected: coastal informal settlement monitoring systems
Trinidad and Tobago	Conserving Coastal Coconut Palms	Expected: detection and management system of South American palm weevil (SAPW) in coastal coconut estates
	Tech4CoastalResilience	28 persons from government, civil society and private sector (fisher folk and dive tour operators) trained in vulnerability and capacity assessment of coastal communities, 16 government entities and NGOs trained in drone mapping to support prediction, planning and management of coastal communities
	BRC	1 resilience assessment model created showing climate change-resilience index at household level in coastal communities, 600+ residents of 10 communities trained in disaster risk reduction, US\$ 1.5 million raised to support home infrastructure improvements and other resilience actions
	ASSET	Expected: mobile app to improve safe use of public transportation

Achievements – November 2024

In the **Indian Ocean region**, **IF** finances one project: Transformation of the waste sector towards a waste-energy nexus in the Southwest Indian Ocean region ([TWENex](#))



TWENex

2021 – 2025

► **Implemented by:** Indian Ocean Commission ([IOC](#)), Mauritius Research and Innovation Council ([MRIC](#)), partnering with universities, research centres and private enterprises acting as local multipliers.

► **Objective:** Inclusive R&I environment enabling the transformation towards a **sustainable management of the waste value chain and production of energy from waste** in the Southwest Indian Ocean region. The project leverages local and regional partners, enhances local skills and develops information exchange mechanisms.

► **Selection of Products:**

- 1 regional R&I Platform in the Southwest Indian Ocean region (to be launched in January 2025)

► [TWENex-supported multiplier partners](#)

Country	Projects	Achievements
Comores	University of Comoros, Faculty of Science and Technology	1 physico-chemical laboratory operational, 1 short BSc course on bio-digestion developed, 42 BSc students mentored in bio-digester prototype development, 1 technology tutorial on household bio-digester developed, 1 scientific publication on waste characterisation
	Biogaz Comores (BioCom)	1 living lab operational for bio-digestion technology transfer among agri-cooperatives, 3 household bio-digesters operational, 1 technology tutorial on bio-digester for agri-waste developed, 10 cooperative members trained on bio-digestion
	National Waste Management Agency	90,000 people sensitised on waste management, 1 framework act on waste management adopted in Comoros
Madagascar	National Centre for Industrial and Technological Research	1 living lab operational for private sector ethanol production with 1 bio-digester , 60 BSc students trained on bio-digestion, 1 waste-to-ethanol facility operational, 1 living lab on bio-digestion operational, 1 physico-chemical laboratory operational
	Support for Sustainable Investments	1 standard for biochar production developed, 1 report on alternative fuels from waste-to-energy technologies in the industrial market in Madagascar, 13 waste-to-energy actors trained on entrepreneurship
Mauritius	University of Mauritius	80 employees (from NGOs, local authorities, universities and private enterprises) trained on waste characterisation, 1 feasibility report on an industrial methanation plant for a public-private partnership, 1 report on sludge characterisation and good practices for energy recovery

Achievements – November 2024

In the **Pacific region**, **IF finances two projects**: Pacific adoption of waste-to-energy (WtE) solutions (**PAWES**) and Strengthening R&I ecosystems to address climate challenges in the Pacific (**RERIPA**)



PAWES

2021 – 2026

► **Implemented by:** The Pacific Community (**SPC**), Secretariat of the Pacific Regional Environment Programme (**SPREP**).

► **Objective:** Enhanced solid **waste management** and energy security by **developing comprehensive Waste-to-Energy policies** and conducting detailed feasibility studies and pilot projects. The project builds stakeholder capacities in both **waste management and renewable energy** sectors and promotes **private-public partnerships to foster collaboration** among government entities, educational institutions and the private sector to achieve sustainable progress in renewable energy production.

► **Selection of Products:**

- 5 Waste-to-Energy (WtE) baseline assessment reports for Marshall Islands, Papua New Guinea, Samoa, Solomon Islands and Tuvalu
- 1 feasibility assessment report on the gasification of Refuse-Derived Fuel (RDF) and the incineration of Municipal Solid Waste (MSW) in Samoa
- 5 national WtE forums organised with 780 representatives from governments, educational institutions, research organisations and the private sector from the 5 countries discussing on sustainable WtE initiatives
- 190 government officers from Energy and Waste departments across the 5 countries trained in WtE policy making

► **PAWES-supported multiplier partners**

Country	Projects	Achievements
Fiji, Solomon Islands, Tuvalu, Vanuatu	University of the South Pacific	Expected: 4 MSc theses on WtE technologies, 4 research demonstration projects
Marshall Islands	College of the Marshall Islands	Expected: 1 Associate of Arts thesis on WtE technologies, 1 research demonstration project
Papua New Guinea	University of Papua New Guinea	Expected: 1 MSc thesis on WtE technologies, 1 research demonstration project
Samoa	National University of Samoa	Expected: 1 postgraduate diploma thesis on WtE technologies, 1 research demonstration project



RERIPA

2021 – 2025

► **Implemented by:** Institut de Recherche pour le Développement ([IRD](#)), Pacific Islands Association of Non-Governmental Organisations ([PIANGO](#)), Pacific Islands Development Forum ([PIDF](#)), Vanuatu Meteorology and Geo-Hazards Department ([VMGD](#)).

► **Objective:** Inclusive Research and Innovation (R&I) environment across the Pacific region to face climate change impacts. The project **assesses** the R&I ecosystem, **mobilises stakeholders** for improved R&I strategies, **builds capacity in R&I**, and creates **Living Labs** to co-construct sustainable solutions.

► **Selection of Products:**

- 2 international conferences on climate change adaptation and mitigation actions

► [RERIPA-financed projects](#)

Country	Projects	Achievements
Cook Islands, Fiji, Samoa, Solomon Islands, Tonga, Vanuatu	Mapping R&I ecosystems	Expected: 1 mapping report of R&I actors addressing climate change impacts
Cook Islands, Fiji	Living Lab on coastal protection	1 proof of concept for coastal erosion prevention: the use of geotextiles in combination with local sand dune fixation vegetation
Fiji	Communication and training tools	Expected: 13 accredited micro-credentials for climate change adaptation solutions produced by the Living Labs
Fiji, Kiribati, Tuvalu	Living Lab on coral reef	1 proof of concept for community-based coral reef conservation and restoration (endorsed by UNESCO as part of its Ocean Decade of Action)
Fiji, Samoa, Tonga	Capacity building in innovation	40 project staff from Living Labs trained in risk management, proposal development, STI policy Expected: project staff from Living Labs trained in sustainable business models focusing on innovation, knowledge and skills in R&I brokering, intellectual property, management and impact pathway analysis
Fiji, Solomon Islands, Vanuatu	Living Lab on livelihoods and lifestyle	Expected: 1 digital application for diagnosing the diet of coastal community residents
Fiji, Tonga	Living Lab on marine infrastructure	Expected: 1 cyclone-resistant jetty , 1 Terms of Reference for the construction of a decarbonised cargo ship for inter-island marine transport
Samoa	Living Lab on decarbonised energy production	Expected: 1 renewable micro-grid adapted to small communities using solar energy for hydrogen production storage

In the Pacific, the [PSF](#) has delivered two services at national and multi-country level

 **PSF at national level**

Timor Leste (October 2021 – April 2022)

Outputs

Assisted the National Institute of Science and Technology ([INCT](#)) in developing a digital repository and a STI programme

Achievements: Support to the establishment of a specific STI policy framework and the creation of a National Digital Repository.

► **10 national representatives** from **6 institutions** engaged, over **80 stakeholders** from around **30 institutions** involved.

Policy Recommendations Report (in [English](#) and in [Portuguese](#))

 **PSF at multi-country level**

Mutual Learning Exercise on R&I Policies and Strategies (February – September 2023)

Outputs

[Collaborative initiative on effective R&I policy development and execution](#)

► **45 policy makers from 15 countries** trained in R&I policy making, including Timor Leste.

[OACPS Handbook on R&I Policy](#)