



GLOBAL CORAL REEF PARTNERSHIP

OF UNEP AND THE REGIONAL SEAS CONVENTIONS AND ACTION PLANS

THE PARTNERSHIP

Global change as well as local pressures are driving declining coral reef health around the world, and accelerated loss of ecosystem services will increasingly affect people dependent on coral reefs in over 100 countries. In 2014 UNEP and Regional Seas Conventions and Action Plans ('Regional Seas') initiated a Global Coral Reef Partnership to support countries deliver internationally agreed coral reef commitments through ecosystem-based management of coral reefs, as called for in the Global Strategic Directions for the Regional Seas 2013-2016.

The overall goal of the partnership is to promote and demonstrate ecosystem-based marine management in coral reef areas, in line with UNEP Governing Council and UNEA decisions, and as a contribution towards international targets such as Sustainable Development Goal 14 and Aichi Target 10. It is the primary vehicle for strengthening implementation of the ICRI Continuing Call to Action through the Regional Seas.

The Regional Seas provide the the world's only legal framework for protecting the oceans and seas at the regional level, using a «shared seas» approach to help restore the health, productivity and resilience of oceans and marine ecosystems, and to maintain their biodiversity.

Participating organizations include the International Coral Reef Initiative (ICRI), a partnership among governments, international organizations and non-



government organizations and the Global Coral Reef Monitoring Network (GCRMN); NOAA Coral Reef Conservation Program; The Reef-World Foundation, international coordinators of the Green Fins initiative; Blue Finance, an organization focusing on development of economic instruments and natural capital-based approaches for management of marine resources; as well as UNEP-World Conservation Monitoring Centre and GRID-Arendal.

RESULT AREAS

At the global level, the partnership supports development and exchange of methods, tools and policy frameworks. Adoption and use of these outputs is facilitated at the regional level through the Regional Seas, as well as nationally through demonstration and pilot projects.

The partnership delivers results under four work areas, three substantive and one institutional. Each result area is described further on separate sheets:

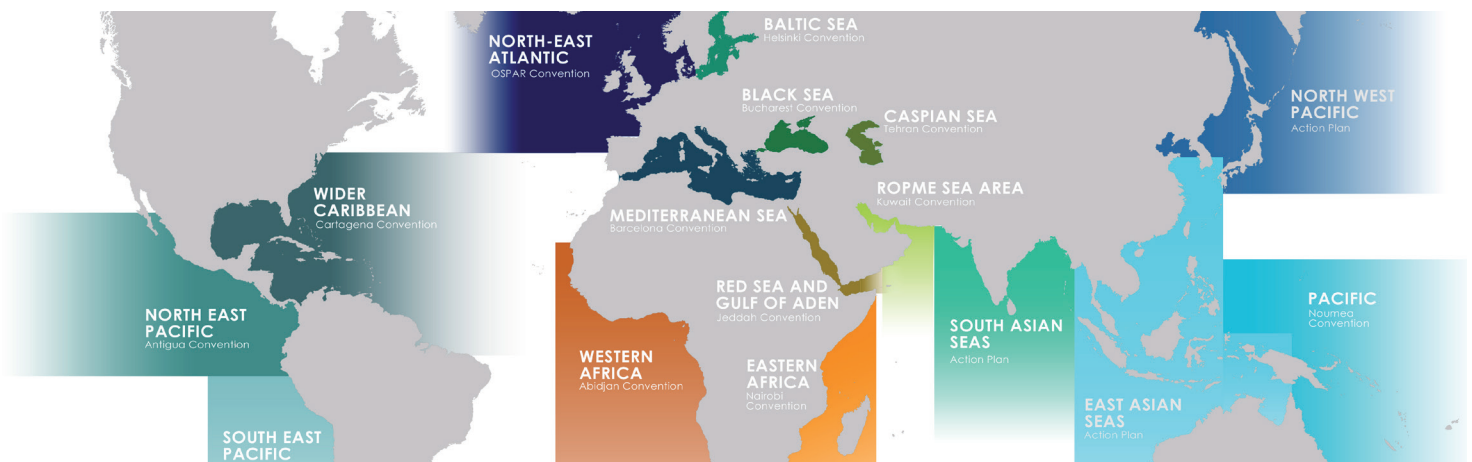
- BUILDING CORAL REEF **RESILIENCE** IN THE FACE OF CLIMATE CHANGE AND OCEAN ACIDIFICATION
- STRENGTHENING USE OF **CORAL REEF ECOSYSTEM SERVICE** VALUES IN PUBLIC AND PRIVATE DECISION-MAKING
- ENHANCING DATA AND INFORMATION FOR **ECOSYSTEM-BASED** CORAL REEF PLANNING AND MANAGEMENT
- SECURING IMPACT THROUGH **INSTITUTIONAL SUPPORT AND OUTREACH**

CONTRIBUTION TO INTERNATIONALLY ESTABLISHED GOALS AND TARGETS

The urgency of addressing the crisis facing coral reefs is reflected in several global commitments. The partnership directly contributes to implementation of these, including Sustainable Development Goal 14; Aichi Biodiversity Target 10, 11 and 15; SAMOA pathway paragraph 44(b) and 58(e); and the International Coral Reef Initiative (ICRI) Continuing Call to Action and Framework for Action, by:

- enabling identification and strategic prioritization of stress reduction measures well as spatial management, including marine protected areas, so as to build resilience;

- catalyzing coral reef stewardship in the private sector and collaboration across sectors on coral reef management and pressure reduction, for common benefits;
- strengthening monitoring and reporting to provide quantitative data on pressure reduction as well as coral reef status and trends, in support of policy and management decisions and tracking progress towards national, regional and global targets;
- integrating gender considerations into partnership activities to promote gender equality and equity as a key component of sustainable development.



Regional Seas with Coral Reefs: East Asian Seas, Eastern Africa, North East Pacific, Pacific, Red Sea and Gulf of Aden, ROPME Sea Area, South Asian Seas, South East Pacific, Western Africa, Wider Caribbean.

ORGANIZATION

The partnership has a light institutional structure, formed around the Regional Seas as formal mechanisms for uptake and collaboration with a technical partners in delivery of activities and outputs. A Partnership Steering Committee, which meets annually, sets the partnership work programme, reviews progress and provides guidance. UNEP hosts the partnership secretariat.

The partnership modality and work programme are elaborated in UNEP Project Document 321.2 "Global Coral Reef Partnership: Towards an Ecosystem Approach to Coral Reef Management"

Implementation of activities is carried out with donor support as well as in-kind contributions by partners. The US Department of State counterpart contribution for UNEP's work on coral reefs with the Regional Seas and ICRI has been instrumental in establishment of the partnership.

This is sheet 1 of 5 sheets describing the work of the partnership.

For more information, contact Jerker Tamelander, Head, Coral Reef Unit, United Nations Environment Programme: tamelander@un.org or visit <http://coral.unep.ch>



GLOBAL CORAL REEF PARTNERSHIP OF UNEP AND THE REGIONAL SEAS CONVENTIONS AND ACTION PLANS

RESILIENCE IN THE FACE OF CLIMATE CHANGE AND OCEAN ACIDIFICATION



The work of the partnership focuses on enabling coral reefs to cope with inevitable climate change and ocean acidification impacts, promoting survival and adaptation of species, recovery and protection of ecosystem functions, and improving prospects for continued ecosystem service provisions.

The partnership is developing guidance documents, data and knowledge products to support coral reef management that builds reef resilience. Identification of science-policy linkages and strategic targeting of activities and outputs was supported through **two workshops** held in 2014 with a common **theme of coral reef** resilience. An international resilience workshop will be held in 2017 to share experiences, review progress, and provide further direction.

TOOLS AND PRODUCTS

Downscaled Climate Model Projections of Coral Bleaching Conditions - Coral reefs are highly vulnerable to temperature stress, which is predicted to increase with climate change, but the spatial scale of climate model outputs is too coarse for application in coral reef management planning. Through collaboration with NOAA and other partners, the partnership has downscaled climate model projections for coral bleaching conditions for the world's coral reefs, at a resolution of 4km for every year up until 2100. This identifies reef areas that are relative climate refugia. As such it provides a key dataset in prioritizing reef management.

Resilience Assessment of Coral Reefs for Decision-support: Process Guidance covering coral reef resilience indicators, field methods, analysis and management planning is being prepared for publication in 2016. Targeted at reef planners and managers this will provide clear and concise guidance on how management actions can be designed and implemented specifically to protect or enhance resilience of reefs, through MPAs, systematic conservation planning, marine spatial planning and other stress reduction efforts. The guidance can be used alongside downscaled climate model outputs and ocean acidification projections.

Knowledge products on emerging issues produced include:

- **A technical report on Mesophotic Coral Reef Ecosystems**, prepared in partnership with GRID Arendal. This constitutes the most comprehensive compilation on mesophotic reefs to date, covering distribution, threats, role in climate change resilience of shallower reefs, and critical knowledge gaps. The report provides appropriate policy, management and research responses based on concrete science-based recommendations.
- **A Science to Policy Brief on Wastewater Pollution on Coral Reefs**, developed jointly with the GPA Global Waste Water Initiative for publication in 2016. Targeted at local and national government policy makers and the private sector, this provides management and policy recommendations on addressing wastewater in coral reef areas to protect their resilience.

A Coral Reef Theme on UNEP- Live provides universal access to these datasets, tools and resources.

The partnership has also supported development and implementation of the ICRI **Regional Strategy for Control of Invasive Lionfish in the Wider Caribbean**.

APPLICATION AND UPSCALING

Broad use of of these tools and data products is being pursued. This will include:

- Demonstration projects for MPA network planning, MPA establishment or zonation.
- Consideration of coral reef climate change exposure and resilience in MSP processes.
- Strengthening sustainability of cross-sectoral management initiatives, including e.g. prioritization of Green Fins implementation to reduce the direct pressure from reef tourism based on downscaled climate model projections.
- Promoting use of tools and data products in the implementation of relevant GEF Projects under Biodiversity or International Waters focal areas.
- Technical support to counties on development of relevant measures and action plans, and collaboration on implementation.

MAIN PARTNERS

- Global Programme of action (GPA) for the Protection of the Marine Environment from Land-based Activities - Global Waste Water Initiative (GW²I)
- Great Barrier Reef Marine Park Authority (GBRMPA)
- GRID Arendal
- National Oceanic and Atmospheric Administration (NOAA)
- The Nature Conservancy (TNC)

This is sheet 2 of 5 sheets describing the work of the partnership.

For more information, contact Jerker Tamelander, Head, Coral Reef Unit, United Nations Environment Programme: tamelander@un.org or visit <http://coral.unep.ch>



GLOBAL CORAL REEF PARTNERSHIP OF UNEP AND THE REGIONAL SEAS CONVENTIONS AND ACTION PLANS

ECOSYSTEM SERVICE VALUES IN DECISION-MAKING

The work of the partnership aims to strengthen the use of coral reef ecosystem service values in public and private decision-making through policy-oriented coral reef ecosystem service valuation, use of economic instruments for coral reef management, and collaborating with key reef based industries to reduce impact on and enhance investment in coral reefs as an industry asset.

The partnership is developing guidance, awareness raising and capacity development materials, and implements demonstration projects and facilitates upscaling of proven approaches through knowledge transfer. This also builds in part on findings of the regional ICRI workshop, 'Implementation and effective communication of ecosystem services valuation studies in the Caribbean', held 16-18 September 2014 on Bonaire, and supported by the partnership.

TOOLS AND PRODUCTS

The partnership continues development and implementation of the **Green Fins initiative for Sustainable Dive Tourism**, originally established by UNEP, COBSEA and Reef-World Foundation in 2004. The approach encompasses an environmental code of conduct for dive centres, complemented by a robust assessment system to monitor and promote compliance; support towards developing or strengthening relevant regulatory frameworks; and strategic outreach to and capacity building among dive centres as well as government partners. By integrating sustainability criteria into the core business of coral reef diving and snorkelling tourism operators, Green Fins helps countries and companies pursue blue economy development strategies based on coastal tourism. Green Fins has been introduced to six countries¹ in Asia. The total membership stands

at over 400 diving and snorkelling operators who are continuously improving their business practices to mitigate negative environmental impacts. Green Fins forms part of the Department of Marine Parks Malaysia's Key Performance Index for the delivery of Aichi Target 10, and in the Philippines the government has adopted the Code of Conduct as a guideline for environmentally sustainable diving. **A comprehensive Green Fins 'Toolbox'**, launched in April 2016, provides consolidated and standardized guidance materials and tools that cover Green Fins implementation, learning and outreach. This also includes a video entitled **"Green Fins for a Blue Planet"** in the '2 Minutes on Oceans with Jim Toomey' series.

In collaboration with the Regional Activity Centre for Protocol on Specially Protected Areas and Wildlife (SPA-W RAC) of the Caribbean Environment Programme and Blue Finance ECRE, **guidance on the use of economic instruments to finance reef management based on the ecosystem services provided by coral reefs** is being developed, for publication late 2016. This will draw on existing methodologies for Payment for Ecosystem Services and other non-public funding mechanisms that have been successfully applied in terrestrial settings, adapting them to address the needs of the coral reef environment and ecosystem service uses. A **pilot project on use of economic instruments to finance reef management based on the ecosystem services provided by coral reefs is underway in Barbados**. This combines an innovative co-management structure based on a public-private partnership (PPP) agreement and a fully operational Payment for Ecosystem Services (PES) scheme to generate sufficient financial flows from the private sector to cover a significant portion of the funding needed for a Marine Protected Area being established.

In collaboration with IFRECOR (the French Initiative for Coral Reefs) and Blue Finance ECRE, **Guidelines for Coral Reef Environmental Impact Assessment and Compensation Schemes** will also be developed

during 2016. Based on initial work by IFRECOR, a guide will be prepared that addresses how to conduct adequate Environmental Impact Assessments (EIA) in or around coral reef ecosystems; and how to design, implement and monitor compensation schemes for impacts of development. The guide will initially be prepared in English and Spanish, in addition to the current version targeting French reef jurisdictions.



APPLICATION AND UPSCALING

- **Expansion and broader impact of Green Fins** is being pursued, through: Introduction to additional countries and new sites in Asia and expansion to other regions. Opportunities are being explored in the Caribbean, Pacific and Mediterranean. Collaboration is also being extended to diver training agencies, in relation to industry-wide environmental mainstreaming.
- Further site-based **projects on sustainable financing for coral reef management** will be established, drawing on the pilot project in Barbados and applying the guidance under preparation. This will initially focus on at least one site in the Caribbean, as well as exploring opportunities to apply the approach at sites in other Regional Seas.
- **Use of Guidelines for Coral Reef EIA and Compensation Schemes** will be promoted through demonstration application of the tool in relevant ongoing processes and training for practitioners, focusing on how to conduct adequate EIAs in coral reef ecosystems and how to design, implement and monitor compensation schemes for impacts of development. Initially focused on the Caribbean, opportunities with other Regional Seas will also be explored.

MAIN PARTNERS

- Blue Finance
- French coral Reef Initiative (IFRECOR)
- Reef-World Foundation
- Regional Activity Centre for Protocol on Specially Protected Areas and Wildlife (SPA-W RAC) of the Caribbean Environment Programme

This is sheet 3 of 5 sheets describing the work of the partnership.

For more information, contact Jerker Tamelander, Head, Coral Reef Unit, United Nations Environment Programme: tamelander@un.org or visit <http://coral.unep.ch>



GLOBAL CORAL REEF PARTNERSHIP OF UNEP AND THE REGIONAL SEAS CONVENTIONS AND ACTION PLANS

DATA AND INFORMATION FOR ECOSYSTEM-BASED MANAGEMENT

The work of the partnership focuses on enhancing data and information provision for ecosystem-based coral reef planning and management, by strengthening Global Coral Reef Monitoring Network (GCRMN) status and outlook reporting through the Regional Seas, and supporting development and application of regionally appropriate methods and indicators, including indicators for tracking progress towards global targets.

TOOLS AND PRODUCTS

The GCRMN report Status and Trends of Caribbean Coral Reefs: 1970-2012, prepared in collaboration with ICRI, IUCN, CEP and other partners, was published in 2014. This initiative developed and tested a new approach for regional-level reporting on the state of the coral reef environment, illustrating the critical importance of a longer-term perspective and in coral reef monitoring for management. Based on the findings of the report, ICRI adopted a recommendation on addressing the decline in coral reef health in the Wider Caribbean by managing the taking of parrotfish and similar herbivores. This established a new model for the development of regional GCRMN reports, with scientific rigor and enhanced utility for decision-making.

A three-tiered set of **ecological monitoring indicators and methods and initial socioeconomic indicators for the wider Caribbean region** were developed based on findings of the regional report, through a regional GCRMN workshop held in Curacao 6-8 August 2014, with support from the Government of the Netherlands, SPAW-RAC and the partnership. The workshop also established a **regional GCRMN Committee** for coordination, development and reporting, chaired by SPAW RAC.

Responding to recommendations arising from ICRI General Meeting 29 and 30, **guidance on the process for development of regional GCRMN reports** is being prepared, to be finalized in 2016. This will establish quality standards for regional coral reef status and outlook reporting conducted through GCRMN, enhance the coherence and consistency of reports and strengthen the uptake and application of findings at the regional level through Regional Seas as well as at the national level. It will also support the preparation of global GCRMN coral reef status reports.

APPLICATION AND UPSCALING

National adoption and use of the regional recommended monitoring standards for the Wider Caribbean is being pursued through CEP/SPAW-RAC, with support of the partnership.

GCRMN regional reporting following the new model developed is being replicated in other regions, with technical and financial support currently being provided through the partnership towards report processes in:

- **The Western Indian Ocean**, where a regional GCRMN report is being prepared through Indian Ocean Commission project in collaboration with the Nairobi Convention. In 2016 the partnership supports the Nairobi Convention coral reef task force in the preparation of a 'blue economy' analysis of the implications of current and projected reef trends and social and economic dependence.
- **Eastern Tropical Pacific**, in response to a decision by the Lima Convention Conference of Parties in November 2015 to pursue development of a regional GCRMN report encompassing both the South East and North East Pacific Regional Seas. In 2016 the partnership supports a regional workshop, data analysis and preparation of a draft report.
- **Pacific Islands:** with funding from France, CRILOBE has initiated data mapping for a regional report initiative in the Pacific Islands, carried out in collaboration with SPREP and CRILOBE. The partnership supports a regional workshop, data analysis and preparation of a report for launch in mid-2017.

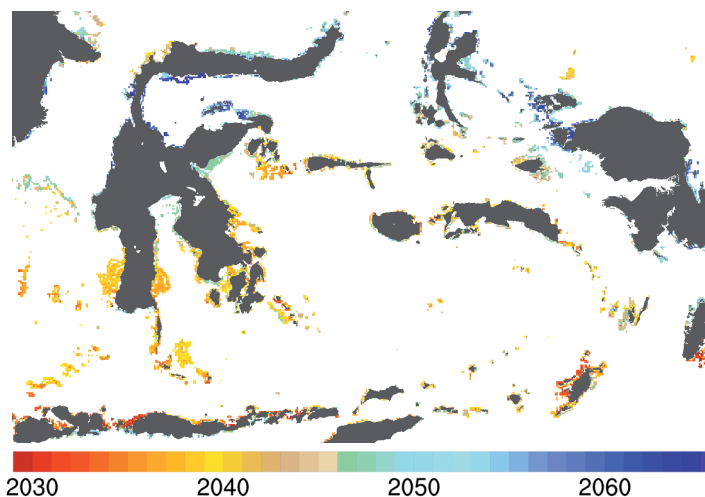
Opportunities to initiate and implement regional report initiatives in other regions are being identified, including e.g. in the Abidjan Convention area, South Asia, the Middle East and the Seas of East Asia.

The Coral Reef Theme on UNEP-Live will be further enhanced to also provide public access to summary reef status and trend data based on regional GCRMN initiatives.

The partnership jointly organized **the 5th International Tropical Marine Ecosystems Management Symposium (ITMEMS)** with ICRI and the Government of Japan, held in February 2016 in Bohol, the Philippines. The technical programme was based on several of the tools of the partnership, including on reef resilience, sustainable tourism, and sustainable financing. ITMEMS enabled 60 managers from around the world to learn about and test management tools and approaches that support EBM, share experiences and lessons learned, and identify gaps and priorities in further strengthening EBM in tropical marine ecosystems. This also guides the partnership in its work.

MAIN PARTNERS

- Centre de Recherches Insulaires et Observatoire de l'Environnement (CRILOBE)
- Government of Japan
- Indian Ocean Commission (IOC)
- International Coral Reef Initiative (ICRI)
- Nairobi Convention
- Permanent Commission for the South Pacific (CPPS)
- Scripps Institution of Oceanography
- Secretariat of the Pacific Regional Environment Programme (SPREP)
- University of Costa Rica



This is sheet 4 of 5 sheets describing the work of the partnership.

For more information, contact Jerker Tamelander, Head, Coral Reef Unit, United Nations Environment Programme: tamelander@un.org or visit <http://coral.unep.ch>



GLOBAL CORAL REEF PARTNERSHIP OF UNEP AND THE REGIONAL SEAS CONVENTIONS AND ACTION PLANS

INSTITUTIONAL SUPPORT AND OUTREACH

The work area covers partnership operations, institutional and policy support to Regional Seas, International Coral Reef Initiative (ICRI) and Global Coral Reef Monitoring Network (GCRMN), policy outreach, and strategic communication.

INSTITUTIONAL SUPPORT

The partnership is strengthening implementation of the ICRI Continuing Call to Action through the Regional Seas. In this regard, it provides **ongoing technical support to ICRI**, engaging closely with the ICRI Secretariat as well as the broader ICRI membership through ICRI General Meetings, including through provision of information and progress reporting to ICRI General Meetings and technical collaboration on the implementation of activities through thematic ICRI Ad Hoc Committees. The partnership also supports maintenance of ICRI Forum, the online information portal and documents repository of ICRI.

The partnership provides **continuing support to GCRMN**, in particular technical and financial support in relation to regional reporting processes as well as development of guidance for preparation of regional GCRMN reports, and technical support in relation to GCRMN governance and coordination.



The partnership **collaborates directly with Regional Seas Coral Reef Task Forces and Regional Activity Centers** on development and implementation of activities, and liaises with them in relation to regional and global reporting and policy development.

PARTNERSHIP POLICY IMPACTS

Partnership achievements are reflected in decisions of Regional Seas governing bodies as well as decisions of global conventions including e.g.

- **Abidjan Convention Decision CP11/6** on coral reefs which, inter alia, emphasizes the importance of preserving coral reef ecosystem services, collaboration on development of tools and methods as well as a network of marine protected areas for management of coral reefs; and requests the Abidjan convention Secretariat to develop collaboration with the Global Partnership on Coral Reefs.
- **Nairobi Convention Decision CP8/13** on Enhancing Cooperation, Collaboration and Support with Partners which, inter alia, encourages collaboration in the work of the Coral Reef Task Force of the Convention in 2015-2016, including in preparing the regional status of coral reef report for the Western Indian Ocean. This and related activities on climate change adaptation and coral reef resilience are also included in the climate change strategy provisionally adopted in Nairobi Convention Decision CP8/8 on Climate Change Adaptation and Mitigation.
- **Recommendations of the Scientific and Technical Advisory Committee of the SPAW protocol** to the Cartagena Convention (UNEP (DEPI)/CAR WG.36/7), which include strengthening regional coral reef monitoring and reporting, and implementation of the «ICRI Regional Strategy for the Control of Invasive Lionfish in the Wider Caribbean.
- **The 20th Meeting of Parties of the Lima Convention** agreed to support the regional GCRMN reporting initiative in the Eastern Tropical Pacific, including through financial support towards workshops to be organized as part of the process.
- **The priority actions to achieve Aichi Biodiversity Target 10 for coral reefs** and closely associated ecosystems adopted in CBD CoP decision XII/23 and its annex reflect extensive technical inputs provided by the partnership during the consultation process leading up to the decision.
- The partnership will also provide a key means to implement the action called for in the **draft resolution on sustainable coral reefs management for adoption at the Second Session of the United Nations Environment Assembly (UNEA-2)**.

OUTREACH

Reporting on partnership activities is provided as part of UNEP's regular reporting on **delivery against internationally agreed priorities**, including e.g. implementation of the Regional Seas Strategic Directions, the SAMOA Pathway, Aichi Targets and other MEA decisions, as well as **delivery against the UNEP Programme of Work**.

The Partnership has made progress in promoting and showcasing its work through inputs provided to **ICRI General Meetings**, which is reflected in the meeting reports. ICRI GM 28 approved participation of the ICRI Secretariat in the partnership steering committee.

Partnership activities, outputs and results have been presented at a number of events, e.g. in association with intergovernmental, scientific as well as industry meetings. For example, **a CBD CoP-12 side event** entitled "Managing coral reefs for resilience to climate change" and the 5th International Tropical Marine Ecosystems Management Symposium (ITMEMS) were organized with the ICRI Secretariat. A coral reef side event jointly organized with Indonesia as well as a media roundtable will be held during **the second session of the United Nations Environment Assembly (UNEA-2)**.

And a Green Fins event on sustainable reef diving and snorkeling tourism was held at the Asia Dive Expo in Singapore, April 2016.

News stories have been published on the UNEP website and shared through social media, including in association with product launches or significant global events, such as the ongoing coral bleaching event. The UNEP Coral Reef Unit website has been updated, and a **UNEP-Live coral reef theme** has also been created to facilitate further public access to data, information and tools.

A communication strategy, to be developed in the first half of 2016, will further enhance outreach activities, with emphasis on how the partnership supports delivery of Sustainable Development Goals and other key global commitments.

This is sheet 5 of 5 sheets describing the work of the partnership.

For more information, contact Jerker Tamelander, Head, Coral Reef Unit, United Nations Environment Programme: tamelander@un.org or visit <http://coral.unep.ch>